

THE
CATECHISM
OF
H E A L T H.



AT ST. BERNARD'S WELL.

EDINBURGH:
PUBLISHED BY STIRLING & KENNEY,
JAMES ANDERSON, AND JOHN MARRATH.

1828.

ABS. 1. 84. 207





THE
CATECHISM
OF
H E A L T H;
SELECTED AND TRANSLATED
FROM THE
GERMAN OF DR. FAUST.

FOR THE USE OF THE
INHABITANTS OF SCOTLAND,
BY THE RECOMMENDATION OF DR. GREGORY.

A NEW EDITION.

EDINBURGH:
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31 JUL 1984

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PREFACE.

THE nature and purpose of this publication will be sufficiently explained by the following extract of a letter from DR. GREGORY to the Editor.

“ I HAVE now perused, with great attention and much pleasure, the translation of DR. FAUST'S Catechism of Health, which you put into my hands a few days ago. I adhere to the favourable opinion of it which I expressed to you after reading only two or three pages of it when you first shewed it me ; and, as, in reading it over carefully, I put my marks either of assent and approbation, or of dissent, or of doubt to almost every proposition in it ; I can say, with confidence, that I think it a work of very extraordinary merit, and one that, if it were generally known in this country, might be of infinite use. It is, indeed, the best popular medical work I ever read : nor do I in the least wonder at the extensive distribution, and the high estimation of it in Germany.

“ To the best of my judgment it contains more solid good sense, and more useful information, in less bulk, than any medical book I ever saw, from the Aphorisms of Hippocrates to your last edition of the Family Physician inclusive; and what I reckon of very great consequence, there is less mixture of nonsense in it, which might either confound or mislead those for whose use it is intended.

“ I highly approve your benevolent purpose of reprinting it here, and diffusing it as generally as possible.

“ I think you should print a great many copies on the cheapest paper, that the poor people may afford to purchase it, or, that those in more affluent circumstances may be encouraged to purchase great numbers of them, and to distribute them among their poor neighbours. By all means print a good number in the handsomest manner on the finest paper, to tempt fine people to buy and to read it.

“ If you think my name and recommendation can be of any use in promoting the distribution of such a work, you are heartily welcome to use them in the most public manner, or even to print this letter at the beginning of it. Nay more, if you please, I will revise it, and superintend the printing of it, and correct the press.

“ If you approve of this, you must pub-

lish it under the title of "*Selection from the Catechism of Health of DR. FAUST, translated from the German, and now published for the use of the Inhabitants of Scotland:*" you may say, revised by me, if you please. I should in that case abridge it considerably, by omitting some things which appear to me erroneous, or doubtful, or useless, or whimsical; or not suited to the state and manners of the people of this country.

"DR. FAUST, you will observe, has some whims; for example, about the very free use of potatoes hurting the understanding: Sulphur ointment being dangerous to health, &c. I even suspect an error in the translation there, of *sulphur* for *mercurial*; which rashly used is very dangerous, and may even have those very bad effects which are imputed to the sulphur, and which I never knew sulphur produce.

"There are several errors, and some very obscure passages in the translation; evidently proceeding from the Translator's imperfect knowledge of the English language, (*luxes*, for *luxuries*; *repulses*, for *repels*; *heavy*, for *severe*, and so forth.) These I should, of course, correct in reprinting it.

* It was translated into English by MR BASSE, himself a German.

“ The plan for extirpating the small-pox, &c. I should omit, as impracticable, at least in this country, at this time. I doubt whether it ever can succeed : but supposing the Author to be perfectly right, this is not a time for such a plan : and people should be told, not always what is absolutely best in itself, but what is the best that they *can* or *will* do : For example, as to the small-pox, universal inoculation, and the cool regimen :* And as to strong liquor, not abstaining from it altogether, (as certainly would be best,) but only getting drunk with ale or porter, instead of whisky and gin, which are absolute ruin to them in mind, body, and estate.


“ The form of Catechism by no means does justice to the strong good sense, the sound morality, and the rational piety of DR. FAUST ; nor can it make that strong and pleasing impression, which classical composition would do, on readers of a cultivated taste. But his sentiments need not the aid of ornament : and the form of Catechism, and his frequent, and seemingly needless, repetitions are probably well suited to the state and habits of those

* On the subsequent discovery of Vaccination, Dr. Gregory was an early and zealous patron of the Vaccine Inoculation.

for whose use chiefly his work is designed. They will tend to assist the memory, and to make the impression stronger; as well as to enable the people to apply the precepts easily and readily. Therefore, as he made it at first a Catechism, so let it remain."

The Editor has only to add, that the selection proposed has been made, and the printing of it revised by DR. GREGORY, according to his promise.

W. C.

 In reprinting the CATECHISM of HEALTH, from the edition published by Mr. Creech, under the inspection of DR. GREGORY, in 1797, the Publishers of this edition, with a view to popular information, have procured from a medical friend, a supplementary chapter, on *Vaccination*; the substitute for the Small-pox, discovered by DR. JENNER in 1798, of which the beneficial operation is experienced, with unspeakable gratitude, in every country of the world.

S. & K

CHAPTER I

The first part of the book is devoted to a general survey of the subject. It is divided into two main sections, the first of which deals with the history of the subject, and the second with its present state. The author begins by pointing out the importance of the subject, and then proceeds to give a brief account of its development from the earliest times to the present day. He then discusses the various methods which have been employed in the study of the subject, and finally gives a summary of the results which have been attained.

The second part of the book is devoted to a detailed examination of the subject. It is divided into three main sections, the first of which deals with the theory of the subject, the second with its practical applications, and the third with its philosophical foundations. The author begins by discussing the various theories which have been advanced, and then proceeds to give a detailed account of the practical applications of the subject. He then discusses the philosophical foundations of the subject, and finally gives a summary of the results which have been attained.

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CATECHISM OF HEALTH.

FIRST DIVISION.

OF HEALTH.

I. *Of Health; its Value, and the Duty of preserving it, and of instructing Mankind, particularly Children, in these important Subjects.*

Q. 1. DEAR Children, to breathe, to live in this world, created by God, is it an advantage? Is it to enjoy happiness and pleasure?

A. Yes. To live is to enjoy happiness and pleasure; for life is a precious gift of the Almighty.

Ps. cl. 6. Let every thing that has breath praise the Lord.

Ps. cxlv. 16. Thou, O Lord, satisfiest the desire of every thing living.

Ps. xxxvi. 5, 8. Thy mercy, O Lord, is in the heavens; and thy faithfulness reacheth unto the clouds. They shall be abundantly satisfied with the fatness of thy house; and thou shalt make them drink of the river of thy pleasures.

Ps. cxxxvi. 1, 8, 9, 25. O give thanks unto the Lord, for he is good. To him that made the sun to rule by the day; the moon and stars to rule by night; who gives food to all flesh: For his mercy endureth for ever.

Q. 2. What other proofs have we to shew that life is an excellent gift of God?

A. The instinct, or natural anxiety of mankind to preserve it.

Q. 3. What must be the state of the human body, the habitation and slave of the soul, that man may enjoy a long, prosperous, and happy life?

A. It must be healthy.

Q. 4. How else can you prove that man ought to be in a good state of health?

A. By the commandment of God, *viz.* "In the sweat of thy face shalt thou eat bread." Gen. iii. 19.

Q. 5. Can we possibly promote the perfection and happiness of our souls, if we do not take proper care of our bodies?

A. No. God has so intimately united soul and body, that by a rational care taken of the body, the happiness and purity of the soul is increased.

Q. 6. What is understood by a state of good health?

A. That the body is free from pains and infirmities, fulfils its duties cheerfully and with ease, and is always obedient to the soul.

Q. 7. How does he feel who enjoys health?

A. Strong; full of vigour and spirits; he relishes his meals; is not affected by wind and weather; goes through exercise and labour with ease, and feels himself always happy.

Q. 8. And what are the sensations of the sick? Are they like those we have described?

A. By no means; the sick man feels himself weak and languid; he has no appetite; he cannot work, nor brave wind and weather; he labours under continual anxiety and pains, and very few are the pleasures of his life.

Q. 9. Can you, children, be merry and laugh, joke, and jump about, eat, drink, and sleep, when you are ill?

A. No. We can only do so when we are in good health.

OBSERVATION.

If a child be present who was ill not long ago, the Master will take the opportunity of asking him the following question:—"You was ill; tell me, did you feel yourself so happy, so easy, as you do now?" To this a sensible child will answer, or will be taught to answer—"I found myself exceedingly ill; I could neither eat, drink, nor sleep; nothing afforded me pleasure or joy; I was full of anxiety and pains; but now restored to health, thanks be to God, I know it is the greatest good."

Q. 10. The blessings of health then must be very great?

A. They are indeed. Health is the most precious good, and the most certain means of enjoying all other blessings and pleasures of life.

Q. 11. What says the son of Sirach of health?

A. In Ecclesiasticus 30th Chapter, v. 14, 15, 16, he says, "Better is the poor being sound and strong of constitution, than a rich man that is afflicted in his body. Health and good estate of body are above all gold, and a strong body above infinite wealth. There are no riches above a sound body, and no joy above the joy of the heart."

Q. 12. Cannot the sick as well as the healthy, enjoy the blessings and pleasures of life?

A. No. They have no charms for the sick.

Q. 13. Of what use then is all worldly happiness to him who is sick, and cannot enjoy it?

A. Of very little use, if any.

Q. 14. If then health be the most precious boon of life, what duties has a man in that respect to discharge towards himself?

A. He must strive to preserve it.

Q. 15. Is it sufficient if he take care of his own health?

A. No. It is also his duty to take care of the life and health of his fellow-creatures.

Q. 16. And what is the duty of parents toward their children?

A. They are bound to take the tenderest care of their health and life.

OBSERVATION.

School-masters and parents ought to seize every opportunity of impressing on the minds of their children, the great importance of the invaluable blessings of health, and the consequent duty to preserve it, by innocent pleasures, conducive to health. They ought, on the other hand, to point out the mournful instances of multiplied sorrows and miseries which present themselves daily to our view, in the persons of the sick and diseased.

Q. 17. Do they fulfil this duty?

A. Very seldom.

Q. 18. Why so seldom?

A. 1. Because few of them are sensible of the real value of health.

2. Most of them are ignorant of the structure and state of the human body.

3. Equally ignorant of what is conducive or hurtful to health.

Q. 19. What is the cause of this ignorance?

A. The want of proper instructions.

Q. 20. But as God wills the happiness of all mankind, should they not be brought from ignorance to the knowledge of truth?

A. Yes. It would be right, good, and dutiful to instruct every body, particularly little children like us, and to teach us the structure of the human body, and the best means of preserving health.

Q. 21. Is it not, therefore, your duty to pay the greatest attention to the instructions which you are now to receive, respecting the most valuable boon of life?

A. We shall exert ourselves to the utmost to understand and to remember them.

Q. 22. Is it sufficient to receive those instructions, and to remember them?

A. No. We should also strictly conform ourselves to those instructions.

II. *Of the Duration of Life, and the Signs of Health.*

Q. 23. WHAT is the usual period of human life?

A. Life is the best gift of God to man, who ought to enjoy it a very long time, and therefore live to an old age, as was intended.

Ps. lxxx. 10. The days of our life are threescore years and ten, and by reason of strength they be fourscore years.

Q. 24. What has God promised as the greatest earthly reward to those that honour father and mother, and keep his commandments?

A. That their days shall be long upon the land, which the Lord our God gives them.

Q. 25. How long is man destined to enjoy health?

A. He ought to live almost uninterruptedly in a perfect state of health.

Q. 26. What epithet is applied to a man who only, at intervals, suffers little inconveniencies from a short illness?

A. The epithet *healthy*.

Q. 27. What epithet is applied to a man who is not only weak, but also spends the greatest part of his life on the bed of sickness?

A. The epithet *unhealthy*.

Q. 28. What are the signs of an uninterrupted state of health, enjoyed by a man at the age of maturity?

A. The fresh and healthy colour of his face, the quickness of his senses, the strength of his bones, and the firmness of his flesh; large veins full of blood; a large and full breast; the power of breathing slowly and deep without coughing; eating with hunger, and digesting well; taking much exercise, and bearing continued labour without fatigue; sleeping quietly and soundly, and enjoying cheerfulness of mind and serenity of countenance; all denote an uninterrupted state of health.

OBSERVATION.

All aliment ought to consist of solid substances, adapted to the number and strength of the

teeth; the teeth serve chiefly for chewing: digestion, and, of course, the nourishment, health, strength, and happiness of a man depends, in a great degree, on the chewing of the solid part of the food, which is mixed with the spittle, and converted into a sweet milk-like fluid, called chyle: it is, therefore, necessary that a healthy man should have a sound set of teeth.

Q. 29. Can one always and solely depend upon these signs of health?

A. No. They are apt to deceive sometimes.

Q. 30. What must be done, in order, unerringly, to ascertain whether an apparently healthy man be so in reality?

A. The temperament, health, and virtuous or moral conduct of his parents, ought to be considered.

Q. 31. What ought to be the state of health of the parents of a healthy person?

A. The father as well as the mother ought to be strong and healthy, not deformed, nor subject to such diseases as may descend to their children, such as the King's Evil, Madness, Consumption, Epilepsy, &c. They both ought to have a good constitution, and the prospect of attaining old age in good health, and should be of a virtuous disposition.

Q. 32. Why is it necessary for them to be virtuous?

A. Because the virtue of the parents is discovered in the children, and because virtuous parents encourage their children by their example, to endeavour to become worthy and honourable members of society.

Q. 33. What then must be the disposition of those parents, who wish to bring up virtuous and healthy children?

A. They must be virtuous and healthy themselves.

III. *Of the Construction, or Structure, of the Human Body.*

Q. 34. How is the human body constructed?

A. With infinite wisdom and goodness, and in the most perfect manner.

Q. 35. What have we in particular to observe with respect to the perfect structure of the human body?

A. That it is endowed with the greatest and most salutary powers, tending to preserve life and health, to remove diseases, or to heal wounds.

Q. 36. If the body contain any thing unnatural, or if it has been wounded, or otherwise hurt, so as to cause its functions to be obstructed, how do those powers act?

A. They operate more or less powerfully to expel from the body all that is unnatural, or to heal its wounds.

OBSERVATION.

If a splinter sticks in any part of the body, irritated nature produces matter to expel it. If the stomach be loaded with bile, or putrid matter, nature strives to remove it by vomiting. If a person has broken one of his limbs, nature will soften the broken ends of the

bone, in order that they may knit without plai-ster or salve : but the previous assistance of an able surgeon is required to bring the broken ends of the bone in contact, and to secure them so, after which tranquillity and rest are necessary.

Q. 37. Can the body, notwithstanding all those great powers with which God has endow-
ed man, sustain any injury?

A. The healthy and vigorous man is very sel-
dom subject to any.

Q. 38. But as we, nevertheless, see so many
objects of pity, what may be the real reason of
their sufferings?

A. Weakness ; or the want of pure vital fa-
culties.

Q. 39. Is this weakness natural ?

A. No. Naturally man is strong, full of vi-
gour and health.

Q. 40. How have so many contracted this
weakness ?

A. Generally through their own faults, or
through ignorance.

Q. 41. Is there not another particular reason
why men are so weak ?

A. Yes. Their weakness has been hereditary,
and transmitted to them from generation to ge-
neration.

Q. 42. What must men do, that they may
be less exposed to sickness ?

A. They must do every thing to recover their
natural strength.

OBSERVATION.

By this strength, you must not understand a rude but a cultivated strength, when the body is accustomed to exercise, and is full of life and vigour.

Q. 43. By what means can man recover his natural strength?

A. By receiving a judicious and liberal education, and leading a prudent life.

Q. 44. By what particular means can a strong and healthy body be injured or rendered unwholesome?

A. By a bad education, and corrupt way of living; by intemperance in eating and drinking; by unwholesome food and spirituous liquors; by breathing bad or unwholesome air; by uncleanness; by too great exercise, or by inactivity; by heats and colds; by affliction, sorrow, grief and misery; and by many other means the human body may be injured, and loaded with disease.

IV. *On the Attending and Nursing of Infants.*

Q. 45. WHAT does the little helpless infant stand most in need of?

A. The love and care of his mother.

Q. 46. Can this love and care be shewn by other persons?

A. No. Nothing equals a mother's love.

Q. 47. Why does a child stand so much in need of the love and care of his mother?

A. Because the attendance and nursing, the tender and affectionate treatment which a child stands in need of, can only be expected from a mother.

Q. 48. How ought infants to be attended and nursed?

A. They ought always to breathe fresh and pure air; be kept dry and clean, and plunged in cold water every day.

Q. 49. Why so?

A. Because children are thus, at the time alluded to, made more placid, because not irritated; and they grow and thrive better.

Q. 50. Is it good to swathe a child?

A. No. Swathing is a very bad custom, and produces in children great anxiety and pains; it is injurious to the growth of the body, and prevents children from being kept clean and dry.

Q. 51. Is the rocking of children proper?

A. No. It makes them uneasy, giddy, and stupid; and is therefore as hurtful to the soul as to the body.

Q. 52. Do children rest and sleep without being rocked?

A. Yes. If they be kept continually dry and clean, and in fresh air, they will rest and sleep well, if not disturbed; the rocking and carrying about of children is quite useless.

OBSERVATION.

As the human soul in a state of infancy is disturbed by rocking, carrying about and dancing, such practices ought to be considered as dangerous and erroneous.

The mother ought to play with the child in an affectionate and gentle manner; ought to give it frequent and mild exercise, and instil gradually into its mind a knowledge of such objects as attract its notice.

Q. 53. Is it in general necessary to keep children quiet?

A. Yes it is.

Q. 54. What is therefore very bad?

A. The making a great noise about children; and it is still worse to frighten them.

Q. 55. It is, therefore, not advisable, I suppose to frighten children into sleep?

A. By no means; because they may be thrown into convulsions by it.

Q. 56. Is it necessary or good to give children composing draughts, or other medicines, that tend to promote sleep?

A. No. They cause an unnatural, and, of course, unwholesome, sleep; and are very hurtful and dangerous.

Q. 57. How long must a mother suckle her child?

A. From nine to twelve months.

OBSERVATION.

In fact the child ought to be suckled till it has two teeth in each jaw. Some children are suckled for two or three years; a practice not only erroneous, but hurtful both to mother and child.

Q. 58. What sort of aliment is prejudicial to the health of children?

A. Meal-pap, pancakes, and tough, heavy, and fat meats.

Q. 59. What harm do they do?

A. They obstruct the bowels: and children's bellies get, by those indigestible meals, hard and swelled.

Q. 60. What food is most suitable for children?

A. Pure, unadulterated, new milk, and gruel; bread or biscuit boiled with water only, or mixed with milk.

Q. 61. Is it proper to chew the food before you give it to children?

A. No. It is disgusting and hurtful.

Q. 62. What is in general to be observed with regard to the feeding of children?

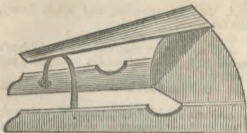
A. That they be regularly and moderately fed, and their stomachs not loaded with milk or other things. It is therefore necessary to prevent people from giving children sweetmeats, or food out of season; the feeding of the child ought to be entirely left to its mother.

Q. 63. Do affectionate careful mothers act right when they take their infants with them to bed?

A. No. It is hurtful and dangerous; children ought, therefore, to lie by themselves.

OBSERVATION.

In Italy, mothers who take their sucklings to bed with them use a machine, which protects them from all injury and danger. It is called *Arcuccio*, and is 3 feet 2 inches long; and the head-board 14 inches broad, and 13 inches high.—See fig. on next page.



Q. 64. Is it necessary to keep infants very warm?

A. No. They must not be kept too warm.

Q. 65. Is it good to cover their heads?

A. By no means; it causes humours to break out.

OBSERVATION.

From the hour of birth the head of a child ought to be kept uncovered. Mothers will find that, even in the coldest night, when they lay their hands on an infant's head, it is always warm.

Q. 66. Children are eager to stare at every thing, particularly at the light; what is to be observed with regard to this?

A. They ought to be immediately turned so as to have the object in a direct line before them; they should never be suffered to look at it sideways, as that would cause them to squint.

Q. 67. By what means is the getting of teeth rendered difficult and dangerous?

A. By caps; by keeping the head too warm;

by uncleanness, and improper food, over-feeding, bad air, and want of exercise.

OBSERVATION.

Nature herself causes pains at teething-time, and the child is afterwards the cause of many more. It may not be amiss here to observe, 1. That pains and sufferings are the first instructors of man; they teach him to avoid ills, and make him provident, compassionate, humane, and courageous 2. Natural bodily pain, in many instances, and particularly in childhood, is less hurtful to man and his happiness, than the anxiety and mortification of soul which a child suffers that is irritated, put in a passion, or treated with contempt; and it is as bad to frighten children.

Q. 68. What is to be observed with regard to making children walk?

A. They ought not to be taught to walk in strings, or chairs, or go-carts, or be led by the arm; they ought to be suffered to creep on the floor, till by degrees they learn to walk.

Q. 69. How can we best assist children in speaking?

A. We ought to pronounce the words to them very distinctly and slowly; first single sounds, and then easy words.

OBSERVATION.

It is of the greatest importance that man, from his earliest infancy, should be accustomed to a distinct pronunciation.

Q. 70. What are the principal reasons why one-fourth of the number of children that come into the world die in the course of the first two years?

A. Want of fresh pure air, uncleanliness, bad indigestible food, particularly meal-pap; the anxiety and misery of parents are also among the causes of the death of so many children.

V. Of the Treatment of Children with respect to their Bodies, from the Third to the Ninth or Twelfth Year.

OBSERVATION.

From the third to the seventh year the child has 20 milk-teeth, and during that time the body is weak; these are changed from that period to the twelfth year for strong teeth. In the ninth year the child has 10 milk and 12 perfect teeth. In the twelfth year both sexes have 24 strong and perfect teeth, and not until then the body begins to receive its natural real strength.

Q. 71. If man is to grow up healthy and strong, how must he be educated?

A. He ought to receive a liberal, judicious, and prudent education in his infancy, as well as in his youth.

Q. 72. Is this of so much importance?

A. Yes; for upon that depends his health, strength, and the happiness of his succeeding days.

Q. 73. What is understood by a judicious education?

A. That man be educated agreeably to the nature of his soul and body.

Q. 74. What is, therefore necessary, to be known that we may give a judicious education to children?

A. The nature of man and of his existence.

Q. 75. What changes does man undergo during the first nine or twelve years of his existence?

A. His body grows and acquires shape; his soul learns the use of the body; his faculties, with regard to conception and perception improve; and he is joyful and happy in company with those of his own age.

Q. 76. What does Nature particularly attempt to effect during infancy?

A. The formation of the body.

Q. 77. Is the energy of the soul, and the accomplishment of man, promoted by the perfection of the body?

A. Yes; the more perfect the body is the more perfect is the soul, and the more man is capable of promoting his own happiness, and that of his fellow-creatures.

Q. 78. Are the natural motions or actions of any use to the body?

A. Yes; its perfection is thereby promoted, and the whole body filled with life and vigour.

Q. 79. Of what use are those sensations to the child which its soul conceives through the senses?

A. They are the foundation of its understanding; for the more the mind has seen, heard, and

felt, and the more distinct its sensations are, the more sensible will man become.

Q. 80. What particular purpose is answered by children living together?

A. They learn to know, to understand, and to love each other, and so lay a foundation for unanimity, mutual fondness, and the happiness of their lives.

Q. 81. But if children live in society merry and happy together, can that have any influence upon them when they arrive at a state of maturity?

A. Yes; it contributes very much to make man spend his life, according to his destination, in virtue and happiness.

Q. 82. By what means are those wise designs of Nature promoted?

A. By activity, and gentle, though constant exercise both of the mind and body of children.

Q. 83. Is such exercise compatible with the nature of children?

A. Yes; children are full of vigour and activity, sense and feeling; they are joyful and merry, and desire to associate with other children.

OBSERVATION.

From the twelfth to the eighteenth year the supple body should be invigorated by exercise and plays; the intuitive mind, by instruction and reflection, may lay up a store of knowledge, and man, whose infancy was passed in joy and happiness, learn to become virtuous in his youth; and he will become so if he has experienced the vicissitudes of Fortune, her smiles and frowns, and shared his joys with

others; if he firmly believes that all the descendants of Adam have an equal right to enjoy pleasures, and are equally obnoxious to pain; and that an all-wise good God created every thing good, and mankind, with a view of making them happy.

Q. 84. What ought we further particularly to observe with respect to children?

A. That children be suffered to exercise their bodies and minds in company with each other in the open air.

OBSERVATION.

Parents ought not only to be present at the exercises and amusements of their children, and guard them from all dangers and injuries, but they ought also to encourage them, and lead them to all that is good and becoming by their own virtuous example.

Q. 85. Ought female children to receive the same education as boys in their infancy?

A. Yes; that they may at a future period enjoy the blessings of perfect health as well as men.

OBSERVATION.

The most pernicious consequences to the rising generation flow from separating female children, at the earliest period of their existence, from male children; from dressing them in a different manner, preventing them from taking the same kind of exercise, and compelling them to lead a more sedentary life.

Q. 86. What are the consequences of preventing children from taking the necessary exercises before the ninth year?

A. Their growth is impeded, and they remain weak and sickly for life.

Q. 87. What effect will it have upon children if they are kept to too hard work before the twelfth year?

A. They will very soon grow stiff, and old before their time.

VI. *Of Clothes fit to be worn by Children from the beginning of the Third to the End of the Seventh or Eighth year; or till, in each of the two Jaws, the four weak Milk Teeth in Front are changed for four strong lasting Teeth.*

Q. 88. By what means does man preserve, particularly in his infancy, the genial warmth of his body?

A. By good wholesome food, and bodily exercise.

Q. 89. Is it necessary to keep children warm, and protect them against the inclemency of the weather, by many garments?

A. No.

Q. 90. Why so?

A. That the body may grow healthy and strong, and be less liable to disease.

Q. 91. How ought the heads of children to be kept?

A. Clean and cool.

Q. 92. Is it good to cover children's heads with caps and hats to keep them warm?

A. No; it is very bad; the hair is a sufficient protection against cold.

Q. 93. Are those artificial coverings dangerous and hurtful?

A. Yes; children are thereby rendered simple and stupid, breed vermin, become scurfy, full of humours, and troubled with aches in their heads, ears, and teeth.

Q. 94. What kind of caps are therefore the most dangerous?

A. The woollen, cotton, and fur caps.

Q. 95. How, then, ought the heads of children to be kept?

A. Boys, as well as girls, ought to remain uncovered, winter and summer, by day and by night.

OBSERVATION.

Children with scurfy heads ought to keep their heads cool, clean, and uncovered; their hair cut, or repeatedly combed; which will be sufficient to cure the evil, for to cure it with salves is a very dangerous custom.

Q. 96. Can the sun or air be prejudicial to the skin?

A. No; if proper care be taken to keep the skin clean, they can do no harm.

Q. 97. But will not children be scorched by the sun if exposed to its heat without being covered?

A. No; those that are accustomed from their infancy to go uncovered will not be affected by the sun.

Q. 98. How is the hair to be kept?

A. It ought not to be combed backwards, or

tied behind; but it ought to hang free round the head to protect it.

Q. 99. Ought the hair to be often combed?

A. Yes; it ought to be kept in order, and combed repeatedly every day; which prevents vermin from settling in it, and induces cheerfulness and liveliness.

Q. 100. Is it right that the collars of shirts and neckcloths should press the neck and its veins?

A. No; the neck ought not to be squeezed; and, therefore, children ought to have their necks bare.

Q. 101. How ought children's garments to be arranged?

A. So as not to impede the free and easy motions of the body, or prevent the access of the fresh strengthening air to it; they, therefore, ought to be free, wide, and open.

Q. 102. What further is requisite for this dress?

A. It ought to be simple, clean, light, cool, cheap, and easy to put on or take off; it ought to be different in every respect from that of older or grown-up persons.

Q. 103. What other reason is there for making this distinction between the dress of children and grown-up persons?

A. To induce children to live with less restraint and greater happiness in the society of each other; to impress upon their minds an idea of their weak, helpless condition, in order thereby to check the too early ebullitions of that pride which leads children to ape the customs and actions of grown-up persons; a practice unbecoming at their age, and dangerous to their health and morals.

Q. 104. How, and of what materials, ought children's garments to be made?

A. A child ought to wear a wide linen frock, white, with blue stripes, having wide short sleeves, and a shirt of the same form.

OBSERVATION.

The shape of the frock is represented in the frontispice to this book; it ought to be without pocket-holes, and not very long, having the sleeves of sufficient length, to reach down to the elbows, and no farther. The collar of the shirt to fall back over that of the frock,—the only garment that a child should wear over his shirt, in order that it may move easily and without restraint; and that the fresh air, having free access to its body, may strengthen it.

Q. 105. Ought children to wear this dress in the winter time?

A. Yes; with the addition of a woollen frock, to be worn between the shirt and the linen frock.

Q. 106. How are the stockings of children to be made?

A. They must be short, and not tied: it would, therefore, be advisable to let them only wear socks, to cover the feet in the shoes.

OBSERVATION.

Stockings, that cover the knees, may produce swellings in them; they ought therefore not to cover the knees, nor be worn with garters.

Q. 107. Will not children find themselves too cold if their ankles are left bare?

A. No; cold, if they are accustomed to it, will not affect their ankles more than their arms. It will strengthen their limbs: in short, they will be kept sufficiently warm by the shirt and frock.

Q. 108. What is the form of the human foot?

A. At the toes it is broad, the heel small, and the inside of the foot is longer than the outside. See Fig. I.

Fig. 3.



Fig. 1.



Fig. 2.



Q. 109. Why has it this form ?

A. That man may walk and stand with ease and firmness, and move his body freely.

Q. 110. How ought shoes, particularly those of children, to be formed ?

A. They ought to have the same form as the feet ; they, therefore, ought not to be made by one, but two lasts, as the shape of the feet may indicate.

OBSERVATION.

Each foot may be laid upon a sheet of paper and its true shape drawn with a pencil, after which model two separate lasts may be made. From these Cuts, it appears clearly how shoes ought to be shaped. The middle Fig. I. is the original shape of the sole of the left foot ; the first, Fig. III. shows how the sole of the left shoe ought to be formed ; and the last, Fig. II. shows clearly, that the shoes we usually wear, made on one last, do not at all fit.

Q. 111. Ought the shoes of children to have heels ?

A. No ; heels cause the back tendon to shrink, and impede the free and easy motions of the body in walking and running.

OBSERVATION.

In order to obtain or preserve an upright posture or carriage of the body, and to run and jump easily and conveniently, shoes without heels must be worn.

When children are suffered to walk much, and are bare-footed, they acquire an easy and steady pace. Little children ought not to wear shoes before the eighteenth month ; if

they do, the soles must be thin and soft, that they may learn to walk easily and well. Boots ought not to be worn by children.

Q. 112. How ought, therefore, children, male as well as female, to be dressed from the beginning of the third to the end of the seventh or eighth year?

A. Their heads and necks must be free and bare, the body clothed with a wide shirt and frock, with short sleeves; the feet covered only with a pair of socks to be worn in the shoes; the shoes ought to be made without heels, and to fit well.

Q. 113. What benefit will be derived from this kind of dress?

A. The body will become healthier, stronger, taller, and more beautiful; children will learn the best and most graceful attitudes; and will feel themselves very well and happy in this simple and free garment.

OBSERVATION.

That by the general introduction of this simple and easy dress, the human race would be benefited, and rendered every way more accomplished, cannot be doubted. It is therefore to be hoped that it will be generally adopted.

Q. 114. How must the whole dress be kept?

A. Orderly and clean. The shirt ought always to be clean, and the frock decent, not worn out, or torn to pieces, or unclean.

Q. 115. When children appear always combed and washed, and in a clean shirt, and dressed from top to toe with decency and cleanliness, what is commonly concluded from it?

A. That their parents are sensible, kind, and loving.

Q. 116. And with respect to the children themselves?

A. They are beloved : the boy will become a worthy man, the girl an excellent wife ; and both imitate the example of their parents.

Q. 117. Is it proper that grown-up persons, but, especially, is it proper that children, should be dressed in an ostentatious manner, or show any pride in their attire?

A. No ; a simple, decent, clean, easy dress is the best.

Ecclesiasticus x. 7. "Pride is hateful before God and man : and by both doth one commit iniquity."

OBSERVATION.

Stays and stiff jackets are inventions of the most pernicious nature ; they disfigure the beautiful and upright shape of a woman, and instead of rendering her straight, as was formerly supposed, they make her crook-backed ; they injure the breast and bowels ; obstruct the breathing and digestion ; hurt the breast and nipples so much, that many mothers are prevented by their use from suckling their children ; many hence get cancers, and at last lose both health and life : they in general destroy health, and render the delivery of women very difficult and dangerous both to mother and child.

It is, therefore, the duty of parents, and especially of mothers, to banish from their houses and families both stays and jackets. Those girdles or sashes which press or con-

strain the belly are equally injurious; and, in general, it would be a desirable thing, if the female dress were made to consist of a long, easy, and beautiful robe, and not of two parts, joining or meeting at the hips.

Q. 118. Is it advisable to wear clothes that have been worn by people who were infected by epidemic disorders, or who died thereof; or to make dresses of them for children?

A. No; it might cause an entire loss of health, and, perhaps, of life.

OBSERVATION.

Old clothes, particularly old woollen clothes, infected by unwholesome perspiration, are very injurious to health; and epidemic fevers are hence easily and frequently propagated.

THE following Chapters regard grown-up persons as much as children; those parts alluding to the latter only, will be pointed out in particular queries and answers.

VII. Of Air.

Q. 119. WHAT ought to be the state of the air in which man liveth, and every moment breathes?

A. The air in which man liveth, and which he breathes, ought to be fresh, clear, and dry.

Q. 120. Why ought it to be fresh, clear, and dry?

A. Because it tends to refresh us, and make us healthy, composed, and serene; it encourages

man to work cheerfully, excites appetite, improves health, and induces balmy sleep: in short, man finds himself exceedingly happy while he breathes fresh air.

Q. 121. Does he feel equally as comfortable when he breathes bad, foul, and damp air?

A. No; in bad corrupted air man becomes weak, unhealthy, and irritable, loathsome and stupid; it often causes fevers and many dangerous maladies very difficult to cure.

Q. 122. Is it very necessary that man should live in fresh air, in order to enjoy a perfect state of health?

A. As necessary as eating and drinking; or as clean water is to fishes.

Q. 123. Why is it so?

A. Because the air contains, as well as our food, vital principles, which cannot be dispensed with, or supplied by any thing except the air we breathe.

OBSERVATION.

Even plants in the best soil, and beasts receiving the most wholesome food, will decay without good pure air; man, in particular, requires fresh air, that he may live and thrive, be healthy, sensible, serene, and happy.

Q. 124. By what means is air corrupted?

A. The air is corrupted in houses and rooms that are not sufficiently ventilated: besides, if in the vicinity of the habitations of man there be morasses, or stagnant waters, they are sufficient to corrupt the air.

Q. 125. By what other means is air rendered noxious?

A. Vapours arising from damp foul things; the breath and perspiration of many persons; the smoke from lamps, tallow candles, and snuffs; the steam from ironing linen; the exhalations that arise from combing wool, and from burning charcoal, all tend, in a greater or less degree, to corrupt or deprave the air, and render it capable of impeding the action of the lungs, or inducing suffocation.

Q. 126. What ought people to do that are much confined to rooms or chambers?

A. They ought frequently to open their doors and windows, in order to dissipate corrupted air, and admit the cooling, healthful breezes.

Q. 127. What other method can be devised to prevent the depravation of air in a room?

A. By making two holes, one through the outer wall of the house, that will open into the room near the floor of it; the other near the ceiling, through the opposite inner wall or partition: the external atmosphere will enter at the hole near the floor, and dissipate the foul air through the aperture above.

Q. 128. What else ought people to do, to obtain so desirable an end?

A. They ought to keep their rooms clean, and in proper order; nothing superfluous, or that can possibly corrupt the air, ought to be suffered in them.

Q. 129. What are the signs by which you may know whether rooms be clean, and contain wholesome air?

A. When there are no cob-webs in the corners, or on the ceiling, of the room, nor dust, nor straw, nor filth of any kind; when the windows are clean and clear, and no offensive

smell, or unpleasant sensation, is experienced by a person who enters it that has been just breathing the open air, we conclude that it is as it ought to be.

Q. 130. Is it necessary for man to breathe fresh air when asleep?

A. Yes; it is necessary that he breathe good wholesome air, whether awake or asleep: curtains encompassing a bed, and narrow bedsteads, are therefore very unwholesome.

OBSERVATION.

To cover children's faces when they are asleep is a bad custom, for they are thereby deprived of fresh air.

Q. 131. If people that are much confined to their rooms, were careful to live always in fresh air, what would be the natural consequence?

A. Instead of being unhealthy, weak, and squalid, and labouring under cold, and hoarseness, they would be much more healthy, content, and happy, and live longer.

OBSERVATION.

To bury the dead in or near towns and villages is very injurious and dangerous to the living.

VIII. *Of Cleanliness:—Washing and Bathing.*

Q. 132. Of what use is cleanliness to man?

A. It preserves his health and virtue; it clears his understanding, and encourages him to

activity; it procures him the esteem of others; and none but clean people can be really cheerful and happy.

Q. 133. How far is uncleanness injurious to man?

A. It corrupts his health and virtue; it stupefies his mind, and sinks it into a lethargic state; it deprives him of the esteem and love of others: besides, unclean people can never be really merry and happy.

Q. 134. Does uncleanness cause any maladies?

A. Yes; uncleanness and bad air, which are commonly inseparable, produce fevers, which are not only very malignant and mortal, but contagious also.

OBSERVATION.

Doctor Ferriar of Manchester, so renowned for his humanity, proves from the epidemical poison which commonly originates in the huts of misery, that not only virtue and charity, but also self-preservation, point out to the rich that it is their duty to relieve the poor.

Q. 135. What impels man most to keep himself clean?

A. The being accustomed from his infancy to cleanliness in his person, his dress, and habitation.

Q. 136. What must be done to keep the body clean?

A. It is not sufficient to wash the face, hands, and feet; it is also necessary, at short intervals, to wash the skin all over the body, and to bathe frequently.

Q. 137. Is washing and bathing the whole body wholesome?

A. Yes, it is very good; for it begets cleanliness, health, strength, and ease; and prevents catarrhs, cramps, rheumatism, palsy, the itch, and many other maladies.

OBSERVATION.

In Russia almost every house has its bath; and it were to be wished that each village or town in every country contained one or more houses where people might be accommodated with cold and warm baths.

Q. 138. Why is the keeping the body so clean of so great importance?

A. Because the half of whatever man eats or drinks is evacuated by perspiration; and if the skin is not kept clean the pores are stopped, and perspiration consequently prevented, to the great injury of health.

Q. 139. What rules are to be observed with respect to bathing?

A. 1. That you be careful to bathe in places where you are not exposed to danger.

A. 2. That you feel yourself thoroughly well and in good health, and that you be not overheated at the time of going into the bath, which should not be immediately after a meal.

A. 3. That you go not into the bath slowly, and by degrees, but plunge in all at once.

A. 4. That after bathing you do not sit or lie down, but walk about leisurely.

OBSERVATION.

It would be very advisable to make school-boys bathe, under the inspection of their masters, a certain number of times each week, from the beginning of May till the end of September.

Q. 140. How often is it necessary to wash the hands and face?

A. In the morning, and at going to rest; before and after dinner and supper, and as often as they are by any means soiled.

OBSERVATION.

In every house there ought to be constantly ready a wash-hand bason, and clear cold water, for that purpose.

Q. 141. Is it not necessary after meals to clean or wash the mouth?

A. Yes; immediately after each repast the mouth ought to be cleansed with cold water: the gums and teeth are thus preserved sound and good, and the tooth-ach prevented.

Q. 142. Ought not children to be washed and combed before they go to school?

A. Yes; children ought, morning and evening, before they go to school, to be combed and washed; that, being thus rendered comfortable and cheerful, they may with greater ease and pleasure advance in the paths of science and virtue.

Q. 143. What ought you particularly to do when you wash yourself?

A. We ought always to immerse our faces in the water, and keep them so for a little time.

OBSERVATION.

Thus we accustom ourselves to restrain our breath, which in case of danger in the water will be found of great use. And if we open our eyes in the water, and clean the mouth, it will prove beneficial to both, and prevent tooth-ach.

Q. 144. As it is necessary that the body should be kept clean from the earliest infancy, and as little children are not capable of washing and attending themselves, what duty is, therefore, imposed upon parents?

A. It is as much their duty to wash their children as it is to feed and clothe them; for children that are often washed improve in health; their clothes are always clean; cleanliness becomes familiar to them; and they grow up virtuous, polite, and happy.

Q. 145. Do little children like to be bathed and washed?

A. In the beginning they are frightened and cry; but if they be regularly and frequently bathed, and often washed every day, they at last take delight in it.

Q. 146. Is it sufficient that man keep his body clean?

A. No; he must also keep his clothes clean, and all that is about him; his apartments, beds, and furniture: and they ought also to be kept in order.

Q. 147. What benefit doth the whole family derive from such order and cleanliness?

A. It tends to preserve their health; makes all work easy, and renders life joyous and happy.

IX. *Of Food.*

Q. 148. Why doth man eat?

A. To satisfy the cravings of hunger, to preserve life, and to nourish the body.

Q. 149. What kind of food doth man generally partake of?

A. Bread, vegetables, fruit, milk, fish, and meat.

Q. 150. Which of these yields the greatest nourishment?

A. Meat, or animal food, which is more nourishing than vegetables.

Q. 151. Of what ought our meals to consist?

A. Chiefly of vegetables.

OBSERVATION.

That man was not designed to live on meat, or on vegetables, only, is evident from the construction of his teeth, his stomach, and bowels. Living upon animal food only, causes putrefaction of the blood; and vegetables by themselves do not sufficiently nourish or strengthen the body.

Q. 152. What gives the most delicious relish to food?

A. Hunger and the thorough chewing of the food.

Q. 153. What tends most to promote hunger and digestion?

A. Bodily exercise, especially in the open air.

Q. 154. Is it best to eat simple food?

A. Yes. It is destructive of health to partake of many different dishes, or of such as are prepared with much art; for they are very difficult of digestion, and afford bad and unwholesome nourishment.

Q. 155. What is particularly to be observed at meals?

A. Order and moderation; and that the food be well chewed, in order that it may the more readily be converted into chyle.

OBSERVATION.

By chewing the teeth are kept sound and fast. It is therefore necessary to make children chew on both sides of the mouth.

Q. 156. What does the son of Sirach say of frugality?

A. Ecclesiasticus, xxxi. 20, he says, "Sound sleep cometh of moderate eating: he riseth early, and his wits are with him; but the pains of watching, and choler, and pangs of the belly, are with an unsatiabable man."

Q. 157. If our food be not sufficiently chewed and converted into a pap-like substance, what is the consequence?

A. It cannot be digested sufficiently; and undigested food yields bad nourishment to the body, over-loads the stomach, and induces a weak, morbid state of the whole constitution.

Q. 158. Is it good to drink much at meals?

A. No; too much drink renders our food too fluid.

Q. 159. Does fluid aliment afford wholesome and strong nourishment?

A. No. Food of whatever kind, in order that it may afford proper nourishment, ought to be substantial; it is therefore necessary to eat bread with fluid aliment.

OBSERVATION.

Even the milk which the child sucks must first curdle in the stomach before it can give any nourishment to the body.

Q. 160. As bread is our principal food, what ought to be its qualities?

A. It ought to be made from good corn, and well baked.

Q. 161. Is hot bread or cakes wholesome?

A. No; they are very unwholesome: they may cause sickness and death.

Q. 162. Are potatoes wholesome?

A. Yes, and very nourishing.

Q. 163. Are ripe fruits and acid substances wholesome?

A. Yes; they cleanse and refresh the body.

OBSERVATION.

With respect to the stones of fruits, children ought to be cautioned not to swallow them, as they may cause an obstruction in the bowels and consequent death.

Q. 164. Are fat meats wholesome, and is it good to give much butter to children?

A. No; it is not good. Butter and all fat aliments are difficult of digestion; and prejudicial to health.

Q. 165. Is dried, smoked, salted or high-seasoned meat wholesome?

A. No; it is unwholesome, and children ought not to eat such meats.

Q. 166. What is in general to be observed with respect to the feeding of children?

A. They ought to be fed regularly every day at stated times; their food ought to be mild and nourishing, that they may grow and thrive well.

Q. 167. Is it good to give children dainties, cakes, or sweetmeats?

A. No. Children are thereby rendered too fond of their bellies, become gluttons, and degenerate from the dignity of their nature.

OBSERVATION.

Sweetmeats, and all the toys of children, are commonly covered with poisonous paint: they therefore ought to be prohibited.

Q. 168. What is the state of the kitchen of a good orderly wife or housekeeper?

A. The kitchen furniture is always kept clean by scouring and washing; after any part of it has been used, it is immediately washed, and dried with a clean cloth, and put up in its proper place; and when it is wanted again, it is first of all dusted and rubbed well.

Q. 169. What is especially to be observed with respect to the preparing and keeping of victuals?

A. The greatest cleanliness; and the eatables ought neither to be prepared nor kept in improper vessels, or such as can communicate to them any poisonous quality.

Q. 170. Ought every thing first to be washed before it is boiled or roasted?

A. Yes. Every kind of food, whether ani-

mal or vegetable, ought to be well washed before it is boiled or roasted; and vegetables especially require washing to remove mildew or insects.

Q. 171. What sort of kitchen utensils may become noxious?

A. Those of copper which are not perfectly well tinned, and earthen vessels which are glazed with lead.

OBSERVATION.

Earthen vessels receive a varnish of sand and prepared lead, which acids will dissolve, and thereby communicate a deleterious impregnation to food.

Q. 172. If acescent food, especially, be prepared and kept, or suffered to cool in such vessels, what are the consequences?

A. It dissolves and mixes with part of the lead or copper, and so becomes capable, if eaten, of producing gradual loss of health: or sudden death may be the unavoidable consequence.

Q. 173. What is therefore to be observed with respect to those vessels?

A. Those of copper ought to be well tinned: those of earth must have a very hard and durable varnish, consisting of but little lead, and ought to be well seasoned by keeping them a proper time immersed in boiling water, in which pot-ashes have been dissolved; and neither the copper nor the earthen vessels ought to be used for cooling or keeping victuals.

Q. 174. Are pewter vessels also dangerous in this respect?

A. They are. Pewter is mixed with a great

deal of lead; and therefore victuals ought not to be kept in vessels of this kind.

Q. 175. What kind of water ought to be used for the boiling of victuals?

A. Not only for boiling victuals, but for baking and brewing, clean soft water is required, in which dry peas can be boiled soft.

X. On Drink.

Q. 176. For what purpose is it necessary that man should drink?

A. To quench his thirst; but not to gratify his palate, or to strengthen his stomach, or with a view hence to nourish him; for all such notions are wrong and against nature.

Q. 177. What kind of beverage therefore is the most proper?

A. Cold water.

Q. 178. What advantage do we derive from drinking cold water?

A. Cold water cools, thins, and clears the blood; it keeps the stomach, bowels, head, and nerves in order, and makes man tranquil, serene, and cheerful.

Q. 179. What is it that gives to cold water an agreeable taste, and renders it nourishing?

A. Bodily exercise in the open air not only induces thirst, and a desire for water, but also renders it nourishing.

OBSERVATION.

By the movement of the body, water is caused to mix thoroughly with the blood, whose vis-

cid, sharp, and acrid humours it expels from the body.

Q. 180. Do people commonly drink a sufficient quantity of cold water?

A. No. Many from not taking sufficient exercise in the open air, and from drinking frequently large quantities of warm drink, lose all real thirst; and from not drinking a sufficient quantity of cold water, their blood remains viscid, acrid, and impure.

OBSERVATION.

Women, in particular, that are much confined at home, drink a great deal of coffee and tea, but do not drink enough of cold water.

Q. 181. May we drink any water without distinction?

A. No; we ought not to drink stagnant, unclean, muddy, or putrified water.

OBSERVATION.

If one be under the unavoidable necessity of drinking bad or foul water, a little vinegar may be mixed with it, which is the best corrector of it.

Q. 182. What kind of water is the best for drinking?

A. Pure, clear water, without taste, smell, or colour;—water in which soap will readily dissolve, and peas readily soften, if boiled in it.

OBSERVATION.

The old Romans made aqueducts of such a

length, that five, ten, or more hours would be consumed in walking from one extremity to the other of some of them; and they did so in order to furnish populous places, with good wholesome water for drinking.

Q. 183. Is beer a wholesome beverage?

A. Light, well-brewed beer is not injurious to the health of grown-up persons; though certainly good water is much better, and more wholesome.

OBSERVATION.

Children, by drinking beer, lose the desire of drinking water, and so steal into the habit of drinking too much coffee, tea, wine, and brandy.

Q. 184. Are warm drinks, such as coffee, tea, &c. wholesome?

A. No. The only wholesome beverage is cold water; all warm drinks weaken the stomach and body; they do not cleanse the bowels, nor purify the blood, and are, therefore, unwholesome and hurtful to health.

Q. 185. Why are people, particularly women, so fond of tea and coffee?

A. Because, for want of exercise, they have no natural or real thirst; and because they have been used to them from their infancy.

OBSERVATION.

If water were the only drink of man, both his health and fortune would be improved. If what is spent on liquors that are hurtful to life were appropriated to the purchase of

nourishing food, and other necessaries of life, the lot of humankind would be better, and we should live longer, and be healthier, stronger, and happier.

Q. 186. What, then, ought to be the only beverage for children?

A. Pure, good cold water ought to be the only drink of children and young folks; who ought to be prohibited from drinking beer, coffee, tea, or other warm liquors.

Q. 187. What advantage do children and young persons derive from drinking cold water only?

A. They grow and are nourished much better, and become healthier, stronger, and happier.

XI. *Of Wine.*

Q. 188. Is wine wholesome, when drunk often, or as a common beverage?

A. No; it is not. Wine is very hurtful to the health, the intellects, and the happiness of man.

Q. 189. Wine as a medical potion, comforts the sick, and strengthens the weak; but does it afford any real strength or nourishment to the healthy?

A. No; it only over-heats, without procuring real strength; for it cannot be converted into good blood, flesh, or bone.

Q. 190. Does wine contribute to the digestion of our meals?

A. No; it does not. Those that drink wa-

ter eat with a better appetite, and digest better, than those that drink wine.

Q. 191. What consequences ensue from drinking wine continually?

A. The tongue loses its delicacy of taste, and rejects water and mild simple food; the stomach grows cold and loses its natural vigour, and man, under the false idea of giving warmth to his stomach, gains by degrees a passion for drinking, which leads him at last to habitual drunkenness.

OBSERVATION.

Wine adulterated with any preparation of lead, as sugar of lead, white lead, &c. is poison.

Q. 192. May children drink wine, punch, or other spirituous intoxicating liquors?

A. No. Children and young persons ought not to drink wine, or any other spirituous liquors; for they are hurtful to health, impede growth, obscure reason, and lay a foundation for future wretchedness.

Q. 193. Does wine expel worms?

A. No; it does not.

XII. *Of Brandy.*

OBSERVATION.

VEGETATION has united and incorporated in the corn, by means of air and water, spirituous and earthy elements, which combined form a sweet and nourishing substance; if this intimate junction is destroyed or resolved

by fermentation, the spirituous part is separated from the earthy, which is then deprived of its body, and is no longer a sweet nourishing substance ; it is fiery, and destroys like fire.

Q. 194. Is brandy a good liquor ?

A. No.

ADDRESS TO CHILDREN.

Children, brandy is a bad liquor. A few hundred years ago brandy was not known among us. About 1000 years ago, the destructive art of distilling spirits of wine from wine was found out ; and 300 years ago, brandy was first distilled from corn. In the beginning it was considered as physic. It did not, however, come into general use till the close of the last century, or rather till within the last thirty years, that it has become an universal beverage, to the great detriment of mankind. Our forefathers in former times, who had no idea of brandy, were quite different people from what we are ; they were much more healthy and strong. Brandy, whether drunk by itself, or at meals, cannot be converted into blood, flesh, or bone ; consequently, it cannot give health or strength, nor does it promote digestion ; it only makes one unhealthy, stupid, lazy, and weak. It is therefore, a downright falsehood, that brandy, as a common beverage, is useful, good and necessary. Our forefathers lived well without it. And as experience teaches us, that even the most moderate, and most reasonable, give way to the baneful custom of drinking every day

more and more brandy, it is much better, in order to avoid temptation, to drink none at all; for believe me, children, brandy deprives all who addict themselves to the immoderate and daily use of it—of health, reason, and virtue. It impels us to quit our house and home, to abandon our wives and children, and entails on its wretched votaries, misery and disease, which may descend to the third and fourth generation.

It has been observed in all countries, in England, Scotland, Sweden, North America, and Germany, that in proportion to the quantity of brandy consumed, were the evils which health, strength, reason, virtue, industry, prosperity, domestic and matrimonial felicity, the education of children, humanity, and the life of man had to encounter.

It was this that induced an Indian in North America, of the name of Lackawanna, to say, that the brandy which had been introduced amongst the Indians by the English, tended to corrupt mankind and destroy humanity. "They have given us (said he) brandy; and who has given it to them (Europeans), who else but an evil spirit!"

Q. 195. Tell me, therefore, dear children, may children drink brandy?

A. No, by no means; children must not only abstain from brandy, but also from rum, gin, whisky, and all other spirituous liquors.

ADMONITION.

It is true, that children must not drink brandy, not even a single drop, for brandy deprives

children of their health and reason, of their virtue and happiness. When therefore, dear children, your parents, who, perhaps, do not know that brandy corrupts both body and soul, shall offer you any spirituous liquor, do not accept it, do not drink it.

Q. 196. Tell me now, what becomes of children that drink spirituous liquors?

A. Children and young persons who drink brandy, or other spirituous liquors, become unhealthy, crippled, stupid, rude, lazy, vicious, and depraved, both as to mind and body.

Q. 197. Doth brandy or any other spirituous liquor, destroy or prevent worms in the bowels?

A. No.

EXHORTATION.

Fathers and mothers, if you wish to obtain the blessing of the Almighty in an especial manner—if you aspire after heavenly rewards, take care not to suffer your children to drink of spirituous liquors, not even a single drop.

XIII. *Of Tobacco.*

Q. 198. Is the smoking of tobacco good?

A. No; it is not good, for much of the spittle, which is necessary for digestion is thereby lost, and it is hurtful to health, to the teeth, and to the organs of taste.

OBSERVATION.

The chewing of tobacco is equally pernicious.

Q. 199. May children and young people smoke tobacco?

A. No; children and youth must not smoke at all.

Q. 200. Is the taking of snuff proper?

A. No; it is a very bad custom, as the nose through which man breathes is stuffed up by it, the important sense of smell destroyed, and uncleanness and loss of health induced by its use.

XIV. *Of Exercise and Rest.*

Q. 201. WHAT advantage doth man derive from bodily exercise, activity, and labour?

A. Bodily exercise, particularly in the open air, creates hunger and thirst, helps the digestion of our food, and makes it nourishing; it purifies the blood, keeps the bowels healthy, and causes rest and sound sleep.

Ecclesiasticus xxx. 18. "To labour and to be content with that which a man hath is a sweet life, but he that findeth a treasure is above them both."

Q. 202. Can any body remain in a good state of health, without much bodily exercise?

A. No; God has given to man, not without a wise design, a body, hands, and feet: he is to make use of them and labour, and through labour to preserve life and health, to promote his own happiness, and that of his fellow-creatures.

Q. 203. But cannot exercise and labour hurt a man?

A. By all means: If man exceeds the bounds of reason, and of his natural powers, he may hurt himself.

OBSERVATION.

It is computed, that in Germany, 300,000 persons of the male sex are afflicted with ruptures.—What is the reason that people are so liable to ruptures? I believe that ruptures will be far less frequent, will scarcely be met with, when the custom of dressing male children in frocks, such as I have described, is introduced, and when the muscles and tendons of the belly are strengthened by unrestrained exercise and fresh air. If a man works continually and too hard, his body will be debilitated and worn out, or a rupture may soon be the consequence.

Q. 204. Is it good to take much exercise, or work hard immediately before or after dinner?

A. No; a little rest before and after dinner is necessary, and promotes appetite and digestion, recruits the powers of the body, and fits it for future work.

Q. 205. What kind of exercise is proper for children?

A. Gentle, varied, and continued exercise in the open air, during the greater part of the day.

OBSERVATION.

A child ought to take a great deal of exercise of the gentlest kind. It is not good to ob-

lige children to lead a sedentary life, or to do too much or too heavy work, or to study hard. After the shedding of the teeth, in the twelfth year, when they have twenty-four strong teeth, when soul and body have acquired sufficient strength and vigour, the time of instruction and work should begin, but not before, lest mind and body be injured.

Q. 206. How doth man become very active and industrious?

A. By being left during his childhood to exercise, unrestrained, with other children, and by being carefully encouraged to activity, assiduity, industry, and thinking; by being taught to do such work as is proportioned to the strength of his body, and accustomed to do every thing with due consideration and in time, and not to postpone till to-morrow, what should be done to-day.

Ecclesiastes ix. 10. "Whatsoever thy hand findeth to do, do it with thy might; for there is no work, nor device, nor knowledge, nor wisdom in the grave whither thou goest."

Q. 207. What advantages arise from accustoming children to moderate or easy work?

A. It renders them, when grown up, useful to themselves and to their fellow-creatures; it will prevent them from mixing in bad company, and will banish want and misery from their doors.

Prov. x. 4. "He becometh poor that deal-eth with a slack hand, but the hand of the diligent maketh rich."

Q. 208. After man has laboured, and finished his work, what then doth he do?

A. He rests himself, and looks with pleasure upon the fruits of his industry.

Q. 209. But would he rest as well if he had not laboured, or had not been industrious?

A. No. Peace, rest, and joy, are the exclusive enjoyments of him who has done his duty, who has worked and promoted his own happiness, and that of his fellow-creatures.

ADMONITION, OR ADDRESS TO CHILDREN.

Dear children! he who owes his birth and education to healthy, strong, sensible, virtuous, and industrious parents, who, from his infancy, has constantly breathed fresh, pure, and dry air; whose skin and apparel are always kept clean; who, with regard to his meals, observes moderation and order, and drinks no brandy or other spirituous liquors; whose habitation is orderly, clean, dry, and light-some; who has been accustomed from his infancy to order and cleanliness, to assiduity and industry, and whose reason and virtue have been fortified and improved in his youth by instruction and example; who fears God, loves mankind, and does justice; who works six days out of seven for the maintenance of his wife and children:—he only enjoys terrestrial bliss; he is truly happy, and may, anticipating the joys of eternal felicity, brave all the horrors of death.

XV. Of Sleep.

Q. 210. For what purpose doth man go to sleep?

A. To rest himself after exercise and labour, and regain the strength of his body, and the faculties of his mind.

Q. 211. How do the healthy rest?

A. Their rest is quiet, refreshing, and without dreams.

Q. 212. When especially do the healthy enjoy a quiet and refreshing sleep?

A. When their bodies are wearied by much exercise in the open air; when they have satisfied hunger, and when their minds enjoy contentment and peace.

Q. 213. Doth much depend upon a sound sleep?

A. Yes; man after a night's balmy sleep awakes with delight and cheerfulness, finds himself quite happy, and full of vigour and desire for labour.

Q. 214. What time is particularly proper for sleep?

A. The night; for in the day-time we do not sleep so well.

OBSERVATION.

Little children and people who are either sick or weak, or very much tired, and the old and infirm, are to be excepted, as they very often sleep in the day-time.

Q. 215. Ought children to sleep much ?

A. Yes; children and young people that are constantly in motion when awake, ought to sleep more than grown people.

Q. 216. Cannot we sleep too much, and so injure our health ?

A. Yes; when we have not had much exercise in the open air, and consequently are not tired, and when we, during our sleep, breathe corrupted air, or lie in warm feather-beds, we find ourselves after some time lazy, stupid, and unhealthy.

Q. 217. Ought we to sleep in cool, fresh, and clean air ?

A. Yes; and it therefore behoves us not to sleep in warm sitting rooms, but in cool, lofty roomy chambers, that have fresh air; whose windows are kept open in the day-time; and in beds without curtains, or with curtains not to be drawn.

Q. 218. Is it wholesome to lie on, or under feather-beds ?

A. No; it is very unwholesome. Feather-beds by their warmth, by the noxious, impure, putrid exhalations, which they attract, render the body weak and unhealthy; and besides, are the cause of catarrhs, head, tooth, and ears aches — of rheumatism, and of many other maladies.

Q. 219. What kind of bed is fittest for grown-up persons ?

A. Mattresses stuffed with horse hair, or straw, covered with a blanket or quilt. But when people sleep on feather-beds, they ought to air and beat them well in summer-time once a week, and in winter once in a fortnight, and often change their bed-linen.

Q. 220. What sort of bedding is proper for children ?

A. Mattresses stuffed with straw, or moss well dried, which requires often to be changed.

Q. 221. Why ought they to lie on such beds ?

A. Because it will contribute to the health, and promote the strength of children ; and because feather-beds are more injurious to the health of children than to that of adults.

Q. 222. What is farther to be observed with respect to sleep ?

A. We ought not to lie down till we are tired, nor remain in bed after we awake in the morning.

Q. 223. Ought the head and breast to be laid higher in bed than any other part of the body ?

A. No ; nor ought we to lie on our backs, but alternately on either side, in a somewhat bended position, taking care not to fold our arms round our heads.

Q. 224. Is it proper for children to sleep in the same bed with grown-up persons, or ought several children to lie together ?

A. No ; such practices are very hurtful ; for the breath and exhalations consist of noxious vapours ; it is therefore advisable for every child and every grown person to lie alone, in order to enjoy sound sleep.

Q. 225. What is to be done with beds in which sick people have lain ?

A. They are for many days to be well aired and beaten ; but if the disease has been contagious, the bed ought to be burnt, or buried deep in the ground.

OBSERVATION.

An English army-physician, Dr. Brocklesby, says, that a bed on which a person died of the putrid sore throat, was the cause of the death of three others that slept in it after him. When travelling, one ought to be very careful and particular with respect to beds.

XVI. *Of the Habitations of Man.*

Q. 226. WHAT advantages ought our habitations and apartments to possess?

A. They ought to be very lightsome and airy.

Q. 227. When habitations are dark, fusty, and damp, what effect do they produce on those that live in them?

A. People in such habitations are rendered unhealthy and weak, paralytic and sick; they grow stupid, simple, ill-natured, and miserable: and little children grow pale in damp rooms; they swell, become consumptive, and die.

Q. 228. When may rooms be considered as fusty and damp?

A. When they lie deep in the ground; when the walls and the floor are wet or damp, and when the furniture or other things grow mouldy.

Q. 229. How can such rooms be improved?

A. By the repeated and daily admission of fresh air into them; or, what is still better, by holes made in the two opposite walls of the house, one near the floor, through which the

external air constantly passes, and expels the foul air through the hole made near the ceiling.

Q. 230. Ought rooms and chambers to be lofty and spacious?

A. Yes; the more lofty and spacious they are, the less liable will the air be to corruption.

Q. 231. How often ought they to be swept and cleaned?

A. All inhabited rooms and chambers ought to be cleaned every day.

Q. 232. Why so often?

A. Because it is wholesome and good; and because decent people like to live in clean apartments.

Q. 233. But is it good to sit in very warm rooms in winter-time?

A. No; very warm rooms are very unwholesome, and make people weak, simple, stupid, and sick.

Q. 234. Is it advisable to warm ourselves over charcoal, or to sit in rooms where it is burning?

A. No; its vapours produce a great depression of spirits, and sometimes suffocate people.

OBSERVATION.

Those little stoves used by women in Germany and Holland to put their feet on, are very dangerous.

Q. 235. Is it wholesome to dry clothes in rooms, or boil water in ovens, where the steam cannot ascend as in a chimney?

A. No; damp vapours corrupt the air very much, and are therefore unwholesome.

Q. 236. If one be very much chilled in win-

ter, may he immediately approach the fire, or a hot stove?

A. No; for chilblains are produced by exposure to heat after intense cold.

OBSERVATION.

Dipping the hands often in hot water, and sudden transitions from heat to cold, and from cold to heat, produce ulcers on the fingers, called, in Germany, "the worm."

Q. 237. When a limb, as an arm or leg, is frost-bitten, what is best to be done?

A. In such a case if the patient enters a warm room, or approaches the fire, the loss of the arm or leg will be the consequence: the part affected should be kept in cold water, in which snow or ice was dissolved, till numbness be removed, and till life and sensation are restored.

OBSERVATION.

In cold winter days, if we travel or walk about in the country, it is necessary that we be particularly careful not to drink any brandy or other spiritous liquor, as it only tends to induce weariness and sleep, the more to be dreaded, as it may last till death is produced.

Q. 238. What ought to be the state of rooms in which children live?

A. Their apartments ought to be lightsome and airy, and to be kept orderly and clean; for in such rooms children will thrive surprisingly, and become healthy, strong, and cheerful.

XVII. *Of Schools.*

Q. 239. WHAT ought to be the site and state of a school-house?

A. It ought to be built in a free, open, and high situation; to be dry, roomy, and in a good habitable condition.

Q. 240. What ought to be the state of school-rooms?

A. They ought to be lightsome, airy, large, high, and dry, having floors above the surface of the earth, not made of clay or stone, but of deal.

Q. 241. Are narrow, low, damp, dirty, dark rooms, which exclude the fresh air, unwholesome?

A. Yes; they are very unwholesome;—unfavourable to the studies and intellectual improvement of children, and to their morals.

OBSERVATION.

If men were sensible of these truths, they would feel an irresistible impulse to unite, like so many bees in a hive, for the laudable purpose of promoting the general good—of erecting and establishing for the benefit of their dear children, healthy and spacious school-houses. They would be rewarded ten fold for their expenses by the benign influence such institutions would have in promoting the happiness of their offspring.

Q. 242. How ought school-rooms to be kept?

A. Orderly and clean, light and airy; taking care to open the doors and windows several times a-day, in winter as well as in summer, for the admission of pure air; and not to keep too great fires in them.

XVIII. *Of Thunder and Lightning.*

Q. 243. How are people to conduct themselves in thunder-storms, when they are in the fields?

A. They are not to run, or trot, or gallop, or stand still, but to keep on walking or riding quietly, slowly, and without fear.

OBSERVATION.

Here the school-master is to explain to the children the nature and causes of thunder and lightning, in order to prevent those fears and false impressions which are made upon the human mind, when children are suffered to form erroneous notions of them.

Herds or flocks in thunder-storms ought not to be driven, hunted, or over-heated, or suffered to stand still, or assemble close together; they ought to be separated, and divided into small numbers; and people should take care not to come too near to them.

Q. 244. May one shelter himself in a thunder-storm under a tree?

A. No; it is very dangerous. Trees and vapours which encompass them, attract the light-

ning, and persons standing under them are in the utmost danger of their lives.

Q. 245. You are right, children, in observing that when thunder and lightning prevail, one should not take shelter under trees; and the higher the tree, the greater is the danger; but what precautions are people to take when at home during a thunder-storm?

A. They are, when the storm is still at a distance, to open the doors and windows of their rooms, chambers, and stables, in order to expel all vapours, and fill them with fresh air. When it draws nearer, the windows are to be shut, and the doors left open, that fresh air may be admitted, avoiding carefully a free stream of air. They are, further, to keep at a proper distance from walls, chimneys, and ovens, and from all iron and metal, in particular from long iron rods or wires; remaining, as to any thing else, composed and without fear.

XIX. *Of over-heating ourselves, and catching Cold.*

Q. 246. If, through violent bodily exercise, labour, running, or dancing, we have over-heated ourselves, what ought we not to do?

A. 1. We ought not immediately to sit down or rest ourselves.

2. Drinking immediately after such violent exercise any thing cold, or even brandy or other spiritous liquor, is highly improper.

3. We ought not to expose our bare skin to the cold air.

4. We ought not to go into the cold bath : when thoroughly wet from rain, it is proper to walk about.

5. We ought not to sit down on the ground, or on the grass ; and we should be particularly careful not to fall asleep, otherwise sickness, lameness, or perhaps consumption will be the fatal consequences.

. OBSERVATION.

When people go home from their labour in the field, particularly in the evening, in cool, damp air, they ought always first to put on their clothes, and not return in their shirts.

Q. 247. What else are we to attend to ?

A. Those that are over-heated, are by very slow degrees to suffer themselves to cool, and enjoy rest ; and dry and clean shirts and clothes are to be substituted for those that have been wet by sweat. When cool and composed we may then gradually drink to satisfy thirst.

Q. 248. If people during work are very thirsty, may they not refresh themselves with some cold drink ?

A. Yes, they may ; but they must not drink too much at once, nor leave off working and rest themselves, but continue their labour, else they will take cold and fall sick.

Q. 249. What are those to do who have caught cold from cold and damp wind and weather ?

A. They are to drink a few cups of boiled water mixed with a fourth part of vinegar, put on warm clothes, and, by exercise, force the blood back to the skin. When the cold is vio-

lent they are to bathe their feet in warm water, drink vinegar and water, and go to bed.

OBSERVATION.

It is very unwholesome to drink spiritous liquors, or heating medicines to induce sweat.

Q. 250. What are we to do if our feet or bodies be wet and cold?

A. We are to take off the wet stockings or clothes lest they should cause a catarrh, the palsy, or rheumatism.

Q. 251. But what else ought to be done?

A. As soon as a person under such circumstances returns home, he ought not only to take off the wet clothes, but wash and dry his skin well, and put on warm clothes.

Q. 252. How do people by slow degrees get catarrhs, palsy, rheumatism, and other maladies?

A. By the obstruction of the perspiration of the whole or a part of the body, occasioned by want of exercise, by wet or damp rooms or beds, wet clothes, and exposure to cold air.

Q. 253. Tell me how a person may catch cold?

A. When a person, for instance, leans with his arm against a damp wall, or, what is still worse, falls asleep in that position, or that the part is exposed to a stream of air, that part will be attacked by rheumatism or palsy, or catarrh will be produced.

Q. 254. How may catarrhs and rheumatisms be prevented?

A. They may be prevented by keeping the skin constantly cool, clean, and strong; by exposing it to pure air; by washing and bathing when the

body is not kept too warm by unnecessary clothes, and by much exercise in the open air.

XX. Of the Preservation of certain Parts of the Human Body.

Q. 255. WHICH are the parts of the human body that man should take particular care to preserve in a good state of health?

A. The organs of his five senses.

Q. 256. By what means are the organs of sight, hearing, and smelling, preserved healthy, improved, and strengthened?

A. By free, pure air, and very frequent exercise in open air, rather than in confined places.

Q. 257. What is in general very hurtful to those three senses?

A. The unnecessary care of keeping the head warm by caps or other coverings.

OBSERVATION.

The baneful consequences which arise from covering the head, or keeping it too warm, are ulcers, scabs, boils, and lice, which lay the foundation of evils to the human race greater than can be calculated.

Q. 258. How may the eyes be injured?

A. By dazzling, irregular, and transient lights; by objects brought too near the sight, or viewed sideways; by corrupted air, dust, smoke, damp vapours, the fat, sharp fumes of oil or candles; by the heat of ovens, and reading without sufficient light.

Q. 259. What hurts the hearing?

A. Strong, sharp, unexpected sounds or reports, corrupted air, feather-beds, dust, too much snout in the nose, and pressure on the external ear, forcing it too near to the head.

OBSERVATION.

That the sense of hearing may be quick and distinct, the external ear should project sufficiently from the head, and be moveable; but this is prevented by the close caps which young children wear.

Q. 260. How are the organs of smell injured?

A. By corrupted air; by strong and foul odours; by snout in the nose, or snuff obstructing the nostrils, and obliging us to breathe through the mouth.

Q. 261. By what means is the organ of taste preserved?

A. By exercise; by the use of water, and mild plain food.

Q. 262. How may the organ of feeling be preserved?

A. By the exercise of the faculty of feeling; by the exercise of the body, and by cleanliness.

Q. 263. Are the common exercises of the senses sufficient to render them perfect?

A. No; the senses require to be incessantly exercised that they may become perfect, and capable of directing and upholding us amidst the wanderings of a disordered imagination, whose phantoms vanish before the torch of reason.

OBSERVATION.

Our sight and hearing, if not sufficiently improved, may deceive us during the night, or when the mental faculties are impaired by fear or prejudice: hence the origin of the absurd belief in spectres. But if our senses be rendered perfect; if we approach, and courageously endeavour to touch whatever imagination conjures up to our view, and if we explore whatever place a noise issues from, we shall soon be delivered from our delusion, and from the belief in the existence of spectres, witches, and all such absurdities. Those who tell stories of spectres to children, with a view to frighten them, are highly reprehensible; and should be excluded from all share in the education of youth.

Q. 265. How can a good, intelligible pronunciation be obtained?

A. By keeping the mouth and the nose clean, the neck free and uncovered, and obliging children to accustom themselves to speak slowly, distinctly, and emphatically, and to keep themselves erect.

Q. 266. Should we breathe through the mouth or the nose?

A. We should breathe through the nose, but not through the mouth: it is therefore necessary to keep the nose always clean by blowing it, and to endeavour to breathe through the nose and keep the mouth shut during sleep.

Q. 267. Are there no other parts of the body which man should take particular care in preserving?

A. Yes ; his teeth ; for the teeth are not only necessary to assist us to pronounce distinctly, but for chewing also ; and on the proper chewing of our food depends, in a great measure, digestion, and the nourishment, health, and prosperity of mankind.

Q. 268. How are the teeth injured ?

A. By too much fluid aliment ; by coffee, tea, and other warm slops used instead of cold water ; by corrupted air in apartments ; by uncleanness ; by the use of tobacco ; by bits of food, particularly meat, sticking between them ; by hot meats and liquors ; by filling the mouth alternately with hot and cold things ; by biting hard substances, and picking our teeth with knives, forks, pins, and needles ; all which practices are highly injurious to them.

OBSERVATION.

Nobody should put pins or needles in his mouth ; they may easily be swallowed and cause death. In general it would be well to make as little use of pins, even in dressing, as possible.

Q. 269. By what means are the teeth preserved sound ?

A. By the early habit of properly chewing our food ; by drinking cold water ; by breathing pure air, and eating cold or tepid aliment, and drinking no warm liquors at all ; by cleaning the teeth after each meal, either by drinking or gargling the mouth ; and by refraining from picking of them : all this is necessary to keep the teeth sound and beautiful.

Q. 270. By what means are the front teeth preserved sound ?

A. By constant use, and the chewing, particularly, of dry substances, as bread, &c.

OBSERVATION.

Children are not to cut with a knife the bread that has been handed to them, but to break it with their teeth and chew it.

Q. 271. Should children also preserve their milk-teeth ?

A. By all means ; for the lasting teeth, which are hid by them, are injured if the milk-teeth are not kept sound by much chewing.

Q. 272. If the teeth be not kept sound from childhood, and are injured, can they be restored to their original state ?

A. No ; that cannot be done ; but through cleanliness, chewing, pure air, and cold water, injured teeth may be preserved from further injury.

Q. 273. What are the best remedies to prevent tooth-ach ?

A. Chewing, drinking of and gargling with cold water ; pure air, cleanliness of the mouth, keeping the head cool, bathing the face, after rising in the morning and before going to bed, in cold water.

Q. 274. Does the preservation of the spittle deserve our particular notice ?

A. Very much. The spittle is very necessary in chewing and digestion, and for that reason the smoking and chewing of tobacco, by which a great deal of the spittle is wasted, is a very

bad custom, as is also the wetting with spittle the thread when spinning flax or hemp.

OBSERVATION.

The thread may be wetted with water rendered clammy by beer, soap, ground lintseed, bran, thin dough, starch, kernels of quinces, bird-lime, or other things. And besides, the flax or hemp should be well beat before it is put on the distaff, and well dusted, else in spinning, the dust or woody particles will be drawn by the breath into the lungs, and occasion coughing, stuffing, and perhaps a consumption.

XXI. Of the Beauty and Perfection of the Human Body.

Q. 275. What is the basis of beauty?

A. Health, and the perfect conformation of the body.

OBSERVATION.

“Health,” says Bertuch (see *Journal of Luxes and Fashion*, March 1793, page 189), “is the only and infallible source of beauty; all other modes of attaining it, such as folly, imposture, and ignorance have devised, may be compared to a plaster, which soon falls off, leaving mournful traces of diseases behind. The beautiful bloom of youth, the fresh colour, the perfection of the whole bodily structure, the free and easy play of the mus-

cles, the fulness of the veins, the clear delicately-spread, transparent skin, the glance of the eye, so expressive of life and of the condition of the soul, great cheerfulness ; all announce an inexpressible sensation of contentment and delight, which dispenses health and happiness both of soul and body, makes the husband, the wife, the youth, the virgin, and the infant happy, and bestows on every member of society charms and attractive powers which no art in the world can afford."

Q. 276. By what particular means may health be attained.

A. By free and easy exercise of the body during infancy.

Q. 277. What is besides requisite and necessary ?

A. Free, pure air ; washing and bathing ; a light easy dress ; clear cold water for drinking ; and simple good meals to nourish the body.

Q. 278. By what means is the perfection of the body to be attained ?

A. By avoiding sloth and inactivity till the twelfth year, after which plays and exercises will bring the body to every degree of perfection of which it is susceptible.

Q. 279. What is yet necessary to facilitate the improvement of the body ?

A. The instruction of children in the various exercises of the body which tend to render man healthy, strong, industrious, and happy.

Q. 280. What posture of the body ought we to recommend to children and to every one ?

A. The erect posture, whether we stand or walk, keeping the breast and head elevated

and on all occasions that will admit of it an upright posture is best.

Q. 281. What, therefore, may be considered as very hurtful?

A. Walking, standing, or sitting negligently, remaining bent or crooked, hanging down the head while we speak or listen, and looking askance.

Q. 282. Is it proper to accustom children to make use on all occasions of the right hand only?

A. No; that is very wrong. Children are to be taught to make the same use of the left hand as of the right.

Q. 283. What does most diminish beauty?

A. The habit which children sometimes contract of making wry faces and foolish gestures.

Q. 284. Is the beauty of man all that depends on his perfection?

A. No; innocence and peace, reason and virtue, the consciousness of having done one's duty, and contributed toward the general good, in endeavouring to diffuse happiness among mankind in this terrestrial abode, all shew the perfection, the beauty, and dignity of man.

CATECHISM OF HEALTH.

SECOND DIVISION.

OF DISEASES.

XXII. *Of Diseases, Physicians, and Medicines.*

OBSERVATION.

IF people lived as they ought to do, they would be exposed to very few internal complaints, perhaps to none at all; and the little ailments to which Nature, under all circumstances, is obnoxious, would be removed by those powers with which God has endowed her, for the preservation of the life and health of the human body, constructed with infinite wisdom and intelligence. But people, seduced by their passions and misguided by error, lead an irregular and dissolute life, and thus expose themselves to a train of melancholy diseases.

Q. 285. Tell me then, what ought those to do that are taken ill?

A. They ought to keep themselves tranquil and composed, and apply for the assistance of a physician.

Q. 286. What knowledge should a physician have who undertakes the care of diseases?

A. He should have a thorough knowledge of the beautiful and complicated structure of the human body; know the various causes of diseases, their nature and their mode of action on the

human body ; how the healing power of nature operates ; and how medicines, whose virtues he ought to be acquainted with, contribute to remove or cure diseases.

Q. 287. Is the knowledge necessary for a physician easily attained by reading a few books, or by conversation ?

A. No ; it is a very difficult matter to attain a thorough knowledge of the science of physic, which those who practice it should begin to study in their youth, and cultivate continually through life with great assiduity and pains.

Q. 288. To whom should a patient apply for assistance ?

A. Not to a quack, but to a physician of understanding, knowledge, and rectitude of heart ; who has received a regular education and studied methodically the very difficult art of knowing and curing diseases.

Q. 289. What class of people do you call quacks ?

A. All those who are not acquainted with the structure of the human body, and who have not methodically studied the science of curing diseases ; all those who presume to judge of the nature of a disease by the urine only ; who arrogantly promise to cure every malady ; and all those are also classed among quacks who are not properly authorized to act in the capacity of physicians.

Q. 290. Is it possible to learn the nature of a disease from the urine ?

A. No ; the urine by itself cannot determine the nature of a malady. Those, therefore, who set up as *water-doctors* are generally impostors, by whom many lose not only their money but their health and lives also.

Q. 291. Can maladies originate in supernatural causes, such as witchcraft or sorcery?

A. No; it were nonsensical and foolish to believe it. Nature operates universally; and all diseases spring from natural causes.

Q. 292. What opinion may we form of travelling, advertising operators, that pretend to cure ruptures by cutting; and what are we to think of itinerant dentists and oculists?

A. They are mostly impostors, who have no other view than to defraud the credulous of their money.

Q. 293. Is it reasonable to buy medicines for man or beast of those medicine-hawkers who travel about the country?

A. No; for by the stuff which those vagabonds sell, life and health may be lost; their nostrums should not be given to any even of the brute creation.

Q. 294. Is it advisable to take domestic remedies, or family receipts?

A. No; in a hundred such, there is hardly one that answers the purpose. The best, the only, and universal domestic remedies which the Almighty has given us are—fresh air and cold water.

Q. 295. What are we to observe respecting those universal, or secret medicines, for the cure, for instance, of canine madness, the ague, &c.?

A. Nothing favourable; they expose health and life to the utmost danger.

OBSERVATION.

The secret remedies against canine madness, and those which are usually resorted to as

infallible, are good for nothing. The only certain means of preventing the fatal effects consequent on the bite of a mad dog (producing canine madness, shewn, by a strong abhorrence from water), are cutting out the bitten part, or burning it with a hot iron, or washing the wound as soon as possible, and very often with water, or washing it with soap lye, which destroys the surface of it; or, filling it and covering the edges of it with Spanish flies, which, by inducing copious supuration, draw all the poison from the part affected.

Universal Medicines (so called) are vainly offered for the cure of many, nay, even of all diseases; but, in truth, there are no such medicines. The medicines so much recommended in newspapers, and the majority of English patent medicines, are good for nothing.

Q. 296. When people have received hurts, to whom are they to apply for assistance?

A. To a surgeon.

Q. 297. Is it very easy to attain a proper knowledge of surgery?

A. No; to become a good surgeon, much study and labour are necessary.

Q. 298. Where ought those medicines to be bought that are prescribed by a physician or surgeon?

A. In the shops of apothecaries who are authorized to sell medicines, and who are noted for order and cleanliness, as well as for the ability with which they conduct business.

Q. 299. Is the art of an apothecary easily learnt?

A. No; it is very difficult; many years are required to become acquainted with all the medicines, to know their properties and how to prepare them judiciously.

Q. 300. At what period of a disease is it most proper to apply to a physician?

A. Immediately on the first attack.

Q. 301. What knowledge and information, does a physician require that he may be able to cure a disease?

A. He must know the nature and the cause of the disease: it is therefore indispensably necessary to acquaint him with all the circumstances and symptoms of the disease, and to lay before him the whole state of the patient from the beginning of it, with the greatest exactness; he must know the constitution, and the manner of living, of the patient, and likewise every circumstance which might have operated in producing the disease.

Q. 302. What is therefore proper?

A. That the physician see and speak to the patient himself, and investigate the nature and cause of the disease?

Q. 303. Suppose certain circumstances prevent this, what must then be done?

A. An exact and circumstantial statement of the case of the patient must be drawn by some intelligent person and sent to the doctor.

OBSERVATION.

In order to do this properly, every house-keeper, or, at least, every parish, in the

country, in or near which there is no physician ought to be in possession of certain rules, according to which, such a statement may be drawn properly. I therefore apprize the public, that a book, much read in Germany, containing such rules, and much other useful matter, is now translating, and will soon be published.

Q. 304. What is required of a patient under the care of a physician?

A. That he take the medicines which the physician has prescribed, faithfully, regularly, in due time, and in the dose prescribed.

Q. 305. Is it to be expected that a serious indisposition should be cured by one prescription?

A. No; as well may we expect a large tree to be cut down by one stroke of an axe, as a disease of any consequence to be cured by the first prescribed physic.

Q. 306. If, then, the first prescribed medicine does not give relief, must the patient persevere in the use of it, or employ another doctor?

A. The patient must continue to take medicine till the disease be cured; but he must not go from one doctor to another.

Q. 307. Is it sufficient that the patient take the medicine prescribed, in order to obtain a cure?

A. No; it is not sufficient: he must observe a proper diet, without which medicines become of little use. Diseases are often cured by the healing powers of nature, assisted only by proper regimen.

XXIII. *Of the Conduct to be observed by Patients afflicted with Fevers.*

OBSERVATION.

THOSE diseases are denominated febrile which manifest themselves by cold or hot fits, and an unnatural alteration in the pulse, commonly accompanied with dislike to food, vomiting, weakness, anxiety, and pains all over the body, or in particular parts, and head-ach.

Q. 308. A sick person is a poor, helpless creature, oppressed by anxiety and pains;—how, then, ought he to be treated?

A. With the greatest tenderness, kindness, and affection; he ought to be attended and nursed with great and judicious care.

Q. 309. Is it proper to talk much to persons suffering under grievous diseases, or to make great noise and confusion about them?

A. No; sick people ought as little as possible to be disturbed by talking; and every thing about them ought to be quiet.

Q. 310. Is it proper to admit visitors, or many persons, into the room where a sick person lies?

A. No; because the air becomes corrupted by the breath and exhalations from so many visitors, who generally come through curiosity, and therefore ought not to be admitted.

Q. 311. What ought to be the state of the air in the rooms or chambers of the sick?

A. All sick persons, particularly those that labour under fever, ought to breathe fresh, pure and dry air.

Q. 312. Is fresh air so necessary for them?

A. Yes; it is indispensably necessary for them, for it is most effectual in cooling and composing them, and diminishes anxiety.

Q. 313. What is further necessary?

A. That the room where the sick person lies be aired by keeping the window open almost the whole day; that the windows and doors be thrown open occasionally, and that all superfluous, especially all soft, furniture be removed from the chamber of one ill of a fever.

Q. 314. What kind of room is best adapted for a sick person?

A. A dry, lofty and large room; not a low, narrow, damp, and musty room: it must be kept clean and orderly, all dust and nastiness removed, and nothing suffered in it that can corrupt or infect the air.

Q. 315. Should the room of a sick person be lightsome or dark?

A. It should not be very lightsome, but rather darkish, as the light disturbs the repose of the patient.

Q. 316. What kind of bed does a sick person require?

A. An orderly and clean bed, not too warm, with covering not too heavy, bed not too soft, and clean linen. If straw be used instead of mattresses, it must be fresh and dry, and free from all offensive smell.

Q. 317. Is it good or bad for persons ill of fevers to lie on feather-beds?

A. It is hurtful; for such beds make the fever worse. They should lie on mattresses stuffed with horse hair, or on straw, covered with a light quilt.

Q. 318. May two sick persons, or one sick person and a person in good health, lie together in one bed?

A. No; every sick person ought to have a bed to himself, and, if particular circumstances do not intervene, a room also: with respect to healthy persons, they ought not to sleep in the bed, or in the room, of one that is sick.

Q. 319. May the curtains of the bed be drawn in which a sick person lies?

A. No; because it deprives him of the fresh air.

Q. 320. Ought not the bed of a sick person to be shaken and made daily?

A. Yes; a sick person ought to be taken every day out of bed, when he can bear it, that the bed may be made.

Q. 321. How ought a sick person to be dressed?

A. His dress ought to be clean and comfortable.

Q. 322. Ought not the sheets of the bed, and the shirt or shift of the sick person to be changed?

A. Yes; they ought to be often changed; but the clean linen substituted ought to be well aired.

Q. 323. How ought the bed of a sick person to be placed?

A. Not near a cold, damp wall, but in an open, free situation, that the person may be ap-

proached and assisted on either side without inconvenience.

Q. 324. Is it proper to keep the heads of persons ill of fevers, who are commonly very much affected with head-achs, warm?

A. No; their heads are to be kept cool and uncovered, that the head-ach and delirium may not increase.

Q. 325. What are sick persons to drink, particularly those who are afflicted with fevers, which induce thirst?

A. Cold, pure water, which in fevers ought to be mixed with vinegar or lemon-juice. A piece of toasted bread may also be added, being a good ingredient.

Q. 326. Is it good to warm or boil the water?

A. No; it should neither be warmed nor boiled.

Q. 327. Is it proper for sick persons to drink much tea?

A. No; it is commonly hurtful to them.

OBSERVATION.

The drinking of much warm tea is also very hurtful to women in childbed: cold tea is preferable.

Q. 328. Do persons ill of fever like to drink cold water?

A. Yes; cold water and fresh air are the best strengtheners for such persons; they refresh, and diminish the anxiety and pains.

Q. 329. Must a person in a fever drink much water?

A. Yes; he ought to drink a great deal.

Q. 330. Does cold water chill a person afflicted with fever?

A. No; a person after drinking cold water falls often into a gentle perspiration; and warm liquids frequently produce heat without any perspiration.

OBSERVATION.

In fluxes, and a few other diseases, warm drinks may perhaps answer better than cold.

Q. 331. What regimen ought sick persons to observe?

A. Persons afflicted with violent fever, or who labour under any other dangerous malady, lose all appetite, and therefore are not to be pressed to eat.

Q. 332. Why should not persons in fever be pressed to eat?

A. Because they do not digest; and food remaining undigested in the stomach aggravates all diseases, particularly fevers.

Q. 333. Is it proper to permit a person afflicted with the first attack of fever to eat, if he has an appetite?

A. No; it is better for him to fast; for the eating of any thing readily increases the disease; fasting diminishes it; and there is no danger of starving.

Q. 334. What kind of nourishment is best in fever, should the sick person be desirous of any?

A. Butter-milk, sour milk, fresh, ripe, juicy fruits, strawberries, gooseberries, raspberries, cherries, plums, grapes, apples, pears, baked or dried fruit, barley-water, or water-gruel mixed

with vinegar or lemon-juice; and, in short, whatever can cool and refresh the patient.

Q. 335. What kinds of food are persons afflicted with fever to avoid?

A. Animal food, whether flesh, fish or fowl, broths, butter, eggs, pastry, or bread not well fermented or baked, are not to be allowed to such persons.

Q. 336. When does their appetite return?

A. Not till the fever is cured, and rest and sleep restored.

Q. 337. Should persons labouring under fever be kept warm or cool?

A. Such patients ought to be kept cool, avoiding all heat; and for that reason fires must not be made in the room where the patient lies, for his situation requires him to be kept more cool than warm.

Q. 338. Is it good to sprinkle perfumes on the patient, or in his room?

A. Fresh air is better than all incense; but in malignant diseases it is very proper to correct the air by sprinkling hot vinegar in the room repeatedly during the day.

OBSERVATION.

John Howard, that friend to mankind, who, in visiting and exploring prisons, hospitals, and lazarettos, sacrificed his life for the benefit of the human race, said, "The use of perfumes or incense is a clear demonstration of the want of cleanliness and fresh air."

Q. 339. Is it good in fevers to take any medicines to promote perspiration?

A. No; in most cases it is dangerous; many

fevers become by such means mortal. Such remedies or liquors as induce perspiration should therefore not be taken without the advice of a physician.

Q. 340. May a person ill of a fever be bled?

A. It is in many fevers dangerous to bleed; and without the approbation of a physician no bleeding should take place in fevers.

Q. 341. But is it advisable for people in good health to accustom themselves to be bled annually once or twice?

A. No; people that are in good health should never be bled; for by bleeding without necessity the blood is depraved, the body weakened, and health impaired.

OBSERVATION.

Bleeding pregnant women once or twice during their pregnancy is a very bad custom, hurtful both to mother and child.

Q. 342. Are vomits prescribed by a physician dangerous?

A. Vomits prescribed by a physician are not dangerous; they often do not weaken so much as purges.

OBSERVATION.

As many maladies, and particularly many fevers, originate in, or are connected with, a foulness of the stomach, vomits are often of very great service, as they expel all foulness from the stomach.

Q. 343. Should those who are ill of fever be permitted to remain long costive?

A. No; in fevers costiveness is very dangerous.

OBSERVATION.

For persons whose general health is good, and who are slightly indisposed, stewed, fresh, or dried fruit, particularly plums, are a good remedy against costiveness.

Q. 344. If a person be sick, and at the same time costive, by what means ought he to be relieved?

A. By a clyster.*

Q. 345. Are clysters dangerous or doubtful remedies?

A. No; they are not.

Q. 346. What are we to observe with regard to the habit which some people have acquired of taking purges annually, at certain periods?

A. It is a very bad custom; and medicines sold by pedlars and such vagabonds are commonly very pernicious.

Q. 347. Ought children in good health to be purged often?

A. No; it tends to nothing good; and in general the health of children should be preserved by proper attention to diet and cleanliness, and by much exercise in the open air, for it cannot be done by medicines.

Q. 348. Is it good to make use of plasters and salves in cases of wounds, contusions, or ulcers?

* Called in Scotland an injection.

A. No ; plasters and salves seldom do good ; in most cases they do more harm than good.

OBSERVATION.

In cases of ulcers on the feet, or St. Anthony's fire, in particular, plasters and salves are carefully to be avoided, as very bad, and productive often of obstinate sores.

Q. 349. What must be done with wounds that are not very large and deep, where neither a great vein nor the bowels are hurt ?

A. The wound must be bandaged with a dry linen cloth, without being previously washed or cleansed with brandy or water ; for the blood, which is better than all plasters and salves, will often perfectly cure the wound without any suppuration.

Q. 350. What is best to be done in cases of contusion ?

A. Linen cloths dipped in equal quantities of vinegar and water should be continually applied cold to the injured part : the pains will thus be abated, and extravasated blood absorbed.

OBSERVATION.

Little ulcers may be dressed with lint ; or a linen bandage dipped in vinegar.

Q. 351. How are scalded parts to be cured ?

A. If (exactly as directed for contusions) linen cloths dipped in cold vinegar and water be applied from the beginning, and repeated every quarter of an hour, the burns will be cured better than by plasters and salves.

OBSERVATION,

Vinegar and water (equal parts) cure also sore nipples. Mothers may prevent soreness of the nipples by washing them often in cold water before and after delivery.

XXIV. *Of Diseases which universally prevail; of Endemial and of particular Maladies.*

Q. 352. If diseases be very rife, and attack many, must the healthy take medicines, in order to escape infection?

A. No; a healthy person should never take physic.

Q. 353. Should not people in such a case purge, take emetics or sweating potions, or be bled?

A. No; such weakening remedies would rather favour than prevent infection.

Q. 354. Is it good to take strengthening medicines for the stomach?

A. No; they are more hurtful than beneficial.

Q. 355. What should a person in good health do to escape general contagion?

A. He should be very temperate in eating and drinking, be very cleanly, take a great deal of exercise, and be careful not to over-heat himself or to catch cold.

OBSERVATION.

In times of scarcity putrid fevers and contagious diseases, which sometimes depopulate

whole provinces, are caused by eating bad bread, and by unwholesome food in general.

Q. 356. Is no other precaution necessary?

A. Yes; as diseases that generally prevail are often contagious, we should not expose ourselves to danger by visiting patients, nurses, or hospitals.

Q. 357. When certain diseases, for instance the ague, are endemial, and stagnant waters or marshes in the neighbourhood are the cause of such fevers, what should the inhabitants do?

A. They ought to drain off the waters, and dry the marshes, and the fever will cease; for with the cause the effect naturally ceases.

Q. 358. If mechanics or artisans be often attacked by diseases peculiar to them, a stonemason, for instance, by consumption, painters by colic, what ought they to do?

A. They ought, as sensible men, who wish to be healthy and live long, to investigate the true cause of their frequent disease, and strive to find out how they can diminish or avoid it.

OBSERVATION.

Those who are to lead a sedentary life, females, mechanics, artists, the studious, ought, from their infancy till the complete shedding of the teeth in the twelfth year, to be exhorted or obliged to take a great deal of bodily exercise in the open air, in order that subsequent inactivity and confinement may not injure their health and happiness too much.

XXV. *Of Contagious Diseases.*

Q. 359. WHAT diseases are peculiarly contagious?

A. Putrid fevers, spotted fevers, the yellow and scarlet fever, dysentery, small-pox, and measles. The plague, the worst of all diseases, is very infectious.

Q. 360. How is the infection of them communicated?

A. By contact, or through the air impregnated with putrid steams or noxious particles proceeding from patients labouring under any of those diseases.

Q. 361. What is particularly to be observed with respect to alleviating the symptoms in contagious diseases?

A. The air, as well in the room as in the house where the patient lies, ought to be preserved continually pure and fresh, by keeping one window always, and the windows and doors occasionally, open. In short, one cannot be too assiduous in procuring constant fresh air.

Q. 362. What is further to be observed?

A. The greatest cleanliness ought to be observed with regard to the patient, the bed, the room, and attendants, observing not to keep the room too warm.

Q. 363. What else should be done to guard against infection?

A. Previous to visiting a patient we should take some nourishment;—we should, however, avoid eating any thing in the apartments of the

sick ; but be cheerful and not timid, and, as far as we can, administer relief and comfort.

Q. 364. What duties do those who are intrusted with the care of such patients owe to their fellow-creatures ?

A. They ought, in order to prevent the infection from spreading, to keep by themselves, avoid all unnecessary intercourse with other people, and not enter any school or church ; and the children and domestics of such patients should be placed under the same restraint.

OBSERVATION.

Contagious diseases are often communicated to schools by children, and so spread to distant parts.

Q. 365. May many persons be admitted into the room of a patient who is infected with a contagious disease ?

A. None but those that are intrusted with the care of the patient ; and all curious visitors should be refused admittance without any ceremony.

Q. 366. Why is it a duty incumbent on the healthy to avoid approaching an infected person when there is no pressing necessity to expose ourselves to contagion ?

A. Because self-preservation, and what we owe to our families and fellow-creatures, directs us not to endanger our own health, and especially not to endanger the health of our fellow-creatures.

Q. 367. If an infected person dies, what is then to be done ?

A. The corpse must not be exposed to pub-

lic view, but buried as soon as possible, avoiding all pomp, and admitting but few to attend the funeral.

Q. 368. Is not the itch a contagious disease?

A. Yes; it is communicated very readily by contact with an infected person.

Q. 369. What must be done to escape this disease?

A. We must avoid the company of infected persons.

OBSERVATION.

Children who have the itch, or scurfy heads, should not be admitted into schools, that other children may not be infected. If school-masters, as it is their duty, would take the trouble of examining the hands of their pupils, and would command them to be washed daily before coming to school, children so infected would soon be found out.

Q. 370. Is it dangerous in cases of itch, scurf, or leprosy, to use mercurial ointment?

A. Yes; it is very dangerous.

XXVI. *Of the Small-pox.*

Q. 371. FROM what can the degree of danger in small-pox be conjectured?

A. Chiefly from their number. If the pustules be few, there is little danger; but where they are many, and confluent, the danger is great.

Q. 372. What is therefore lucky?

A. To have but few pustules.

Q. 373. At what period of the disease may we apprehend danger?

A. Not at the beginning when the pustules come forth, but towards the end, when they suppurate and dry.

Q. 374. When a child has symptoms of being infected with this disease, is it proper to have recourse to wine, brandy, warm rooms and beds to forward the eruption?

A. No; it would be acting very injudiciously; for by such means we should increase the number of pustules, and consequently the danger.

Q. 375. What is then to be done?

A. The cure must be left to nature, observing only, during the period of the eruptive fever, which lasts two, three, or four days, to keep the patient cool and in fresh air, allowing him but little nourishment, and cold water only for drink.

Q. 376. When at last the pustules come out, what must be done in the course of the disease?

A. We should keep the patient in a situation where the air is pure, cool, and dry; give for drink cold water, and enjoin temperance and moderation in eating and drinking.

Q. 377. Is it good to lie in bed in the day-time at the period of the eruptive fever, before the eruption of the small-pox, and during the whole course of the disease?

A. No; it is not good in the day-time: the patient, if possible, should keep out of bed, and at night lie in a bed that is not too warm, nor

fusty; feather-beds are therefore very hurtful to this class of patients.

Q. 378. When the eye-lids are inflamed and closed, is it right to force them open, and apply to, or blow into, them spices or other hot things?

A. No; the eye-lids must not be forced open, or meddled with, nor ought inflammatory things, which induce blindness, to be applied to them; but when at last they open of themselves care must be taken that the eyes be not irritated by too much light in the room, which should be kept darksome, both before and after they open. Particular attention is also to be paid to keeping the air in the room pure and cool.

Q. 379. Is great mortality occasioned by the small-pox?

A. Yes; in general out of ten patients labouring under the natural small-pox, one dies.

ADDRESS TO CHILDREN.

Children, the natural small-pox is a bad distemper—as bad as the plague! But God has, in his goodness enabled man to find out a remedy for the alleviation of the great miseries occasioned by it. He has led us to the important discovery of inoculation, which destroys in a great degree the virulence of this baneful disease.

When children are inoculated they have only a few pustules of the best kind; they are seldom confined to bed; seldom lose their health; and of a hundred inoculated hardly one dies; whereas one out of ten of those afflicted with the natural small-pox generally dies.

Q. 380. Do you wish to be made acquainted with the process of inoculation?

A. Yes; if you will be so kind as to explain it.

INSTRUCTION HOW TO INOCULATE.

In order to inoculate a child in a good state of health, a needle is dipped in a little fresh thin matter of true small-pox, with few pustules. With this needle an incision is made of the breadth of a straw under the scarf skin of the arm above the elbow, without drawing any blood, so that the matter shall be lodged under the upper skin; and this is called inoculation for the small-pox.

The effect produced, and the conduct to be observed by the patients, are as follows: Having the great advantage of knowing to a certainty that the person inoculated will have the small-pox within ten or fourteen days, the strictest regularity and temperance with regard to diet is to be enjoined.

The fourth, fifth, or sixth day the incisions become inflamed, red, thick, and hard; and from this time till the complete restoration of the patient to perfect health, the incisions, which are often much inflamed and from which a great deal of matter oozes, ought to be repeatedly washed every day with cold water.

The seventh, eighth, or ninth day after the inoculation, the patient feels pains under the arm and is attacked by head-ach, and fever; and sometimes vomits.

This fever lasts two, three, or four days, dur-

ing which period the patient should not remain in bed, but, though it may be very inconvenient in the beginning, walk, or be carried, about, where there is fresh, pure, cool, air, which is absolutely necessary.

In free and cool air, the fever and head-ach go off; and if the forehead and arms be frequently washed in cold water, almost all illness will go off.

The second, third, and fourth day of the fever, or the tenth, eleventh, or twelfth day after inoculation, sometimes later, the small-pox come forth of their own accord: they ought not to be forced to make their appearance.

In most cases there are few pustules, which being good, the disease is soon at an end. The pustules in this case contain little matter, and dry soon; and it is only necessary to keep the patient regular and in fresh air, to prevent the disease from becoming dangerous.

Q. 381. Can a person be infected twice by the small pox?

A. No; the true small-pox cannot infect the same person more than once: all stories of getting the infection twice are erroneous.

Of Vaccination, or the Cow-pox.

The inoculation of small-pox, as a preventive of the dangerous forms of the disease, has been practised in Scotland, for nearly a century, with great success. But it has ceased to be equally important, without any failure of its

efficacy, by the substitution of *Vaccination*, or *the Cow-pox*, discovered by Dr. Jenner, in the year 1798, and adopted in all parts of the British empire, and in every country of the civilized world, as one of the greatest blessings conferred by an individual on the human race. It is founded on an extraordinary power possessed by a pustulous disease on the teats of the cow, and capable of being communicated to man, and of obviating the susceptibility of the human constitution to small-pox. The existence of such a power, derivable from such a source, is ascertained by the experiment, that the pustule excited in the human subject by vaccine matter, yields a fluid of a similar nature with that which was inserted; a discovery essential to the general propagation of the practice.

Comparative Advantages of Vaccination.

The vaccine inoculation is perfectly safe, and incomparably milder than the inoculated small-pox. The latter has much fever, and is acknowledged to be sometimes fatal. A slight fretfulness or uneasiness for 24 hours, sometimes scarcely discernible, is all the fever that attends inoculated cow-pox; it requires neither medicine nor regimen, may be practised at any season of the year; and not being capable of being disseminated by volatile effluvia, no contagious affection by means of it is diffused through a neighbourhood, and none have died. That it affords a full security from small-pox the evidences are innumerable, and, notwithstanding some

apparent exceptions, absolutely decisive. The alledged exceptions are extremely rare, and may be ascribed to cases of chicken-pox, or some imperfection in the mode of inoculation, the efficacy of artificial cow-pox, as a preventive of the dangers of small-pox, being incontrovertible.

Precautions in performing Vaccination.

The matter should be taken from a good vaccine vesicle in a healthy subject, from the 5th to the 9th day of the disease. It is most certain in its effects when immediately inserted. If it is to be kept, it should be allowed to dry, not before the fire. It may be kept on glass, on the point of a lancet, or on the end of a small pointed piece of ivory: cotton-thread is a very commodious vehicle. When about to be used, it must be moistened with water, either cold, or of a blood-heat. The end of the third month, when the constitution has acquired some firmness, before the period of teething, is the most eligible time for the operation. In an adult, it should be performed when the constitution is in its sound state. The operator should delicately raise the cuticle on the arm, midway between the elbow and the shoulder, near the insertion of the deltoid muscle, with the point of a lancet, charged with the fluid matter, without any effusion of blood, if possible, and apply the matter to the abraded part. The lancet may be charged again, and wiped on the puncture. About the third, or fourth day, a small red spot, a little elevated, appears on the punctured part, which gradually becomes

more florid, and slightly hardened and swelled. On the fifth or sixth day, the spot is converted into a small white vesicle. In two days, this is much increased in size, has elevated edges, and in the centre, a small depression, surrounded with a narrow crust. On the eighth or ninth day, a circular inflammation appears around the vesicle, which increases for three days, and is sometimes half an inch, sometimes two inches in diameter. On the eleventh or twelfth day, this inflammation begins to disappear, the vesicle becomes harder, and of a dark brown colour, approaching to black, and afterwards separating, leaving a red raw-looking depression, which continues to be distinguishable through life, either somewhat depressed, or merely of a whiter colour than the neighbouring skin.

A minute attention to the rise, progress, and decline of the vaccine vesicles is indispensable; the completion of the course of the disease, in the vaccinated constitution, being the criterion of the security of the patient from small-pox. The appearances are subject to some slight varieties, which are not generally found to obstruct the process of vaccination.

XXVII. *Of the Measles.*

Q. 382. ARE the measles a bad distemper?

A. Yes; they take away the lives of many; and even after they go off, leave behind complaints which often prove fatal.

Q. 383. What may particularly be observed

with regard to this disease, which is so often hurtful to the lungs?

A. Patients afflicted with it must be kept a little warmer than is necessary in cases of small-pox, but not too warm; they ought to breathe pure air, and great care is to be taken that they do not expose themselves to cold.

Q. 384. When this disease goes off, what are we to do for the patient, that he may not suffer from the consequences of it?

A. The patient for some time must guard against cold air, and put on warm clothing.

XXVIII. *Of the Bloody Flux, or Dysentery.*

Q. 385. At what season does the bloody flux commonly appear?

A. In the summer, but mostly in the autumn.

Q. 386. Is the bloody flux a bad and dangerous disease?

A. Yes; it is a very malignant disease, exposing the patient to great danger, if he be improperly treated.

Q. 387. Is the bloody flux the consequence of eating fruit?

A. No; ripe, sweet, juicy fruits rather prevent, than produce, this disease.

Q. 388. What precautions ought to be taken to avoid infection?

A. People should be very careful to avoid cold, and all unnecessary communication with the sick.

Q. 389. The stomach and bowels of patients labouring under dysentery are filled with bitter,

acid, and putrid matter:—is it proper to endeavour to stop the progress of the disease by confining this matter in the stomach and bowels?

A. No; the stopping of the bloody flux would endanger life; but the body ought always to be cleansed by purges, and sometimes by vomits, at the beginning of the disease.

Q. 390. What ought therefore to be avoided?

A. The stopping of the flux by any means, but especially by opium or laudanum, which is very dangerous.

Q. 391. What is further to be observed, as the bloody flux is often infectious?

A. The greatest cleanliness; filling the patient's chamber with fresh air, and taking great care that any excrements, as soon as voided, be carried out of the room, and buried under much earth.

XXIX. *Of Treatment, after Diseases are removed.*

Q. 392. WHAT ought to be observed after severe diseases are removed?

A. Regularity and temperance in eating and drinking, taking only light nourishing food, and observing not to expose ourselves too soon to the weather.

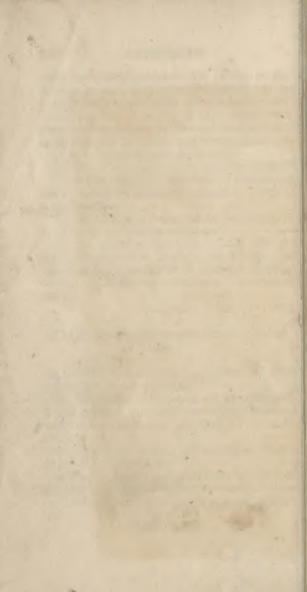
Q. 393. May a person just restored to health set to work immediately?

A. No; a person just risen from the bed of sickness ought first completely to recruit his natural strength before he begins to work again.

THE END.



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THE
CATECHISM
OF
HEALTH.



AT JERRY AIRD'S WELL.

EDINBURGH:

PUBLISHED BY STIRLING & KENNEY,
AT FISHER AND SON, AND JOHN FAIRBAIRN.

1828.