Kallos : a treatise on the scientific culture of personal beauty and the cure of ugliness / by a Fellow of the Royal College of Surgeons.

Contributors

Fellow of the Royal College of Surgeons.
Royal College of Physicians of Edinburgh

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KALLOS

A TREATISE ON

THE SCIENTIFIC CULTURE OF PERSONAL BEAUTY AND THE CURE OF UGLINESS

BY

A FELLOW OF THE ROYAL COLLEGE OF SURGEONS

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PREFACE.

TWO CLASSES of readers are addressed in this book, namely, the medical profession and the general public. But, just as an actor must raise his voice till it be heard in the pit as well as in the stalls, so the author of this work has always, in writing it, been careful to make it plain and untechnical enough for the laity, and has, in fact, more especially addressed them.

His ambition being no less than to sketch the outlines of a new science, that of the culture of human beauty and the cure of ugliness, he at once feels reminded that no science, new or old, can live and grow without professors. A moment's reflection serves to show that only among medical men can persons be found with sufficient biological and

pathological training to fit them to profess and study the new science in question. But, however specially fitted medical men may be to superintend measures primarily directed towards improving personal appearance, how often is their advice offered or asked except in the case of recognised disease or deformity? Would not the family doctor be somewhat astonished if a mother brought to him one of her children, and simply said, 'I have brought my little boy to you because he is growing up much plainer than his brothers and sisters; please find out the cause and remedy it, if you can?'

But, if it be in the power of an intelligent surgeon or physician to really occasionally advise a mother how to cultivate the good looks of her children in a scientific manner, it ought to be no longer singular for medical men to be consulted for that object. And if this book be successful, it should tend to bring such consultations about. Then the interest of a body of scientific men will be roused in the subject, and the knowledge of it may be expected to advance rapidly.

The author hopes that what he has just said will not lead people to regard the work as mainly persuading them to run to the doctor on account of every little defect of personal appearance. Quite the contrary! It is one thing to say that a science must look for its progress principally to men of science; it would be a very different and a preposterous thing to say that the public ought never to use the knowledge due to that science without the intervention of scientific men. One might as reasonably forbid the every-day use of arithmetic. The author repeats, therefore, that this book is chiefly intended to excite the interest and add to the information of the *public*.

Lastly, although he wishes the book to be 'popular' in the sense of being written for and comprehensible by the people, yet he means it to be studied seriously, and has not attempted to make it popular after the manner of that kind of essay which contains a smattering of science diluted with, and supposed to be rendered acceptacle by, a great deal of gossip and fine writing.

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THE

SCIENTIFIC CULTURE OF BEAUTY.

CHAPTER I.

INTRODUCTION.

I PROPOSE to write of the various forms of plainness, ugliness, and the minor disfigurements just as if they were manifestations of disease; and to study the laws which govern the culture and growth of human beauty after methods analogous to those applied by the hygienist in studying the laws of health.

Every subject, even the meanest, becomes better known, and the knowledge of it more practically useful, by being treated in a scientific manner.

The æsthetic relations of the human body are far from being a mean subject, and it seems impossible to leave them any

longer to the amateur writer in magazines of fashion, however intelligent and well-informed, still less to the hair-dresser and to the 'enameller.'

I am very conscious that the deficiencies of the following work are obvious and enormous; but every science must have a beginning more or less small. How meagre was the knowledge that could have been imparted about chemistry by a writer even as late as the date of Priestley's immortal discovery. How little that was true could have been said a few years ago in a complete course of lectures on Embryology. But if writers on Chemistry and Embryology had waited until there was material enough for Watts's Dictionary or for Balfour's book, neither of the two latter works could ever have been written at all.

It is very customary with a certain school of writers to moralise on the evanescence and to endeavour to demonstrate the valuelessness of personal beauty. Of such statements as that 'beauty is only skin deep,' I trust the following pages will contain a conclusive refutation. And when, in a gloomy dream, the poet tells us he saw

'in every land Beauty and Anguish walking hand-in-hand,' what did he really see, but half a dozen young women, each coming to an untimely end? The Accidental Insurance Office does not in these days charge a higher premium to good-looking people than to others. Beauty has not only an æsthetic but it has also a legitimate commercial value. As a suitable frame shows off and heightens the interest of a picture, so a handsome person emphasises the other qualities of the possessor. Personal appearance takes a large share in producing those 'first impressions' which play so important a part in ordering the course of men's lives in many matters besides affairs of love. Good looks will often disarm resentment. Remember, for instance, the story (Charles Lamb's, I believe) of the smart young blue-coat boy who was thus addressed by an emotional woman whom he had run against: 'Get out, you little brute ——' (then for the first time catching sight of his bright eyes),—'No, Lor' bless your pretty face!'

There is hardly any walk of life in which personal appearance will not be found rated by business people at a considerable money

value. The shopkeeper choosing a young woman to wait behind the counter, the doctor engaging an assistant, the solicitor picking out a barrister, seldom forget the power of good looks. The same qualities tell in contested elections of every kind.

And then also, if one gives a thought to a process which exercises a vast influence in deciding who are to get the chief prizes in every profession, namely, the process of patronage of the young by the old, how greatly personal appearance has to do with it! If one comes across any striking instance of some obscure youth who has, mainly by making for himself connections, risen to wealth and position, one almost invariably finds that he is endowed with good looks, a good voice, and a good address. If he has these and has also business habits, no one ought to regard this favoured individual's success as due to mere luck, even though his brains be small indeed.

Beauty of movement and of voice may be fairly included in the term 'personal beauty.' A fine voice has been in countless instances an endowment of those great orators who sway multitudes and settle the destinies of

nations. Take, for example, Gambetta and Gladstone; and can there be a doubt that the voices of John Bright and of Spurgeon have contributed largely to their enormous influence? It is well and truly said then that 'Such a lord is Love, and Beauty such a mistress of the world.' Fortunate are they whom all the unseen forces of nature seem to have conspired to make lovely, but not without hope are those whom Nature's neglect has left mainly to the devices of science and art; and doubly blessed are they in whose favour Nature and Art work intelligently side by side, they for whom the gifts of Aphrodite are cherished beneath the shield of Pallas.

CHAPTER II.

GENERAL OBSERVATIONS.

A DIFFICULTY is met with at the outset, viz.: that of giving a thoroughly satisfactory definition of beauty. There are some who profess to consider this merely a question of taste; but, upon reflection, it will be seen that no one practically regards beauty in this light. In the same country, at all events, the ideas of beauty are sufficiently uniform. For instance, there are very few people in England who do not consider the Princess of Wales good looking, and there are very few who do not consider that the late Mr. Peace was decidedly plain. It should be borne in mind that to like a face or figure is not to consider it beautiful. One may like a gargoyle or an excessively deformed person. Moreover, to say that a face possesses 'character' is not to say that it is

handsome. I shall refrain from attempting a definition of beauty, firstly, because I think it would serve no other purpose than that of provoking many of my readers to contradict me at the outset; and, secondly, because I believe that, as they read on, they will understand my opinions and objects without any such definition.

Let us straightway consider the following forms of ugliness:—

1. Coarseness.
2. Thinness.
3. Obesity.
4. Vulgarity.
5. Wrinkles.
6. Weakness.
7. Excessive strength.
8. Defects of circulation.
9. Defects of complexion.
10. Faults in the distribution and character of the hair.

Afterwards we shall proceed to plainness localised in the Face:—

1. Eyes, the eyebrows, &c.
2. Mouth, lips, &c.
3. Nose.

4. Cheeks.
5. Jaws, chin, &c.
6. Forehead, head, &c.
7. Ears.
8. Teeth.
9. Hands and nails.
10. Feet and ankles.
11. Neck.
12. Limbs.
13. Figure.

Then come :—

1. Ugliness of motion.
2. Ugliness of voice.

And lastly :—

'Tricks' and 'Habits.'

CHAPTER III.

COARSENESS—THINNESS—OBESITY—VULGARITY.

COARSENESS.

A THOROUGHLY coarse person has a thick, rough, muddy skin, bristly hair, large hands, wrists, feet, and ankles. The abdomen is large, often pendulous; the mouth is large and heavy; the face perhaps spotty, blotched, red where it should be pale, and often pale where it should be red; the nose is swollen and fat, the eyes often weak and congested.

(Note in this and the other descriptions in this book it is not implied that every detail is present in every case. Coarseness, for instance, is often purely local, *e.g.* the coarse palms of many amateur gardeners.)

Causes.—Hereditary influence often plays an important part, but not always, for often coarse parents have a refined child, and

vice versâ. Over-eating, especially of meats, and over-drinking alcoholic liquors. General coarseness is common in butchers and publicans. Rickets in childhood produces large wrists and ankles. For other causes see under special localities.

Treatment.—Eat moderately, take more fish, milk, fruit, and vegetables, less meat, less beer, less coffee, less stimulant of any kind. If the blood circulation is imperfect, use the remedies directed for it (p. 33). I think my readers will agree that coarseness depends more on surface and shape than on size; for instance, large hands, if their form imply strength, suppleness, and skill, and if their complexion be healthy and bright, are by no means repulsive. And a large foot, if with a good arch and strong supple ankle, is much handsomer than a smaller splay foot and weak ankle. In short, mere largeness is as distinct from coarseness as strength is from clumsiness.

In children, the family doctor should be consulted concerning the possible presence of scrofula or of rickets, as these diseases require special treatment.

THINNESS.

It has been said that one can always safely banter a person about being tall and stout, but never for being short or thin. When there is due proportion between the thinness of the bones and that of the soft parts, slimness is produced, which, in suitable figures, is a beauty. In children, and in adults when the coarser passions are put to one side, slimness is essential to perfect beauty. Voluptuousness must be distinguished from beauty in the strictest sense of the latter term.

Objectionable thinness is a disproportion between the soft tissues and the bones, resulting in hardness and angularity. It is often local. When localised in the face it is very unfortunate; for hollow cheeks are not inconsistent with a very lovely figure. So long as there are women with attenuated faces and fine arms and busts, it must be idle to declaim against low dresses in society. Now there are several different kinds of fat in the body. There is the subcutaneous fat, a fair proportion of which is necessary to round the limbs and smooth the shoulders.

There is the fat between the muscles, which also contributes to round the limbs. Too much of this detracts from the beauty of adult men, gives them figures resembling too much those of middle-aged women. Last, but not least, there are deposits of fat in certain parts of the body much like independent cushions. These are of high consequence to beauty. Take, for instance, one of them, which gives the full cheek of childhood, producing an outline like this—

Its absence throws into prominence the jaw and cheek bones like this—

Similar cushions lie in the orbits, causing a full as distinguished from a sunken eye,

and in the fossa behind the orbit, between it and the ear. They are found also in the neck just above the collar-bone and above the sternum. The want of these cushions causes the muscles of the neck to stand out like cords. The sufficient presence of them produces a columnar roundness, one of the chief beauties of the female neck. Only very muscular male necks have enough grandeur to enable them to dispense with these fatty cushions and yet remain handsome. This kind of fat, again, helps to round the female ankle.

The causes of thinness include congenital influences, want of sufficient food, want of good food, inability to digest the food swallowed, inability to assimilate the food even when digested, excessive work, excessive heat of the surrounding atmosphere, exhausting discharges of all kinds, insidious diseases, obscure nervous influences, restlessness of the mind, depressing passions, want of sleep, and old age. It is thus clear that persistent thinness demands a thorough investigation by a medical man. Everyone must have noticed how the same individual is at one period of life, say childhood, fat,

then at puberty (age of 14 and thereabouts) thin, at 25 to 30 fat again, and, in old age, thin once more. Or these alternations may occur more frequently; or, again, there are people who are always thin and others who are always fat. Now, I believe that these climacteric changes have their more immediate origin in the influences of which a list is given above. The thinness of puberty may sometimes be caused by exhaustion through rapid growth, or through new habits, or through mental disquiet from which infancy is free. Even the thinness of old age is often caused by some ailment such as chronic indigestion, having only an accidental connection with old age and not necessarily irremediable.

Treatment.—Ascertain and try to remove the cause. The doctor, here again, is often indispensable. When affections of the mind are concerned, or when evil habits are responsible, moral discipline is essential. If the patient is above a certain age, he probably will have to trust almost entirely to himself. He should live with some easy-going person of contented and easy habits. He should go to bed early. As far as pos-

sible he should execute all the functions of nature with regularity. He should be moderate in all things and he should 'study to be quiet.' Stimulants are not as a rule good, though beer, or a little wine at meals, often seem to stimulate the appetite and digestion so beneficially as to increase the production of fat. Alcohol is undoubtedly the cause of thinness in many persons. Whosoever would get plump should go to bed early, and get his or her 'beauty sleep.' I once heard of an idle person who consulted a physician because he could not go to sleep if he went to bed before four in the morning. 'What time do you get up?' said the doctor. The reply was, 'About two in the afternoon.' How many unreasonable people there are who won't go to bed early, because then they can't sleep, and who cannot then sleep because they will lie in bed and sleep in the morning. It is only certain constitutions which can lie in bed an unlimited time and sleep all the time; therefore most thin people, while going to bed early, should get up in reasonably good time.

For the rest, directions for getting fat would be little more than a treatise on di-

gestible and nutritious food, on the managemen of the digestion, and on the cultivation of the appetite. All these things should be attended to at once, and in doing so, consult a good handbook of diet and your medical attendant.[1]

OBESITY.

Of course it is not fat which is ugly, but fat in excess or in the wrong place. Unfortunately it is possible to be too fat in one place and too thin in another. For instance, compare the simultaneous double chin and sunken cheeks of some old people with the rounded cheeks and delicate chins of most young girls. Thus also the 'subcutaneous fat' may everywhere be excessive, while those cushions of fat mentioned above are nearly absent.

Still, the obesity which causes trouble to the subject of it is of a more general kind. Its *causes* are—Congenital tendencies, excessive power of assimilation (this assimilative power is sometimes great even when the digestion and appetite are weak). Other causes are calmness of disposition, a mind

[1] See also the Appendix on Banting's system.

too intelligent to be troubled with vanities, or too stupid to be troubled by things of consequence; laziness, excessive power of sleeping, enforced want of exercise, certain affections of the blood or lungs which interfere with normal destructive oxidation. Thus there is a disease called 'chlorosis,' which makes young women look bloodless, and often at the same time grow fat. The accumulation of fat in these cases is said to be due to the want of red blood-corpuscles to carry oxygen to burn the fat off. High living, laziness, and abundant sleep combined, will make ordinary people fat; and if such people get too fat, they ought to know how to cure themselves. As a matter of fact they do not always know, but complain of their fatness with no more justification than had the man who, after a huge dinner, felt alarmed to find that he had lost his appetite.

Treatment.—The last class of people have the remedy in their own hands, or, if they be children, their mothers have. A mother need seldom fear to limit the diet of an obese child so long as he sleeps well and continues bright and lively.

With regard to people who get fat because

of their exceptionally powerful digestion, they should either eat less or take more exercise, or diet themselves on some such system as that called after Banting.[1]

But there is a class of obese people in whom almost every article of diet seems to go to build up fat. Now the difficulty in dealing with them is that their fatty tissues are so greedy that they will be 'first served' by the digestive system. Hence a diet like Banting's starves not so much the adipose tissue as the tissues and systems essential to life. Cases of this kind are, however, very exceptional indeed. Hence there are exceedingly few corpulent individuals who cannot safely go through a regulated system of diet and exercise. When poverty of the blood is a cause of fat, iron is the great remedy; and it is well supplemented by fresh, bracing air. The citrates and the fresh carbonates are the best salts of iron for this purpose, and should be taken in large doses.

VULGARITY.

This appearance usually depends more upon the manners, the dress, the bearing, the

[1] See Appendix.

state as regards cleanliness of the hands, &c., the method of arranging the hair, beard, &c., than upon the features and complexion. But undoubtedly certain forms of ugliness, especially coarseness of the face and of the hands or feet, are more common among the lower classes. These forms are considered elsewhere. See 'Coarseness,' 'Hands,' 'Feet,' &c.

CHAPTER IV.

WRINKLES.

THE skin has a natural tendency to form folds or wrinkles even in early adult life, or earlier. This tendency grows stronger and stronger with age; but it is subject to modification by congenital, by accidental general, and by accidental local peculiarities. Any influence which distends the skin considerably for some time, and afterwards passes away, is almost sure to lead to lines, if not to wrinkles. Excessive, but temporary, obesity and dropsy are such influences. Now, well-marked dropsy is a serious matter; but there are many individuals free from serious organic disease who, owing either to a weak circulation or to an imperfect condition of the blood, are yet liable to puffing of the subcutaneous cellular tissue of certain parts of the body when those parts are in a dependent position.

During the day the legs swell slightly; during the night the orbits and cheeks become fuller. This condition tends to deepen and increase the so-called 'crow's feet' near the eyes. It is usually associated with disordered nervous system, with sedentary habits, and want of exercise. It sometimes is simply due to a state of the blood above referred to and named 'chlorosis.' The cause should be carefully inquired into and attacked. Here, again, the medical attendant is useful and generally essential.

But wrinkles may also be produced and deepened in a more active manner. I am told that the inhabitants of countries where the sky is cloudless and the sun high and glaring, the United States, for instance, get crow's feet near the eyes at an earlier age than do Londoners. If such be the case, it is consoling to think that we have some compensation for our fogs, and clouds, and smoke. But this, alas! is almost taken away from us by the fact that a dirty atmosphere tends to make ordinary wrinkles conspicuous by the grime which gets rubbed into them, and is not always easy to wash out. Seamen, and other persons whose eyes are exposed to

wind, sun, and weather, get wrinkled in a similar way. Such wrinkles may be called 'active,' from the mode of their production. With 'active' wrinkles, should be classed those depressed lines which appear in the forehead, and which may give an expression of permanent frowning, or of permanent perplexity, according to whether they be perpendicular or horizontal. Grooves which are sometimes passive in origin, sometimes active, and often both, are the lines which, commencing just outside the alae of the nose, extend outwards and downwards on each side, between the cheek and the corner of the mouth. Their passive cause is a drooping flabby cheek, their active cause not unfrequently some disorder of the lower bowel. The wrinkles and folds in the skin of the forehead are liable to be originated and aggravated by habit, especially if the individual have a very movable scalp, or defective sight, or be subject to headaches.

Careful attention to the state of the bowels, for instance, the cure of hæmorrhoids (piles), is sometimes required by persons in whom the lines just mentioned are strongly marked.

Of the exact anatomy and physiology (it can scarcely be termed pathology) of the development of folds and wrinkles I confess myself ignorant. It is a subject which deserves careful and scientific investigation, and which will no doubt get it. It is as well, therefore, to publish no crude hypotheses.

It is not unreasonable to think that local emollients, such as cold cream, applied at night, and followed in the morning by astringent lotions, such as alum, may tend to check the wrinkles which form around the eyes. But the alum lotion should be very weak, or it will be more likely to injure the skin than to act as a prophylactic against wrinkles. Good may certainly be expected from the hygienic measures recommended over and over again in this book, viz., moderate quiet exercise in the open air, early hours, and correct diet. Ladies also should not wantonly expose their eyesight to wind and sun.

CHAPTER V.

WEAKNESS—EXCESSIVE STRENGTH.

WEAKNESS.

WEAKNESS is one of the elements of beauty, if the beautiful be considered, as Burke keeps it in his Essay, entirely distinct from the sublime. But although weakness itself has something fascinating about it, many of its immediate results have by no means that effect. For instance, a slight figure is always accounted a beauty; but if the slightness involves much muscular weakness, the ensuing effect of feebleness combined with gawkiness is far from charming.

'Weakness' is a term which is often applied to conditions in no way pleasing. It may then be found upon examination to be used metaphorically, or else derived in some very indirect way. Examples of this use are to be found in the expressions, 'weak eyes,' 'weak knees,' 'weak head,' 'weak voice.'

Weakness is also sometimes disagreeable from its associations.

It seems doubtful, therefore, whether it can be either correct or advantageous to treat of weakness as a general cause of ugliness. It will be discussed in those parts of this book which deal with affections according to their localities.

EXCESSIVE STRENGTH.

When a satirist in 'Punch' wrote that

> We know all ladies' heroes are
> Tall, wicked men, and muscular,

he was apparently making a statement scarcely consistent with the dictum that great strength usually involves ugliness. Nevertheless, when the passive parts of the frame appear strong, they are generally ugly. Thus large knees, thick ankle bones, and thick wrist bones are the opposite of lovely. So also, as a rule, are a large bridge to the nose, a large chin, and powerful, *i.e.* high cheek bones. Some of these features have a pleasing effect in spite of their size; but it is then either because of their having some quality of beauty, such as fineness of shape,

or because of their grandeur of character (what Burke would call 'sublimity'), or because of their associations. For example, a nose, though large and strong, may be covered with skin of a fine complexion and may be classically and elegantly shaped.

The only kind of excessive strength which is practically remediable is that which comes from excessive exercise. The cure lies in the removal of the cause.

CHAPTER VI.

CIRCULATION.

To begin with, let us consider the main influences which affect the circulation generally.

There is hardly any kind of disease or disorder, bodily or mental, which may not affect the circulation; hence the doctor's never-failing habit of feeling the pulse. The 'pulse' is a small blood-vessel in the wrist which conveys blood from the direction of the heart towards the hand. Now, every medical man knows that the pulse only gives reliable information when its indications are considered with other signs and symptoms. For instance, extreme rapidity of the pulse is a frequent sign of impending dissolution, but more frequently of a far less serious state of things. This apparent

inconsistency in no way confuses the physician, because he knows how to make other symptoms explain the meaning of the pulse. I say this, because the public cannot be too strongly impressed with the idea of their own incompetence to use any but the simplest medical knowledge without the guidance of a trained adviser, and this no matter how great their intelligence. The keenest judge upon the bench, if he should think, after reading a good medical work on the liver, that he could tell the condition of his own, would be as wrong as if he thought he could play the violin after hearing a lecture on it and without regular instruction. You can no more make a physician than a man of the world by giving him a book to read. Nothing but years of practice and experience will produce either one or the other. Therefore, whatever I may say to you about your circulation, your heart, your brain, or your nerves, do not imagine that you will be at all more competent to tell the state of them than you have ever been. If you attempt it, not your untrained mind, but your ever-active feelings will have to guide your judgment, and you will probably come

to the conclusion that you suffer from heart-disease, or even from impending insanity. What I mean to attempt is to show you when you may reasonably hope to effect any improvement in appearance by simple measures, and also when, in order to effect the same object, you ought decidedly to call in the aid of the doctor.

In order to give a necessary warning I have made this digression. To return, almost every kind of disorder, as I have said above, may affect the circulation, and the most trivial causes may influence it seriously, or *vice versâ*. For example, fainting is usually due to the heart's failing in strength temporarily so much as to be unequal to the task of sending a proper blood-supply to the brain. Now ladies have been known to faint at the sight of a mouse. Such an occurrence also illustrates another fact, namely, the immense power of the nervous system over the heart and blood-vessels. So also do blushes.

The state of the circulation depends primarily upon the strength and structural soundness of the heart, and upon the tone and soundness of the blood-vessels; second-

arily, upon the presence or absence, character and degree, of various conditions, which for convenience might be called 'irritations' (including both excitants and sedatives), *e.g.* exercise, rest, food, alcohol, pleasure, pain, hope, fear, shame, &c., &c.

I shall assume that the heart and blood-vessels are structurally sound, though most of what I have to say would scarcely be altered by any except a severe grade of structural heart disease. How it should be modified in such a case had best be left to be settled by the doctor in attendance.

The strength of the heart.—A normal state as regards this is best kept up by a sufficient amount of exercise, especially brisk walking exercise in fresh air. Of course, a sufficient diet is essential; the dress should be unconstraining. In very fat people, the heart itself is frequently oppressed with fat, a state of things which can only be improved by a regulated diet as well as increased exercise (see p. 16, on Fatness). When the heart has been weakened by an illness, *e.g.* a fever, its restoration is involved in the general convalescence and its management.

The *tone* of the blood-vessels signifies

that property by which they retain a proper size, and are not unduly stretched by the force of the blood-current pressing through them. Each little artery[1] has a coat of muscular fibres arranged circularly round it and directly under the influence of the nervous system, which places it in connection with all the other parts of the body just as much as the Postal system places each English town in connection with every other town in England.

These facts enable us to sufficiently understand the action of the various irritants of which we are about to speak. Irritants act in two opposite ways through the nervous system upon the arteries; how is not perhaps positively known; at all events it is not necessary to discuss the question here. They may cause the arteries to dilate or to contract. It is curious that the same irritant will cause exactly opposite effects, according to the circumstances under which

[1] The 'arteries' are the blood-vessels which convey the blood from the heart to the parts of the body it is destined to nourish. The 'veins' bring it back to the heart. The 'capillaries' are microscopical vessels which intervene between the arteries and the veins.

it acts, or according to the individual on whom it is acting, or according to the particular part it acts on. For instance, fear, which makes most persons grow pale, makes some grow flushed and red; or, again, it makes the same person at one time flushed, at another pale.

Changes in the circulation, when they are rapid and commonplace, and especially when the cause is known to the observer, are rather pleasing than otherwise; take, for example the blush of maidenly modesty. But when the changes are prolonged, or singular, or mysterious, the effect is apt to be unpleasant. A face flushed for a long time after a meal is generally the cause of much dissatisfaction to the sufferer if a woman, and still more if the flushes occur in irregular patches, so as to convey to the mind of an observer that a mysterious something is wrong with the owner. So also that waxy look which sometimes comes over the fingers of certain persons is not attractive.

But irregularities of the circulation are not only objectionable in themselves, they are apt to be the direct cause of much ugliness and especially of coarseness. A face

subject to frequent and prolonged flushes is likely to become spotty or rough. Hands and feet unduly subject to being blue with cold are liable to become the seat of chilblains. In cold weather, a person with weak circulation is apt to be troubled with chapped ears and suffused eyes.

Defects of the circulation arising directly from more local causes are no less disfiguring. Local inflammations and catarrhs affect not only the regions immediately concerned, but also neighbouring parts in close connection. A prolonged chronic nasal catarrh in childhood will modify for life the shape of the nose by merely disturbing the local circulation.

In dealing with a defect in the circulation, the first thing to do is to determine whether the causes be local or general, or both. To settle this question, a medical man will generally be necessary, unless the sufferer's own experience has taught him that the particular effect habitually follows a particular cause, and he may easily be deceived about this. The cause being ascertained, it of course must be attacked.

Over and above this, and the remarks

already made concerning how to cultivate strength in the heart, various local remedies may be found in other sections of this work, *e.g.* those on the Face and the Hands.

I will conclude by impressing upon the reader the strong influence exercised on the circulation by the state of the digestion, the sexual and the nervous organs. Irritations acting on these are apt to produce striking changes in the circulation of the skin of the face and even of the extremities.

CHAPTER VII.

COMPLEXION.

Complexion, as an element of beauty, is of the very first importance. There are persons upon whom it causes a greater effect than almost all the other elements put together. And, perhaps, it is that element of beauty which is most under the legitimate control of art. I use the word 'legitimate' in opposition to such illegitimate resources of art as powder and paint.

Complexion depends primarily upon race, family, and individual congenital peculiarities. But it is the exception for racial, family, or individual congenital modifications of the complexion to be intrinsically ugly, however much they may appear so to the eye of prejudice.

Complexion is, of course, gradually altered, usually for the worse, by age. This altera-

tion is more marked and more rapid in some races and individuals than in others. The skin of dark people, as a rule, appears to age more rapidly than that of fair.

Complexion is affected by the state of the health,—of the health generally, of that of the chief viscera, *e.g.* the liver, lungs, heart, and stomach, and by various local disorders. As examples of these influences may be mentioned the yellow hue of persons with so-called 'disordered liver' (it is not always the liver itself which is affected), the ashy pallor of persons subject to periodical hæmorrhages, the less degree of pallor, often accompanied by a loss of transparency, a 'muddy' look, seen in the subjects of certain not uncommon diseases, the blue or purple look of many people with obstructed circulation, the dusky red of persons suffering from another form of deranged circulation, and the cutaneous eruptions that accompany various specific and many commonplace every-day affections.

Of course the complexion is affected by all 'skin diseases.' The most usual of these are acne and eczema. They are far too well described in the technical works on such

subjects for it to be judicious to attempt a semi-popular description here. But I do not think I shall do wrong in giving a few hints as to the best way to deal with ordinary cases of each affection.

First with regard to acne. This is the skin disease which causes the ordinary 'spotty face' of adolescents and young adults, and which frequently attacks the back also. A commonplace case can be effectively treated in the following way, (1) locally. For a fortnight at least rub the parts thoroughly and for some time every night with soft soap and a piece of flannel. Wash off the soap with rain water if it can be obtained, then apply the following lotion, after shaking it well.

℞ Sulphur. præcip. ℥ss.
Camphoræ gr. xx.
Gum. acaciæ gr. xl.
Aquæ calcis,
„ rosarum, āā ℥iv.
M. ft. lotio.

The effect of this treatment is sometimes to make the face rough and even sore. If, however, the pimples are being removed by it, a little inconvenience may be borne. The patient will soon decide for herself how much

and how long she can stand the rubbing with soft soap.

When a decided improvement has been made with regard to the acne, the soap may be dispensed with, and nothing used to cleanse the face except hot water. The water should be really *hot*, not merely warm. The lotion should still be continued in the way above directed, following the hot water at night, and its deposit being merely dusted off in the morning.

Early hours should be kept, regular and sufficient out-door exercise taken, and all depressing and unhealthy emotions avoided as far as possible.

Probably the best drug to take internally in such cases is arsenic. This drug should be taken under the superintendence of a doctor, as even in medicinal doses it sometimes causes injurious irritation of the stomach and of the eyes.

Next to acne, the commonest affection of the skin of the face among adolescents and adults is a trifling form of 'eczema,' or rather a mixture of eczema and erythema. 'Eczema' signifies a superficial inflammation of the skin marked by redness and an aggre-

gation of very small vesicles. In erythema there is the same redness but no vesicles. In the very common affection of which I am now referring minute papules sometimes rise instead of vesicles. Persons who are subject to the affection should use no soap to the face. Whatever may be said by the puffing advertisements, with their discreditable testimonials sometimes signed by legally qualified quacks and sometimes by medical men of position who ought to have known better when they lent their signatures, *there is no such thing as an absolutely non-irritant soap*. In the case of which I am speaking, the face should be cleaned with hot (not merely warm) water, and, if possible, with soft water. Beer and stimulants should, as a rule, be avoided; so also should too much farinaceous or starchy food. Indeed, often a modified Banting system is to be recommended. In these cases, also, sufficient exercise in a fresh, breezy atmosphere is a splendid cosmetic. But heating exercise, and too much clothing are bad. Perspiration produced in this way is not good for eczema of the face.

The digestion should be attended to, but no drugs should be taken except under medical

supervision. See above concerning acne. The muddy complexion is sometimes due to a naturally thick, dark skin, but often it is the result of want of exercise, combined perhaps with over-eating and with costiveness. In the latter case, the treatment is to remove the cause.

The bilious complexion usually requires the occasional use of saline purgatives in the morning, attention to diet, the avoidance of rich, fatty foods, of pastry and of alcoholic drinks, as well as regular and sufficient exercise, especially walking. The excessively pale complexion is the result of defective blood, and its treatment is noticed at p. 67.

A complexion spoilt by little black points scattered about the nose or any other part of the face should be treated according to the directions given above for the cure of acne.

A 'pasty' face is usually a combination of the muddy with the excessively pale complexion, and arises from a combination of their causes. Such a combination is often found in the habits of those who practise dissipations, mild or otherwise, in the small hours of

the morning. In the case of ladies the most usual form taken by such 'mild dissipations' is the ball and the late supper. The treatment is to remove the cause, and to recruit in the country or at the sea-side. If this is impossible, at all events fatigue and 'overdoing it' at each dance may be avoided, and a sufficient amount of sleep and enough fresh air, in the parks or suburbs for want of anything more rural, should be obtained. Often small doses of iron benefit such cases. See p. 68.

CHAPTER VIII.

THE HAIR.

THE hair should be glossy and not coarse. It should exist in the proper localities and be absent elsewhere. In both sexes the eyelashes should be long, but the eyebrows rather short. The most desirable length of the hair of the head depends upon fashion as well as upon sex. The hair of the moustache should be long, especially towards the sides. The hair of the head can scarcely be too thick, provided the owner has the skill and patience to dress it properly; but the eyebrows cease to be what is called 'pencilled' when they are too thick.

Of course the hair should retain its colour.

Dulness of the hair is apt to accompany a feeble state of the health. It is not so prominent a symptom in man as in some

animals, partly because, in him, the hairy coat is neither so universal over the body, nor so readily erected or depressed by cutaneous muscles; and partly because, in man, the apparent gloss of the hair is often due to pomades. The free use of good brushes to the hair will improve the gloss just as good grooming will in the case of horses.

Thinness of the hair results from various causes of general mal-nutrition, including old age; it also arises from certain specific diseases. It is often apparently an individual peculiarity which cannot be traced to any cause.

Excessive thickness of the crop of hair on the scalp is only considered a disfigurement by persons whose tastes tend more towards smoothness than towards the picturesque. But excessive thickness of the hair is really ugly when found in certain localities, *e.g.* the eyebrows, the backs of the hands, and the cheeks.

Even long hair may not be conducive to beauty if in some positions, *e.g.* the centre of the moustache. Here this defect can easily be remedied by the scissors, but the result then is generally to produce scrubbiness. A strik-

ing example of the effect of a free use of the scissors on the moustache is seen in portraits of the late Mr. Darwin.

Shortness of the hair is a defect in the eyelashes, in the sides of the moustache, and in the hair of the head of women.

Coarseness of the hair is, where regarded in the abstract, always ugly. It has, however, such beauty as arises from an apparent fitness of things when seen on the head of a stalwart man, especially if it be at the same time crisp and inclined to curl. Congestion of the skin on which the hair grows tends to make the latter coarse. Such congestion is often produced by irritants, as, for instance, when stimulating hair-washes or even blisters are used to make the hair grow. Possibly some forms of diet, especially stimulating food, may tend to make the hair coarse.

Baldness is, of course, practically the last stage of excessive thinness of the hair.

Treatment of defects relating to the Hair.

The hair is not likely to be in the best possible condition unless the whole bodily state is healthy and vigorous. The circu-

latory, the digestive, the excretory, and the nervous systems, all have great influence on the hair. But putting these considerations aside for a time, because they really ought to be attended to for more weighty reasons than the appearance of the hair, it may be stated that the prime requirement for good condition and good looks of the hair is good 'grooming'—plenty of vigorous, *long continued* brushing with good brushes, as well as proper cleansing and douching occasionally. The head should never be washed except when there is time to dry it thoroughly and give it a long, steady brushing afterwards. To make the hair look well, time must be spent on it; there is no royal road for the hairdresser. Of the many pomades in his shop, only one is of sovereign efficacy, and that is 'elbow-grease.'

Still, certain dressings for the hair have a little value, either from the gloss they impart, or from their odour, or because they mildly stimulate the scalp and induce the hair to grow, or because they at least prevent scurf from falling upon the shoulders or even prevent it from forming at all. Most stimulating hair washes and pomades contain

cantharides. Other frequent ingredients are spirits of rosemary, dilute acetic acid, or liquor ammoniæ. Of course acetic acid and liquor ammoniæ are not used together, they would simply neutralise each other. The above mentioned strong substances are always diluted with some vehicle such as rose water, or vaseline, or hog's lard. Generally a little spirits of wine, and frequently a little glycerine, is present. The so-called 'lime juice and glycerine' of the chemists' and hairdressers' shops contains no lime juice and little or no glycerine, but consists of lime water and olive oil, scented with essence of lemons. Hair-washes usually consist of spirits of wine, glycerine, pure water or rose water, perhaps a little acetic acid, and, finally, some essence to give an agreeable odour. The kind of hair-wash which produces a lather contains no acetic acid, but, on the contrary, an alkali or a solution of some form of soap in spirit and water. Castor-oil is said to have a stimulating effect on the growth of the hair. A mixture of equal parts of castor-oil and rum is very popular.

That local cutaneous stimulants, such as

those mentioned above, have a real power of increasing the growth of hair is certain; but they unfortunately too often have more effect upon the individual hairs than upon the mass of hair, that is to say, they make each individual hair grow much longer and stronger, but they do not greatly increase the number of hairs in the scalp. But very much depends upon the cause of the thinness in the hair-crop which has led the sufferer to resort to these remedies. When it is any specific or temporary disease, a perfect recovery of the normal head of hair may be expected. When, on the other hand, it is old age, or years of circulatory and nervous depression, or hereditary peculiarity, ointments and lotions have little power. But, even in the last mentioned cases, I believe that good, daily, skilful, and long-continued 'grooming' will save the hair for years.

A remedy for baldness is said to have been found in pilocarpine, a drug which has an action producing extraordinary general and local sweating. Wonderful powers have been claimed for this drug.

Tonics taken internally, in suitable cases, improve the growth of the hair. The drug

which has the best effect on the state both of skin and hair is arsenic. Neither arsenic nor pilocarpine should be used except under medical supervision. Early hours and country or sea air are, however, the best tonics for every purpose. Wearing tight hats or heavy and hot caps should be avoided.

All local applications which stimulate the growth of the hair tend to make it coarser.

I am scarcely in a position to make any practical suggestion respecting how to make coarse hair finer, but long-continued wasting diseases undoubtedly have this effect, and I should think that moderation in diet would, in the course of time, more or less refine hair whose coarseness was previously due to over-eating.

I believe that every physician of standing and ability, having special experience in dealing with skin and hair, condemns as either useless or injurious the use of depilatories, *i.e.* remedies to check or destroy the growth of hair. It is unfortunate that no such remedy is known and approved of; for the presence of hair in regions where it is not welcome is much more objectionable than its absence where it is desirable.

Where the hairs are few in number, it is practicable to destroy the root of each by a very fine needle cautery. When they all grow from a spot of limited size, *e.g.* from a mole, that spot can be excised. When a number of hairs grow from a large surface, no satisfactory remedy is at present known.

For premature greyness of the hair no treatment is known, unless those measures which are recommended above for increasing the growth and gloss of the hair have any value. The nervous system is said to have a very direct influence on the colour of the hair, therefore the so-called 'nervine tonics' might sometimes be tried. Probably the best of these are early hours, sufficient sleep, country air, country life, simple food. Drugs should never be taken for such a purpose, except under medical advice, especially as, in order to do any good, they should be long continued.

CHAPTER IX.

THE FACE.

COMPLEXION, upon which the general effect of the face so much depends, has been already dealt with. With regard to the features, I feel compelled to deal with them separately. That there are distinct types, according to which faces could be classified into divisions which ought, in a perfect work on this subject, to be treated separately, is certain. For instance, there are numerous well-known types characteristic of race; and in the same race the existence of family types cannot be doubted. Certain peculiarities in feature are habitually associated with certain others. The child of two very dissimilar parents seldom has a mouth exactly like its mother's and a nose exactly like its father's; there seems to be a harmonising influence by which the cha-

racter of the nose spreads over the mouth, and *vice versâ*. A poor man had the misfortune to have his nose cut off. He was supplied with several very good-looking artificial noses in succession, but was discontented with them all. He longed for a nose exactly like the lost one; none other, he said, suited his face. It is quite clear that, in endeavouring to cultivate the beauty of a face, one ought to bear in mind that the ideal to be aimed at must not be something quite foreign to the type to which the face naturally belongs. Unfortunately, this is a maxim more easily propounded than adhered to. A comprehensive and useful classification and discussion of faces (other than racial) would be in the present state of our knowledge insuperably difficult. The preparation for it would involve a great deal of very patient observation, registration, and collation of facts, probably including measurements and mathematical calculations. A field is here presented for labour which may eventually produce very valuable results.

There is a stronger influence associating certain features than others. Thus the

hair, skin, and eyes are particularly likely to conform to one type; and, again, the forehead, nose, cheek bones, and chin are likely to specially harmonise. It must be remembered that harmonies of all kinds are consistent with many combinations, otherwise there would long ago have been an end of original compositions in music. Another comparison may be drawn from music. Although musical compositions are now almost as numerous as, and far more various than, the sands on the sea-shore, so to speak, while, at the same time, there are thousands which partake of the nature of very different classes, yet musical pieces admit of very useful division and classification. So it also must be with faces.

In spite of all these considerations, I am, from the limited number of facts which are in my possession on the subject in question, compelled to cut short this chapter, and pass on to the study of the features one by one.

CHAPTER X.

THE EYES, ETC.

THE names 'conjunctiva,' 'iris,' and 'pupil' have almost ceased to be purely technical terms; but there are still educated persons who are rather uncertain as to their meaning. The conjunctiva is the white of the eye, or, rather, the transparent membrane covering it; the pupil is the central black disc; and the iris is the zone of colour, usually brown or blue, which lies between the pupil and the white of the eye.

Eyes should of course be clear, more or less brilliant, and steady; and their movements should be graceful and free.

Sometimes the eyes are unnaturally clear. The conjunctiva has then a blue tinge due to a deficiency in the quantity or in the quality of the blood in its vessels. At the same time the eye has usually an unnaturally

large appearance, due, in the main, to the exceptional whiteness and clearness. It is eyes in this condition which, under the influence of excitement or of stimulation, show best the quality of brilliance, more especially if they be dark eyes.

The clearness and the apparent size of the eye are diminished by the deposit of fat beneath the conjunctiva and by the enlargement of the blood-vessels beneath the same membrane. The yellowness of jaundice, or even of biliousness, does not seem to lessen so much the apparent size of the eye; the one is easily distinguished from the other. Besides the difference in tint, fat is more patchy and less evenly diffused than is the yellow tint imparted by 'biliousness.'

There are two distinct kinds of redness of the conjunctiva, by far the less common one being due to escape of blood from the vessels, the other to dilatation of the vessels themselves. The former is almost always vivid, bright, and circumscribed, forming, *e.g.* a scarlet patch in one corner of the eye; the latter is general, or, at all events, does not often form a sharply outlined patch, and is seldom so vivid as the former. The blood-

vessels can also be themselves distinctly seen as red lines. Patches of blood outside the vessels are almost always due to blows upon the neighbourhood of the eye, are, indeed, of the same nature as bruises elsewhere. They become absorbed in the course of a week or two. The other variety of conjunctival redness, namely, that due to congestion, takes origin from such influences as drinking to excess, over-eating, smoking, over-reading, cold, fog, dust, tobacco-smoke, foreign bodies beneath the eyelid, lazy habits, want of sleep, nervous depression, mere 'low tone' of the system, and specific causes, *e.g.* rheumatism. Reading and needlework are apt to produce congestion in the eyes of short-sighted or long-sighted who do not wear spectacles, or who wear unsuitable ones.

In treating redness and 'weakness' of the eye, the cause must always be attacked. Tonics are indicated in many cases, especially such tonics as fresh air, out-door exercise, and early hours.

'Weakness' is a term generally applied to readiness to 'water' or to become suffused without reasonable cause. It is a result of congestion, and especially of congestion

arising from catarrh or from 'nervous causes.' When arising from catarrh, it is more continuous; when arising from 'nervous causes,' it is not usually continuous, but merely comes on at the slightest provocation.

The treatment of congestion, which causes 'weakness' of the eyes, has been indicated above. When the weakness of the eyes attracts more attention than the congestion which is at least an element in its production, there is usually a want of tone, especially in the nervous system.

Restlessness of the eyes is sometimes due to 'nervousness,' and this, again, to general weakness, or to some chronic local disorder. As it is sometimes also a sign of a lack of honesty, it is a very undesirable peculiarity. A good deal can be done to remove it by attacking the cause and by attention and practice. A young person with restless eyes should be patiently taught to look gently but fearlessly at any person to whom he may be speaking, or at any object he may be talking about. And he ought to be taught that, if the subject of conversation be a visible one, it is natural to look at it rather than at the person who is being conversed with. This

remark more especially applies to the listener. I know of no sillier, more affected, or more exasperating trick on the part of an auditor than to gaze at the person explaining an object instead of at the object which is being explained. Of course, if the hearer does not quite believe what he is being told, that is a different thing.

The eyeballs and eyelids being movable parts, there may be either gracefulness or the opposite in their movements. Movements, here as elsewhere, should not be hurried or lazy, insufficient or exaggerated; and, above all, they should be natural. It is, perhaps, a truism to say that parts may be trained and educated in their movements and yet be perfectly natural; that is to say, may have the movements natural to educated parts. But affectation imparts to the eye the movements natural to a goose or an idiot. When faults in the deportment of the eyeballs and eyelids do not arise from affectation, they usually arise from ill-health or from habit, often from habit produced originally by ill-health.

There is a kind of involuntary tremor of the eyelid to which many persons are subject.

It is often associated with indigestion and with errors of diet. A little mild electricity locally (the constant current) might be tried in a very obstinate case; but surgeons are usually content to direct treatment to the digestive organs or to the general health.

There is a kind of tremor of the eyeballs which has usually had an origin of some more or less serious kind, and which takes the sufferer to the physician or surgeon as a matter of course.

A large pupil is considered by some ladies to give a look of brilliancy or of intensity to the eye. For this end they are said to use belladonna, or its active principle atropine, a drug which damages the sight, at least temporarily, whatever it may do to the looks. When a large pupil exists independently of drugs, it usually indicates a want of nervous tone, and is sometimes a result of exhaustion from late hours, unhealthy excitement, and various bad habits.

CHAPTER XI.

MOUTH AND LIPS.

THE chief affections of the lips are:—(1) Coarseness, (2) Thinness, (3) Great compression, (4) Asymmetry, (5) Dryness, (6) Cracked lips, (7) Thick upper lip, (8) Stiffness, and want of expression, (9) Discoloration of the lips.

THE COARSE MOUTH.

The lips are not only thick, but are heavy looking. The term 'full' is often applied to lips, and it contrasts with the expression 'coarse' in the following way:—'Full' means that the plane of the lips, especially that of the upper lip, presents more forwards than usual, as in the figure A; but 'coarse' means thick, heavy, and having a tendency to droop, as in figure B.

Fulness is attractive when not excessive.

Coarseness is always objectionable. Coarseness is always accompanied by thickness of the cheek immediately adjacent to the

A

mouth. Coarseness is sometimes hereditary. In dogs, for instance, the mouth of the mastiff is naturally coarser than that of the terrier. But there is a perceptible difference

B

between hereditary and acquired coarseness, the latter being usually the more ugly.

Acquired coarseness often arises from excessive eating, combined with a digestion

which, though it may be strong enough for ordinary purposes, is not quite equal to the demands made upon it. It is easy to understand how excessive eating can cause oral coarseness; the mouth is itself part of the digestive apparatus. Everyone knows how the tongue sympathises with the stomach. So also does the mouth. So also, for the matter of that, does all the rest of the face, but not so much as the mouth. Now essential steps in the process of digestion are insalivation and mastication. By 'insalivation' is meant the mixture of food with saliva, with the secretion of the glands which open into the cavity of the mouth. The production of the secretion goes on both while the food is in the mouth and while it is in the stomach. During all that time there is determination of blood to the mouth. Hence the hypertrophy[1] when eating is excessive, especially if digestion be also weak. Moreover, the lips are much occupied in the process of mastication, being used to assist in adjusting the food properly between the teeth. In healthy people the effect on the mouth produced by great eating is mainly to

[1] Overgrowth.

cause enlargement of the muscles; but in less vigorous people the hypertrophy occurs chiefly in the mucous membrane, in the small submucous glands, and the surrounding cellular tissue. In the former case there results what is called a 'strong' mouth; in the latter, a heavy and weak mouth. Fine specimens of strong mouths are often to be seen in robust and temperate navvies. Excellent examples of coarse, weak mouths are not uncommon in Du Maurier's social caricatures.

Scrofula is often found associated with an unusually thick upper lip.

Treatment of coarse mouths is useless in hereditary cases; but in others, the indication is plainly to discover the cause and to remove it.

THIN LIPS.

Thinness of the lips is due to the various causes of thinness in general (see the chapter on Thinness). It is a common effect of an insufficient allowance of food. It is noticeable in ascetic persons. The treatment is that of thinness in general.

COMPRESSED LIPS.

When not hereditary, they are sometimes due to habitual suffering; and, in such cases, the indication for treatment is plainly to inquire into and attack the cause. Persons conscious of having unsightly front teeth are apt to get into the habit of compressing the mouth so as to conceal the defect. Their remedy of course is to be sought at the dentist's.

ASYMMETRY OF THE LIPS.

This is by no means uncommon. It is usually associated with asymmetry of the cheeks, and sometimes also of the teeth. If the teeth be much better on one side of the mouth than the other, a person is apt to chew his food almost entirely on the better side. Upon that side, therefore, the muscles of the cheek and of the corresponding corner of the mouth grow especially large and strong. As the mouth is usually a very muscular structure, the results are clearly visible. The remedies in such cases as these are to have the teeth seen to, and to endeavour to

get each side of the mouth to perform its proper share of mastication.

DRYNESS OF THE LIPS.

When this is habitual, it often indicates a disordered state of the digestive, renal, or other organs, causing perhaps slight feverishness. If regulation of the bowels and diet do not remove it, a doctor had better be consulted. At night, cold cream may be used as a local application. In cold weather a little glycerine may be applied in the morning to prevent chapping.

CRACKS IN THE LIPS.

These usually occur in the lower lip, especially near its centre. They are often due to the effect of cold weather on dry lips. The general treatment of dry lips should be pursued; and, in addition, fissures which do not readily heal may have applied to them unguentum hydrarg. nitratis (citron ointment). Very unsightly cracks which constantly recur in the same places upon the lips of some people may require further treatment, *e.g.* a touch of caustic. I believe

I have seen cases of this kind which would have justified, and been permanently cured by, a touch of the surgeon's knife.

A THICK UPPER LIP

Is often found in young people who are believed to be what is called 'strumous,' that is, especially liable to, even if not suffering from, enlarged glands, chronically diseased joints, phthisis, &c. To what extent a thick upper lip is remediable by the so-called 'anti-strumous' remedies, namely, cod-liver oil, iron, iodine, sea-air, &c., I cannot say. Enlargement of the upper lip in genuinely strumous cases is possibly connected with either nasal catarrh or with hypertrophy of the glandular structures contained in the lip.

STIFFNESS AND WANT OF EXPRESSION IN THE LIPS

May sometimes be undoubtedly traced to chronic catarrh of the nose or to dryness and fissures of the lips, or to an affected and cramped deportment of the mouth. In every case the cause should be resolutely attacked

for this even if for no other reason. Lovely and eloquent as the eyes may be, they play a comparatively passive part in expression. But any face with an inexpressive mouth must be dull and monotonous indeed.

One cause of the affected and cramped deportment of the mouth above referred to is the consciousness of bad teeth. Truly, of the many friends to whom beauty in distress may resort, there is none more valuable than the dentist.

DISCOLORATION OF THE LIPS.

The most common defect of colour from which the lips suffer is pallor. The opposite extreme, however strongly marked, even if 'ruddier than the cherry,' is no disfigurement. A full and rosy underlip is, in woman, one of the diamonds, perhaps one should say 'rubies,' of animated nature. With a good set of teeth above it, how much it means! The combination impresses one like the star of some illustrious order. It charms by its intrinsic brilliancy and, at the same time forms the insignia of health and sweetness.

Pallor of the lips is sometimes very temporary, and due to quite passing derangements

of the health. In a few instances it is due to chronic disease, requiring all the physician's or the surgeon's skill. But, in a great mass of cases, in the vast majority which occur in this overgrown city of London, it is due to a defective condition of the blood, which fluid then may be shortly and simply stated not to contain enough iron. In woman such a condition often reaches an extreme degree. It is then accompanied by a waxy look of the whole countenance, by shortness of breath, and by other symptoms. The whole condition amounts to the gravity of a recognised disease and demands medical skill. But there are thousands of instances in which young women remain for years on the verge of this extreme condition, never consulting the doctor, because they do not consider themselves ill enough, and resigning themselves to the possession of a permanently washed-out, pallid look. Most of these cases would greatly benefit by taking iron internally. One of the best, simplest, and cheapest forms is the following:—

℞ Pil. ferri carbonatis 3ij. D. in pil. xxx.

Take one pill thrice a day, after meals.

Too many of these pills should not be

bought at a time as they tend to grow hard and indigestible.

They are infinitely preferable to 'iron wines' and 'iron and quinine wines,' &c., which usually contain far too little iron and often a great deal of bad wine.

Iron causes headache and other disturbances occasionally. It is desirable to keep the bowels in order while taking it.

Blueness of the lips imperatively requires that a doctor should be consulted.

CHAPTER XII.

THE NOSE.

THE following kinds of noses may be noticed successively, namely, (1) the Coarse, (2) the Flat, (3) the nose to one side, (4) the Very Thin, (5) the Weak, (6) the Long, (7) the Blue, (8) the Spotty.

THE COARSE NOSE.

Its causes include habitual excess in eating and drinking, chronic catarrh of the nose and repeated catarrhs of the nose. The coarse nose may be thus described: it is large and thick, especially on the bridge and at the tip. It tends to be shiny and reddish. In middle-aged people it is dotted with acne and with small dilated capillaries on the tip and alæ of the nose. In old people the tip and alæ sometimes hypertrophy to a great extent, in fact, turn into lobules of fat and fibrous tissue.

The coarse nose of a youth will often

refine greatly in his early manhood if he lives a life of moderation, free from sensuality. The prognosis [1] depends greatly on the removability of the cause. Chronic catarrhs are very obstinate and difficult to cure, especially in this climate. In the young, suitable treatment may be aided by that strengthening of the constitution which often comes naturally with the arrival of manhood. On the other hand, it is of course in the young that catarrh has the greatest power to alter the shape and maldirect the development of the nose. Another thing which aggravates the prospects in the case of adults is, that their coarseness so often depends upon evil habits which have become quite rooted, 'second natures,' as the saying goes. It is idle to attempt the refinement of a 'strawberry-nose' if the sufferer will not forsake the bottle. It is difficult to remove blotches, and acne, and seborrhœa,[2] if

[1] 'Prognosis' is a term applied to a statement of the probable future course of a disease, especially as regards the prospect of recovery. There is no reason why it should be limited to disease solely.

[2] 'Seborrhœa,' excessive secretion of sebaceous or oily matter by certain glands in the skin. This produces a greasy state and, in certain regions, *e.g.* the nose, a shiny appearance.

the patient refuses to regulate his diet and to avoid causes of nervous irritation.

Treatment.—The treatment of the hypertrophied noses of some old people is surgical and operative, and is only applicable to extreme instances. But the ordinary coarse nose requires (1) that any tendency to catarrh shall be combated and patiently treated; (2) that the diet should be regulated, especially as regards fats, starchy foods, and stimulants; (3) that nervous irritation is to be prevented; (4) that local treatment is to be applied. The last, in mild cases, should be limited to bathing the part twice a day in hot water (not warm, but hot), especially hot rain water, without soap. Really severe cases are usually complicated with acne, and may require some other local treatment such as a doctor may suggest. A very good local application is Kummerfeldt's lotion, for which the formula is given at p. 37.

Every night, after washing with hot water and flannel, and drying, shake the lotion and apply it. In the morning, dust off the sulphur powder which adheres to the skin, but do not wet it.

THE FLAT NOSE.

This is usually due to one of three causes, namely, disease, accident, and race. Compared to the Jews, most Europeans have flat noses, hence some uncomplimentary Israelite has dubbed them 'flat-nosed Franks.' If the reproach is just, it is to be feared that it must be allowed to remain. I, at least, have heard of no trustworthy means of removing it, unless any value belongs to the practice of some mothers of daily pinching the bridge of an infant's nose between the finger and thumb. I should imagine that if any sensible infant could decide for itself, it would prefer that nature rather than even the fondest and most artistic mother should be the sculptor of its nose.

When disease has flattened the nose, the bones have been stinted in growth if not partially destroyed, and no remedy is known.

But when accident has merely broken the nose in and not destroyed the bones, it is sometimes possible for the surgeon to safely effect great improvement in the feature.

THE NOSE TO ONE SIDE.

Obliquity of the nose is sometimes congenital, but it frequently developes during childhood and adolescence. Excepting when it is caused by violence, the origin is usually obscure or unknown. The immediate cause is almost always a deviation of the septum, *i.e.* the partition between the two nostrils.

The treatment lies in a simple operation, and is attended in most cases, with so much improvement and so little pain as to quite justify it.

THE EXCESSIVELY THIN NOSE.

The thinner the bridge of the nose the better. Such a condition expresses delicacy and refinement, which, alas! are not always present in spite of the peculiar theories which someone has asserted concerning the close relation between the soul and the nose.

But narrowness of the nostrils gives an unintelligent aspect. It sometimes arises from a habit of breathing through the mouth, hence the alæ of the nose and their muscles droop and flatten from want of exercise. The remedy is to remove the

cause of breathing with the mouth open, whether it be enlarged tonsils, polypus in the nose, nasal catarrh, or merely bad habit.

The peaked nose is thin at the tip. It is often the result of suffering and of imperfect nutrition, hence it is not surprising that it is generally supposed to indicate a disagreeable temper. Pain and mal-nutrition are not likely to increase the sufferer's amiability.

An appearance of length is sometimes given to a nose by hypertrophy of its tip. (*See* the 'Coarse Nose,' above.)

Blue Nose. (*See* chapter on 'Defects of Circulation.')

Spotty Nose. (*See* 'Coarse Nose.')

CHAPTER XIII.

THE CHEEKS.

IMPORTANT as these parts of the person are, there is but little to be said about them beyond what has been already mentioned in the general chapters on Thinness, Obesity, Wrinkles, Complexion, &c.

The beauty of the cheek depends mainly upon four things in woman and five in man. The four are—(1) complexion; (2) the state of the cushion of fat which fills out the healthy cheek, especially in childhood; (3) the extent to which is marked the furrow leading outwards and downwards and separating the cheek from the ala of the nose and the corner of the mouth; and (4) the 'height' of the cheek bone. The fifth important influence on the appearance is confined to the male sex, and depends upon the arrangement of the hair on the face.

The first, second, and third have already been considered (*see* pp. 35, 12, and 22). The fourth (the height of the cheek bone) acts to a great extent concurrently with the cushions of fat above and below it, namely, in the orbit and the cheek. The absence of these throws these bones into relief, and gives a false appearance of height to the cheek bones. Conversely, abundance of such fat practically buries even high cheek bones. It would appear from the favourite paintings of a certain modern school of thought and feeling, whose temple is perhaps the Grosvenor Gallery, that some degree of hollowness of the cheeks and consequent prominence of the cheek bones is considered by them a feature of beauty. It is not to be denied that such cheeks sometimes tend to intensify the expression and increase the meaning of a face.

And, after all, the most essential requirement of beauty in the cheek is a clean, smooth, spotless skin. The state of the cheek is generally the key to the whole complexion.

The 'rosy cheek,' the 'bloom' on the cheek, is to be sought for by the same means

as those recommended for gaining the ruby lip. It is scarcely necessary to add that, in both cases, early hours, sea or country air, daylight, and out-door exercise, are most valuable assistants.

The drooping, flabby cheek is a difficult one to improve. Such remedies as tonics, nutritious food, fresh air, and bracing climates may have a good effect, and healthy increase of flesh should tend to fill such cheeks out. When the furrows leading from the side of the nose past the corners of the mouth are abnormally deepened, it is worth while to inquire whether the individual be not suffering from some chronic and irritating, if not painful, disorder, especially of the lower bowel.

In the male sex the whiskers are apt to greatly modify the character of the cheeks. The style and shape of them may usually be described as 'nature tempered by fashion,' just as the Government of Russia has been called absolutism tempered by assassination. No man should be content to leave the cut of his whiskers entirely to his barber. Indications of character are apt to be drawn from the management of the whiskers; and it

might be unfortunate if the world were allowed to mistake a man's hairdresser's character for his own. At the same time, no one should be too resolute in opposing his own fancies to the laws of fashion.

The whiskers should be kept neat and well-trimmed, but should present no angular or severe lines from any point of view. They should or should not cover the angle of the jaw, according to whether or not it be angular and heavy.

CHAPTER XIV.

THE JAWS—HEAD AND FOREHEAD—EARS.

THE JAWS.

THE jaws, even more than the mouth, belong to the digestive system, and are, therefore, influenced by it in their growth. Also, like all other bones, their development bears a relation to that of the muscles attached to them. Hence, a powerful jaw is a real indication of originally strong digestion and muscle, and it is, therefore, not without reason, assumed to indicate force of character.

As the jaws of infancy are comparatively toothless, whilst, a little later in life, carrying teeth becomes the chief duty of the jaws, it is natural that infants should have comparatively small jaws, with angles very little marked. Similarly, when, in advanced age, the teeth drop out, the jaw wastes, and once

again gets small, light, and less pronounced at the angle. Premature loss of teeth will tend to precipitate the changes in the jaw natural to advanced age. It is said that the employment of false teeth will prevent these premature changes.

From the above remarks, it may be deduced that excessive eating, especially during youth, has a tendency to make the jaws heavy, while insufficient food must tend to make them stunted. It will also be clear why the female jaw should be, as a rule, much slighter than the male. The expression 'masculine jaw' is one often used with well recognised force.

All changes in the jaws, as in the case of other bones, are necessarily very gradual, by whatever causes they may be produced.

The *apparent* shape of the jaws is somewhat dependent upon the development of the attached muscles, but much more on the amount and arrangement of the neighbouring fat. Absence of fat, especially of the cushions of fat several times referred to in this book (*see* the sections on the 'Cheeks' and on 'Thinness'), throws the jaws into relief, exaggerating high cheek bones and lantern

jaws. On the other hand, excess of subcutaneous fat may almost obliterate the outline of the lower jaw, a misfortune when that outline is a graceful one. Refer if necessary to the section on 'Obesity.'

There is a cause of insufficient growth of the jaws and chin little if at all known to non-medical people, but extremely common among children. It is enlargement of the tonsils, an affection which should not be, as it often is, neglected and dilly-dallied with from year to year, until, whatever may be done with the tonsils, it is too late to cure the spoilt and guttural voice, the spoilt hearing, and the spoilt and weak-looking face.

THE HEAD AND FOREHEAD.

The shape of the head, including that of the forehead, is practically determined in infancy and early childhood. Compared to other parts of the person, not excepting the face, the head grows but little afterwards.

With the rarer diseases which disturb the development of the head we have, in accordance with the general plan of this book, nothing to do. An example of such

comparatively rare diseases is hydrocephalus, commonly known as 'water on the brain.'

But rickets is an affection which so frequently alters the shape of the head, and which, when not very severe, is so often overlooked or neglected by parents, that it must be referred to more particularly.[1]

At the time of birth, the shape of the head is sometimes considerably modified by the conditions of birth; but I believe these modifications are seldom permanent, and probably never permanent except to a very minor extent. In infancy the head is not an entirely bony capsule as it is in adult life; but it is a membranous bag, having imbedded in it bony plates which are not rigidly united to one another.

The scalp contains very little fat, and the quantity is pretty nearly independent of the fatness or leanness of the rest of the body.

The actual and, still more, the apparent shape of the head is partly dependent on the development of the muscular system. The thin layer of muscle on the forehead and upper part of the back of the head (the occipito-frontalis muscle) has no great in-

[1] See Appendix.

fluence; but the temporal muscle which lies in a more or less deep fossa between the ear and the forehead has greater importance with respect to personal appearance. When it is wasted, and there is an absence of fat also, a great hollow comes in its place and gives an appearance of old age.

The apparent shape of the head is also liable to be modified by the muscular and adipose development of the neck, and also by the way in which the head is set on the face. A huge muscular or so-called 'bull' neck dwarfs the apparent size of the back of the head, giving an expression of physical courage and determination, but of animalism and stupidity.

The appearance of the forehead is greatly modified by the state of its skin, *e.g.* whether smooth or wrinkled (*see* the chapter on 'Wrinkles.')

THE EARS.

The broad outlines of their shape depend almost entirely on congenital peculiarities, and are often indicative of race.

Undue prominence of the ears is apt to cause the possessors considerable dissatisfac-

tion. There is a popular idea that mechanical apparatus to flatten them against the side of the head during childhood will correct the defect. I am unable to say what foundation there is for such a belief.

It is always desirable, and most so when the ears are large and prominent, that they should have a good complexion. The complexion of the ear is often referred to in poetical descriptions of female loveliness, and really a well-shaped, carnation-tinted, clear-skinned ear is an attractive feature with its intricate curves and its graceful involutions.

The complexion of the ear is greatly affected both by the state of the general circulation and by that of the nervous system. The circulation of the ear has considerable sympathy with that of the brain. A perfectly bright, healthy-looking ear is, to a certain extent, indicative of 'mens sana in corpore sano.' It ought to be generally known that a bruise, the result of a blow on the ear, is not unfrequently followed by wasting of the part bruised; and that this wasting will almost certainly ensue if the blow be severe enough to cause a swelling to form containing effused blood.

CHAPTER XV.

TEETH.

A COMPLETE chapter on the culture and preservation of beauty in the teeth would be a complete treatise on dentistry, an art and science about which sufficient is known to occupy intelligent men a lifetime in the study and practice thereof. It is, however, probable that some persons will read this book who would be disappointed if, with respect to the teeth, they found it merely referred them to a special work on the subject.

The teeth must be kept clean, and clean in two senses, scientifically clean as well as æsthetically clean. Teeth may look clean, bright, and white enough, and yet may, in various out-of-the-way crevices, be infested with injurious decomposing or fermenting and unhealthy materials. That is to be only

æsthetically clean. To make teeth scientifically clean should be the aim when cleanliness is meant to preserve as well as to beautify. To this end the mouth should be occasionally rinsed and the teeth brushed with some antiseptic solution. Most antiseptics are quite unfitted for this purpose, either by reason of their taste and smell, or because they stain the teeth, or because they are corrosive. A good solution for the purpose is made by adding a drachm of glycerine of borax to a pint of water. Quinine is an effective and harmless antiseptic; but with regard to the ready-made dentifrices sold in the chemist's shop as containing quinine, it is in the highest degree unlikely that they contain enough to be at all effective. If they did, they would impart a bitter taste so decided as to be quite unpleasant. Another good oral antiseptic is chlorate of potash. About an ounce of this suffices for a gallon of water. Both it and the borax are extremely cheap, costing only a few pence.

The tooth-brush should never be very hard. Strong as is the enamel of teeth, it will not absolutely resist the friction of any hard substance applied daily, year after year.

Moreover, a very hard tooth-brush may be injurious to the gums.

The teeth should be brushed on their inner as well as on their outer aspects.

It is much easier to prevent the deposit of tartar between the teeth and between the gums and teeth by regular brushing than to remove it when once formed. If formed to any considerable extent, its removal can only be effected by a skilful dentist. As the accumulation seems to encourage and hasten the withdrawal of the gums from the teeth, it should not be neglected.

The basis of almost all dentifrices is chalk, very finely powdered. It should be absolutely free from the slightest grittiness. A scratched tooth is a wounded tooth, and therefore specially exposed to the causes of decay. To the chalk is usually added some astringent powder, meant to brace up the gums, powdered rhatany, for example. Another addition is some agreeable scent, and in the case of tooth-paste, glycerine may be used, partly for its sweet taste and partly to help to retain the moisture. Glycerine also acts usefully as an antiseptic.

The reasonable use of a quill tooth-pick

is not only justifiable but commendable. Much injurious irritation may be caused by decaying fibres of meat and the like jammed in between teeth, especially if the teeth are not sound.

Retrocession of the gums from the teeth is especially frequent as old age comes on, and, as has been already mentioned, it may result prematurely from the deposit of tartar at the border of the teeth and gums. Besides the advice given above, considerable benefit seems sometimes to be derived from painting the gums and the necks of the teeth with tincture of myrrh.

The health and good looks of the teeth depend to a great extent upon the condition of other parts. This includes not only what is called the 'general' health, but also, more especially, the condition of the digestive system, to which the teeth may be considered to belong.

All diseases of the teeth should be attended to promptly. Many a tooth is utterly lost and much agony caused by neglecting this. It is to be feared that the high charges of many dentists cause some people of only moderate means to delay. But usually the

delay is due either to mere improvidence, or to timidity, or to indolence. Having mentioned the high charges of many dentists, I think it right to say that I am not finding fault with these charges. Careful, conscientious dentistry is a laborious and time-consuming occupation, and allows room for great skill and experience.

CHAPTER XVI.

HANDS, FEET, AND ANKLES.

HANDS.

The hands, besides being liable to such general disfigurement as coarseness, excessive fatness, or thinness, &c., and to gouty, rheumatic, congenital, and other deformities, for which a medical man is consulted as a matter of course, are also subject to chilblains, warts, defects of the complexion, puffiness, and various irregularities of the nails.

Chilblains.—Are local inflammations due to the action of cold weather, and especially of cold and wet. Some persons are much more liable than others, especially those who are subject to coldness of the extremities. Such individuals are usually described as having a weak circulation, and so they actually have, locally at least. The ages of

childhood and puberty are particularly subject.

The treatment may be divided into (A) preventive and (B) curative.

Preventive measures are such as sufficient general exercise in the open air, woollen or fur gloves, keeping the hands dry, or, at all events, drying them well, with plenty of friction, when they have got wet. Also, the slightest symptom of approaching chilblain should be attended to immediately, according to the directions in the next paragraphs. Sometimes, probably, disorders of the digestive or of the several organs are at the bottom of liability to chilblain.

A number of letters on the subject of chilblains are to be found in the 'British Medical Journal' for November 11 and 18, 1882. One of them is particularly good, and is here given verbatim.

Mr. S. Grose (Melksham) writes that in his experience there is no such thing as a remedy for chilblains in the sense that quinine is a remedy for ague, arsenic for pemphigus, or ipecacuanha for dysentery. The nearest approach to cure is brisk, vigorous, daily walking; any other exercise

is futile in those strongly disposed to chilblain. One of his friends, a lady, who always suffers each winter, has been much relieved by taking one glass of port after luncheon and dinner; another by leaving off her habitual 'tot.' No tonics are of the slightest use, but many stimulants and anodyne lotions and ointments will temporarily relieve. The stinging, smarting, and swelling go only to recur after the first time the part affected becomes cold. The disease is generally attributed to weak circulation, but this certainly is not the whole cause. After forty the rule is not to be further troubled, yet circulation is commonly weaker then than in youth. Mr. Grose has long passed forty, but suffers as much as ever from chilblains. Again, the livid hands and feet of a sufferer from obstructive heart disease, or advanced phthisis, indicate a weak circulation. Still, in the writer's experience, chilblain is rare with such patients. As to heredity, his impression is that chilblainy parents are more apt than others to beget children subject to chilblains; but frequently this is not the case, and not rarely we find only one of a family a sufferer, whose health varies in

no discoverable way from that of his brothers or sisters. Sometimes, also, the children of habitually chilblainy parents never suffer from the plague.

Before the skin is broken in a case of chilblains, the best applications are stimulant. The parts may be repeatedly and frequently plunged into water as hot as it can be borne, or they may be painted with a solution of silver nitrate (thirty grains to the ounce), or they may be well rubbed with unguentum iodi. When the skin is broken, such applications as unguentum iodoformi (thirty grains to the ounce), and 'anodyne colloid,' made by Richardson, of Leicester, may be applied, the parts being also covered by a thin layer of cotton wool. Hot water may be used also, whether the skin is broken or not.

Warts. — These unsightly structures should be shaved off close, and the bases rubbed with solid caustic every other day for a week, or a fortnight if necessary. The hands should be carefully examined from time to time, and each new wart treated while it is quite small before it has had time to grow. The hands should be kept thoroughly dry. If the above treatment

does not suffice, the warts may be removed by the galvano-cautery.

Defects of the complexion of the hands.—These are almost always due to one of two causes, or to both combined. They are (1) defective circulation, (2) local irritation.

Defective circulation.—Its first effect is to cause redness, which inclines to blueness or to a purple colour in cold weather, and sometimes to a blotchiness in hot weather.

Elevation of the hands, *e.g.* to the level of the shoulders will at once free the skin from this congestion, and allow the natural colour of the hands to be seen.

Some persons suffer from a peculiar defect in the circulation, in consequence of which certain influences, *e.g.* prolonged bathing, will make the fingers 'go dead,' as they say, that is, become waxy and apparently bloodless for a time.

The treatment of these conditions should be chiefly general. (*See* the chapter on 'Circulation,' p. 27).

It should be borne in mind that defective circulation renders the hands specially subject to the evil influence of local irritants.

The tendency to congestion, swelling, and

eventual discoloration of the hands due to defective circulation can be to some extent remedied by the regular use of gloves, especially when the individual is long occupied with his hands in a dependent position.

Local irritants.—Sir Astley Cooper began his 'Lectures' with the statement that the doctrine of irritation is the foundation of all surgery. It really is the foundation of the pathology of almost all ugliness, if distant as well as local irritation be included. And the hand is no exception with regard to this rule. The coarse hands of the working classes are almost entirely due to the irritating substances with which they are in contact all day long. But even persons in a higher grade of society sometimes irritate their hands into coarseness by means of strong soaps and of substances into contact with which they are brought by their occupations or by their hobbies.

The lady who finds the skin of her hands roughened by work can do something to remedy the evil by dressing the parts with cold cream at night and by the usual plan of protecting the hands with old white kid gloves when at work.

Nails.—The nails are appendages of the skin and belong to the same system (the 'cutaneous'). They are therefore affected by almost every condition which influences the skin. For instance, various diseases which damage the skin, are liable also to attack the nails, although producing very different appearances in the latter from those characterising the same affection elsewhere. And hygienic measures which are calculated to increase the health of the skin can scarcely fail to benefit the nails. The converse is also true.

Granting that the nails are healthy, the three things to be chiefly aimed at concerning them are: (1) cleanliness, (2) shape, (3) a neat appearance of the fleshy parts surrounding the nail, especially near its root.

How to keep the nails clean is a matter of common knowledge. But it should be stated that the brush assisted by a wet towel or a thin piece of wet linen should be made to do the work if possible, and a nail-pick avoided. In particular the penknife should be avoided. Its habitual use tends to increase the difficulty of keeping the nails clean. The nails should undoubtedly be kept

short, far better too short than too long. Those of the fingers should be cut in the shape of a semi-lune, those of the toes square across. The flesh at the root of the nails should be regularly pressed back. In this way an oval and arched nail can be cultivated.

Lukewarm water, though usually bad for the face, at all events when there is any tendency to spottiness or coarseness, is very good for the hands and nails; soft water is of course to be used if it can be obtained.

The formation of minute ribbon-like little tags at the root of the nails, so common in young people, is usually associated with a feeble local circulation, and sometimes with a disordered nervous and digestive system.

THE FEET.

The chief minor disfigurements of the feet are:

Flat foot (in its lesser degrees),
Corns,
Bunions,
Distortions of the toes, especially of the great toe,
Sore feet,
Too readily perspiring feet,

Excessive size (general and partial).

Corns and sore feet are usually not visible disfigurements themselves, but the causes of ugly walking, not to mention ugly tempers and cross looks.

Too readily perspiring feet are commonly associated with objectionable odours of the boots and stockings.

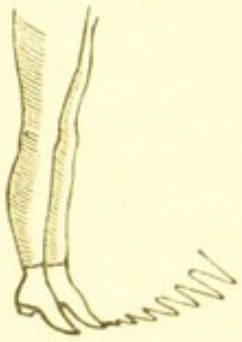
Flat foot.—When this is severe, or cripples the sufferer, the surgeon must be applied to; but it often exists in a minor grade, scarcely sufficient to necessitate surgical advice, but quite enough to detract from the beauty of the feet and of the gait. The treatment should include an inquiry into the cause, attention to the general health, special local exercises, and wearing boots with a strong spring in the instep as well as a good stiff sole. A strong spring with a weak sole only results in the following misshape of the boot.

The causes of flat foot include certain predisposing or essential influences concerning which there is not yet sufficient agree-

ment, or rather sufficient knowledge among professional men, to justify me in saying more about them here. But they include also other causes, such as those occupations which require prolonged and excessive standing, about which there is no difference of opinion whatever.

The sufferer from flat foot should stand as little as possible, and should never walk so much as to cause persistent pain or downright fatigue. But perfect rest is only good for what has been termed the 'inflammatory stage' of flat foot, wherein there is much aching, a condition demanding surgical treatment. For other stages of flat foot, regular exercises, of which the following are an example, are beneficial.

Exercise 1.—Stand on tip-toe, with the knees straight, thus:—



Slowly allow the heels to descend to the ground, still keeping the knees straight

Then as slowly raise yourself on tip-toes again, always with the knees straight. Repeat until weary. This exercise should be gone through several times a day.

Exercise 2 consists simply in walking about on tip-toe with the knees straight.

The object of these exercises is to strengthen those muscles which assist the ligaments to support the arch of the foot.

In the instep of the boot should be placed a steel spring, which should be a genuine spring, and not a piece of metal which, from its shape or quality, has no spring whatever.

These boots, like others, are best preserved in good working order by being placed on 'trees' when not on the feet.

Corns are conveniently and correctly divided into 'hard' and 'soft.' The former should be cut as closely as can be done without making them bleed, using a thoroughly sharp knife. They should then be dressed alternately night and morning with belladonna plaister and soap plaister, respectively. In some cases a ring or horseshoe of soft amadou plaister may be cut to protect the corn. Soft corns are those which occur between the toes. They may be treated on

the same plan as hard corns, but they require even sharper tools to cut them. Soft corns, when not very bad, can be efficiently treated by dusting French chalk between the toes. Another plan, sometimes successful, is that of placing a little cotton wool or lint between the toes.[1]

The boots should be carefully studied, and faults of shape, or fit, or pressure corrected.

It ought to be mentioned that those who cannot cut their own corns, or get them cut properly by others, may find a small file a useful instrument.

Bunions are swellings, 'enlarged bursæ,' as they are technically called, which appear over the bony prominences of the foot, most frequently on the inner aspect of the great toe (using the word 'inner' in an anatomist's sense), *i.e.* as meaning 'towards the middle plane of the body.' The common bunion is caused by excessive pressure, and the pressure itself is due to a distortion of the great toe. The toe is pushed to one side in such a way that it tends to cross either over or under the second toe, but usually over.

[1] The chalk and wool may be used together.

A bunion is seldom painful unless inflamed; but that is little consolation, since, from its exposed situation, it is so often inflamed.

The treatment consists of local applications, such as hot poultices, to allay the inflammation, of carefully cut horseshoe or circular plaisters to take off the pressure, and of measures to correct the distortion which is the prime cause of the bunion. These measures are instrumental and surgical. In a few cases sufficient benefit is derived from wearing a stocking like a mitten, *i.e.* with a separate compartment for the great toe.

Another common distortion of the toes is the 'hammer toe,' in which the affected toe is bent downwards so that not only does a painful corn sometimes form on its back, but also the power of the toe to assist in giving a firm hold of the ground, and thus steadiness and decision to the gait, is lessened. Hammer toes are usually best let alone, but sometimes require a slight surgical operation.

Sore feet.—These may be caused in almost anyone by excessive walking, especially in

hot weather, or in thin shoes, or when the walker has had no previous training. But there are some people especially prone to soreness of the feet. The subjects of this kind of soreness are often young women who have to stand a great deal, and who do not very frequently change their boots and stockings.

Treatment.—In order to prevent ordinary soreness caused by excessive walking, wear well-fitting strong boots, and socks or stockings which are not only well-fitting, but are of material and thickness adapted for the time of year. In a long journey it is not always easy to take a change of boots, but the stockings, even if they cannot be renewed, may, with advantage, be changed from one foot to the other. It is a good plan also to soap the soles of the stockings, especially in any part where a blister is forming or likely to form. If the walk should extend over two or three days, take care that the socks, when put on in the morning, are dry. The feet may be bathed with cold water at the end of each day's journey, and then well dried and put into dry socks.

But the kind of soreness of the feet

which, as above mentioned, attacks young women more than other people, requires special consideration. It is accompanied by a strong and unpleasant odour. Large blisters, or at least stains, may be seen on the soles of the feet. In these cases the feet and the intervals between the toes should be cleansed in hot water, very hot water, every night, then douched with cold water, except in winter time, and, lastly, thoroughly dried. The toe-nails should be cleansed with a nail-brush. Care should be taken to cleanse and dry between the toes. After the drying, a little belladonna ointment should be smeared on the soles and left on; but this ointment should be used with caution, and not for many days together. The patient should change not only stockings but boots every day. If the sufferer cannot afford many pairs of stockings, she can wash every night the pair worn during the day, and can take care to have them dry and ready for use again the next day but one. Before drying, the stockings may be rung out in a weak solution of some antiseptic.[1]

[1] *E.g.* Salicylic acid (a quarter of an ounce to a pint and a half, *i.e.* an ordinary wine-bottleful of water) or borax (half a teaspoonful to a pint and a half of water).

In the cases in question, internal treatment, by medicines, &c., is sometimes required.

Perspiring feet.—When the feet perspire too freely, even if they do not become sore, the boots and stockings are apt to acquire a peculiar and unpleasant odour.

The best treatment is that just given for soreness of the feet.

Disproportionate size of the feet.

A few individuals have feet almost ridiculously small; but as, happily, they and their parents are seldom conscious of it, unless they think it a beauty, nothing further need be said upon this point.

With regard to excessively large feet, there are several varieties.

There is, *first*, a large size of the feet which can scarcely be called excessive, because it is due to very active exercise and only proportioned to the development of the legs.

There is, *secondly*, a large size due to what pathologists call disease, what the public and most practitioners often call 'weakness.'

There is a largeness which is only appa-

rent, and which depends on the very slight development of the legs. This, if not due to, is at all events usually accompanied by, weakness.

And there is another kind of *apparently* large foot, which is really a flattened out foot, and which, though it covers a large space of ground, would yet, if placed in a vessel of water, not displace more fluid than a much smaller looking but compact foot.

The constituent parts of the foot, especially the heel, the instep, and the great toe, may be independently overgrown. The large heel is sometimes a racial peculiarity, the large great toe is probably, in most cases, a family peculiarity, but the large instep is sometimes due to rickets, which causes the short 'cancellous bones' and the cancellous ends of the long bones to hypertrophy. The instep is made up of short cancellous bones.

There are other but very rare cases of large size of the feet which occasionally come under the notice of the surgeon. I have seen the toes of one foot twice the size of those of the other (of course I am not referring to inflammatory swelling or to tumours).

The *second* variety [1] of large foot is generally in early childhood associated with rickets, and is, indeed, itself a sign of rickets. It requires the treatment of rickets, and, as in the case of most other signs of rickets, it has, if the cause be removed, a certain tendency to spontaneous improvement.

A very similar overgrowth, due to an allied, if not identical, disorder, occurs in early adult life.

Large feet of the class in question are usually associated with large ankles, wrists, hands, and knees.

Weak legs and flat feet are discussed elsewhere.

I know of no remedy for large heel and large great toe except when they also are caused by rickets (either of childhood or adolescence).

THE ANKLES.

The importance of the ankle is partly due to the arrangement of civilised female costume, which devolves upon it the duty of being the representative of and index to the leg. If good-looking, it usually receives the

[1] See page 105.

conventional epithets of 'well-turned' and 'neat.' An ugly ankle is generally either too fat or too large and bony, or else is weak-looking and apt to bend in.

A fat ankle can be made thinner by methods noticed in the chapter on 'Obesity,' An ankle may have an appearance of size and boniness due, not to its actual state, but to the thinness of the leg above. (*See* the chapter on 'The Limbs.')

A really large, bony ankle is very frequently due to rickets. In childhood, both ankles and wrists are apt to enlarge in this common affection, and they do not always quite return to their normal proportions.

'Weak' ankles are apt to spoil the appearance and carriage of some persons, usually young girls. The usual idea of treatment which possesses the public in these cases is to obtain a pair of high, laced-up boots. Certainly these sometimes give a slight amount of support, but more reliance should be placed on muscular exercises, such as those recommended for flat foot. These may be supplemented by friction, 'beatings,' and shampooings applied to the calf.[1] Dur-

[1] See Appendix on 'Massage.'

ing dancing and walking, elastic anklets may be worn; but these, except in bad and painful cases, had better not be continually worn. Tonics and sea or country air are also beneficial.

CHAPTER XVII.

THE LIMBS—THE FIGURE.

THE LIMBS.

CONCERNING such disfigurements of the limbs as too great fatness or leanness, weakness, coarseness or bad complexion of the skin, there is little or nothing to add to what has been written in the general chapters.

A certain amount of muscular development, greater, of course, in males than in females, is essential to a handsome limb. No amount of fat will make up for a deficiency of calf muscle. Muscular development is greatly dependent upon inborn peculiarities, but it is, more than almost any other kind of development, influenced by exercise. This is almost universally known; but it is not so well known that the muscles which form the calf act upon the constituent

parts of the foot as well as upon the ankle, and that the muscles of the forearm (*i.e.* the part of the upper limb below the elbow) act upon the fingers as well as on the wrist. Hence exercises to develop the calf should be gone through with the toes, feet, and ankles, and playing the piano develops the forearm. It should be mentioned in passing, that exercises of the fingers do not develop the forearm to the same extent as do the more violent exercises of the hand and wrist, such as are gone through by the batsman, the rower, the fencer, and the gymnast.

A lady wishing to develop her arms without making either them or her hands clumsy should alternate such exercises as lawn-tennis and gymnastics with piano-playing, or else with practice on some stringed instrument, *e.g.* the guitar or the violin. This combination, if practised with care and thoughtfulness, should add greatly to the grace as well as to the strength of the limbs; but carelessly executed exercises, when they make considerable demands upon the strength, are destructive to gracefulness.

For the general development of both

upper and lower limbs, as well as indeed of the whole body, swimming is very good.

Particular exercises which develop the leg well are running, jumping, dancing, and walking. If walking is to develop the leg below the knee, it should be practised in proper style. Dragging along without any elasticity in the gait is not very effective for the purpose. Walking in hilly or mountainous countries compels the walker to use his calf muscles, and thus to strengthen his feet and ankles. Hence the so-called 'elastic step of the mountaineer.'

The bones of the limbs are liable to distortion, producing such conditions as knock-knees, bow-legs, curved shins, and the like. The public recognise clearly enough that these demand the interference of the surgeon, and the same may be said concerning the various affections to which the joints of the limbs are liable.

THE FIGURE.

The real character of the figure is of course entirely dependent upon its construction; but, owing to the mobility of the spine and of the shoulders, its apparent character is

very greatly dependent upon carriage. Hence much of the value of drilling and calisthenics.

Now it is generally acknowledged that figures which excel in beauty belong to two chief distinct types according as they are male or female; but, at least in lecture rooms and in newspapers, there seems to be some difference of opinion as to what constitutes beauty in the female figure. There are certain people to whom a small waist seems to appear but a sign of deformity, and the confession of any admiration for it a proof of mental and moral degradation. Whether this be so or not, the facts remain that, independent of tight lacing, young girls have smaller waists than matrons; that, regarding beauty as quite distinct from voluptuousness, young girls are generally credited with possessing as a class more beauty than matrons; that clumsiness and obesity of the figure in general are usually found associated with large waists, and that a small, though not too small,[1] waist has a certain charm for almost every man who sees it.

I shall, therefore, not hesitate to include

[1] Corsets are usually so made that even if they do not constrict the waist, they alter its shape.

among the drawbacks to a good female figure, a large waist.

Other subjects to be considered in writing of the figure, are prominence of the abdomen, hollowness of the loins, roundness of the shoulders, stiffness of the back, pigeon-breast, smallness of the chest, narrow shoulders, high shoulders, prominent collar-bones, too small breasts, too large breasts, pendulous breasts, leanness of the trunk, obesity of the trunk.

The large waist.—Largeness of the waist is sometimes entirely due to inborn peculiarity and sometimes to very serious disease. But these, especially the latter, are exceptional causes. Enlarged waists usually depend, in adolescents and adults, upon deposits of fat, and in infants and children upon comparatively large size of the viscera, especially the hollow viscera, namely, the bowels and perhaps the stomach. Of course comparatively large size of the viscera is, even in children, more or less serious. But it is all the less serious because at that age it is the more likely to depend on remediable conditions.

A child with a very large abdomen is so likely to be suffering from rickets and from

improper food, that it should be taken to the doctor. The errors in feeding which usually produce such a condition consist in an excess of starchy material, such as bread, biscuits, potatoes, and certain artificial foods for infants. The best diet in such case is usually the most concentrated, including a proper proportion of lean meat. Small quantities of raw meat beaten up into a pulp and sweetened with sugar are often prescribed for little children with the affection in question. The greatest care should be taken in procuring raw meat for the purpose, as it is liable to be infected with dangerous parasites, and is not going to be subjected to that thorough cooking which would possibly destroy them.

It may have been observed that in speaking of large abdomens in childhood, I have generally used the expression 'comparatively large.' As a matter of fact, it is often rather the chest, and pelvis, and limbs which are small, and thus give a false appearance of large size to the belly.

Turning now to large waists in adolescents and adults, it must be repeated that they are usually due to fat, to fat in the abdominal wall, and fat in and around the viscera (the bowels,

kidneys, &c.) The rational way to deal with excessive deposits of fat is discussed in the chapter on 'Obesity.'[1]

But mistake should be guarded against. If an individual had a large waist but was otherwise slim, it would be very foolish to apply the remedies for obesity.

If in such a case the absence of organic disease was assured, good might result from attention to the state of the bowels, from care to take only very nutritious and digestible food, and from the use of a well-made belt which should support the whole abdomen and not merely constrict the waist.

Hollowness of the loins is almost invariably accompanied by round shoulders and a poking chin, and, not unfrequently, also by a loose-kneed gait. Some people profess to regard hollowness of the loins as a beauty; a slight degree of it, if without the above-mentioned accompanying defects, is both beautiful and natural. A complete flatness of the back from the neck to the lower limbs is ugly, and can only exist when the buttocks are very ill-developed. The incurvation of the spine itself ought to be very slight, and

[1] And in the Appendix on Bantingism.

any further appearance of it should be due to the development of the figure below and

behind the waist. Ladies show their recognition of this by the use of 'crinolettes' and the like contrivances (some of which are nevertheless abominations).

This is the figure which has to be guarded against, or rather a caricature of it.

In some cases it is due to actual changes in the shape of the bones, but often, especially

in youth, it results from a lazy slouching carriage, or from constitutional weakness, or from want of nervous energy.

Under any circumstance, even when the bones are altered, improvement will result from gymnastic and calisthenic exercises, from rowing, drilling, and swimming. But it is absolutely necessary that the patient should be constantly mindful of her own bearing. She must hold her abdomen back, her shoulders back, her head up (not her chin up), and her chest forward. At first this position should be studied before a mirror, when it will be found to be much more simple than it reads. In fact, it is only the ordinary attitude of a healthy child when standing erect. At first also its retention will involve some stiffness, but, if persevered in, and accompanied by calisthenic exercises, or even games like lawn-tennis, it will soon become natural, easy, and graceful. As there is often some cause for the loss of constitutional elasticity and vigour from which hollow loins and round shoulders frequently proceed, this cause should be sought out and attended to. Simple exercises, admirably calculated to make the back strong and

supple, are (1) swinging on 'the rings' to be found in most gymnasia, (2) circling the horizontal bar, (3) bending forward and endeavouring to touch the toes without flexing the knees, and alternating this action with an attempt to bend backwards with the arms outstretched above the head.

Stiff stays are rather to be deprecated except when the wearer is recovering from, or suffering from, actual exhaustion or illness. Even then, an hour or two's rest in the horizontal position, alternating with gentle exercise and a careful carriage of the body, should be preferred.

In most of these cases an hour's rest on a couch at mid-day does much good by giving the physical elasticity time to recover itself from the fatigues of the morning, and also by relieving congestion of the pelvic organs and inferior extremities, a fruitful cause of languidness.[1]

In many other points also this mid-day rest is highly beneficial to the looks, especially in the case of matrons.

With regard to *roundness of the shoulders*, that subject is almost disposed of in the im-

[1] And perhaps of ugliness in general.

mediately preceding paragraphs relating to its complementary condition and usual accompaniment, hollowness of the loins. Various braces have been devised to hold the shoulders back. They are not entirely useless, but they must not be relied on to do more than encourage the patient to hold her spine erect, her head up, and her shoulders back actively.

Every girl who appreciates the value of a good bust and a graceful carriage of the arms should assiduously practice such exercises as moving the arms in a free circle from the shoulder, and should not be satisfied until she can get her shoulders into such a state of suppleness that she can touch together the backs of her hands behind her waist without rotating her arms inwards. (Rotation of the right arm or hand inwards is in the opposite direction to that taken by the hand in screwing in a gimlet or a corkscrew.)

Stiffness of the back is to be treated by the exercises recommended for hollow loins and round shoulders.

For anyone who can afford it, shampooing, or rather what is called massage,[1] is

[1] See Appendix.

highly beneficial to weak backs, stiff backs, and round shoulders. This is effected by an attendant, and consists in vigorously kneading, rubbing, and pinching the soft structures on each side of the spine along its whole length, while the patient lies on the face. The process should be gone through once or twice a day, or oftener in bad cases, and kept up for ten minutes at least each time.

Pigeon-breast is a disfigurement in which the front of the chest projects forward, and, at the same time, the ribs, and the cartilages which unite them to the breast bone, are flattened inwards in such a way as to produce a 'keel' shape, bearing a superficial resemblance, so far as its prominence goes, to the breast of a bird. It is developed in childhood. It is believed to arise from obstruction to breathing during that period, *e.g.* such as is caused by enlarged tonsils. It is sometimes, if not always, connected with rickets. Under favourable conditions there is a tendency to grow out of it to a certain extent. It is difficult to conceive that any truss or other plan of making continuous pressure on the projecting breast bone is justifiable by the good it is likely to do.

Gymnastics and exercise in the open air, and plenty of them, are chiefly to be recommended.

Smallness of the chest is a condition which can be greatly improved by judicious exercises, especially by running and by regular gymnastics.

Narrow shoulders depend upon either a small chest or short clavicles (collar bones), or upon both. They can be improved by exercises, more especially such as employ the arms and shoulders, namely, rowing, gymnastics, Indian clubs, &c.

Sloping shoulders can be made squarer by exercises which develop the chest. (See the last paragraph but one.)

High shoulders often depend on some habitual difficulty in breathing which demands medical attendance. Under almost any circumstance high shoulders will assume a better position if the patient will cultivate his 'wind' by suitable exercises, and if he will, in addition, learn to carry his head properly, firmly, and freely.

Prominent collar-bones detract from the desirable smoothness of a lady's bust. The only remedy is to cover them, or rather to

fill in the hollows above and below them, with suitable cushions of fat, the absence of which is the cause of the disfigurement. (*See* the section on Thinness in general, p. 11.)

We now come to parts of no small importance so far as the appearance and charms of women are concerned, namely, the breasts. These may be too large or too small, or too soft, and they may be pendulous.

They are composed partly of the proper structure of the organs, 'glandular' structure, as it is called, and partly of fat. In almost all extremely large breasts the proportion of fat is very considerable.

Their size bears a usual but far from invariable relation to the nutrition of the whole body as well as to the age and single or married state of the individual.

Their firmness depends upon (1) the general tone of the system, (2) the state of the health, (3) the age, and (4) the previous condition of the organs. When breasts are larger than they have ever been before, they are usually firmer; when they have fallen off in size, they are usually more flabby. Persons who have nursed children are apt to

find the breasts diminish in firmness afterwards.

The shape of the breasts and the mode in which they are set on the chest, *e.g.* whether projecting or pendulous, or whether flattened back, depends upon similar conditions to those already enumerated as affecting the firmness of the parts, and they depend also upon the weight of the organs and upon the kind of stays which have been worn. The tone and attitude of the breasts are preserved by carefully-shaped corsets, set well out from the chest wall at a sufficiently low level, but they are absolutely ruined by high and flat stays. A proper corset would support the breast as gently as would the hand of the owner, exerting no pressure whatever except the counter pressure upwards due entirely to the weight of the breasts pressing downwards. It is to be feared that such corsets are seldom produced.

It would be quite necessary that they should be carefully and thoughtfully made to measure and designed to suit each individual case. I have often thought that the poor, who cannot afford such luxuries, would

do well to discard stays and to crochet for themselves bags of wool with an open network, and having straps of webbing to go round the chest and over the shoulders. I am certain that such bags could easily be made to give the breasts almost perfect support without injurious pressure.

For remarks about leanness of the trunk and about obesity, see the general chapters on ‘ Thinness ’ and ‘ Obesity.’

CHAPTER XVIII.

MOTION.

THIS is a part of my subject which has really been carefully studied by many people, especially in foreign countries. Frequently on the stage, and less frequently in private life, are seen excellent results of this study. But many persons on the stage, and certainly the majority of the public, have little or no insight into the principles of the beautiful as applied to motion. Yet there are few people who have not a feeling for it, and, among the classes who are blessed with sufficient leisure, there are few individuals in whom this feeling, combined with experience, imitation, and, above all, with some relics of childhood's grace, does not produce a good influence upon their bearing and movements.

Much has been said about the 'poetry of motion.' That is a very telling phrase, for

certainly all the passions which form the soul of poetry can be more or less indicated by gesture; but I think an expression at least as truthful would be 'the music of motion.'

For the relationship between music and pleasing movement is most close. In the first place, *time* is the prime essential in both. Secondly, in each particular movement, as in each musical sound, there should be a crescendo and a diminuendo, or at all events some kind of cadence.

But movements in themselves devoid of beauty may be combined into beautiful arrangements. Here again the analogy with music is obvious.

Movements should convey an idea of suppleness. But if this suppleness is excessive, the grotesque rather than the beautiful is produced. Compare, in illustration of this, the performance of a graceful *danseuse* with that of a contortionist.

Every movement should be simple and sufficient, quite sufficient for its purpose and little or no more.

There are apparent exceptions to this rule, *e.g.* the high-stepping carriage-horse.

The high step of this fashionable animal is not in itself a perfectly beautiful movement, but it is pleasing, because it conveys the idea of abundant energy and high spirits.

Angular and spasmodic movements are ugly, and may be overcome by avoiding heat and hurry. Much of that ease and elegance which is commonly associated with high breeding is due to the habitual avoidance of heat and hurry. A similar ease and elegance of manner is often noticeable among the lowest classes in lands where sufficient food is to be had almost for the asking, and where climate makes clothing rather an encumbrance than a necessity.

Slow movements are usually more beautiful than quick ones, though the latter may be more amusing and animating.

Motion is endowed with so much power of expression that there is, in a minor degree, the same difficulty in distinguishing between the intrinsic beauty of a movement and that of its meaning that there is in distinguishing between the beauty of a word and that of its meaning.

If the body, or any part of it, is, by the

grace of its movements, to exercise the utmost possible charm, it is desirable that it should have a graceful carriage in the intervals of rest; although, under some circumstances, the transition from a very ugly posture to a lovely series of movements might produce a not unpleasant feeling of astonishment.

Even movements which are most effective in quick time had better be first studied and practised in slow time.

Every joint should do its own proper share of work in a given movement. One of the commonest instances in which this rule is violated is in the management of the shoulder-blades during movements of the arms. The shoulder-blades belong to the arms rather than to the trunk, indeed, have only a very slight and indirect bony attachment to the trunk at all. Particularly free, graceful, and varied movements of the upper extremities are, therefore, possible to those who take advantage of this. But an immense number of people, including some of our stage dancers, who manage their legs admirably, mar all the effect of their grace and skill by making the shoulder joint itself do that which

should be performed by the attachments of the shoulder-blade to the trunk.

So also the elbows should not be made to do the work of the wrists, nor the knees that of the hips.

This proper distribution of the work among the joints will be made easier by attention to the following rules :—

1. Every joint should be made and kept supple.

2. No part of the person should be allowed to get disproportionately weak or strong.

To confer suppleness on the joints, exercises are usually necessary, except in the case of persons naturally loose-jointed. Proof of the value of active exercises for such a purpose may be acquired from the well-known calisthenic exercise of trying to stoop forwards and touch the toes without bending the knees. This act, though often impossible at first, is made very easy by a few days' practice.

Passive exercises can often, with considerable advantage, be applied by a person to her own fingers. In this way can be cultivated the pleasing shape of the fingers, whose last joint turns back a little.

Repose is an essential element of beauty in movement. Rugged, fierce, and powerful movements may fascinate though quite destitute of repose. But it is sublimity and not beauty in which lies the secret of such fascination.

Opposed to repose are jerkiness and fidgetiness. These are sometimes the mere effect of evil habit, of bad example, or of shyness, or of self-consciousness; but they are often indicative of a disordered nervous system, which, again, is usually secondary to disturbances of other systems, especially the digestive.

An intelligent person who had mastered the first principles of the beautiful in motion could, with great advantage, study the examples set by such of our actors and actresses as are justly renowned for grace. Anyone ignorant of such first principles, or deficient in perception, would run some risk of gathering tares with wheat, of acquiring not gracefulness, but staginess and affectation.

THE BEARING IN REPOSE.

It should be natural. It should indicate qualities appropriate to the individual, and either pleasing in their nature or, at all events, of a character likely to excite sympathy. In the latter case they should be subdued. The slightest exaggeration tends to make them ridiculous if not repulsive.

They should be, so far as the subject's figure will permit, intrinsically beautiful or picturesque.

The question may be asked, 'What if the qualities of the individual are neither pleasing nor fitted to excite sympathy? A bearing which is either, cannot, in such an instance, be also natural.' I might evade this question by saying,—'That is the individual's own concern. If his inner nature is unpleasant and repulsive, so much the worse for him.' But I shall, instead, recommend him to try to look like what he ought to be. In so doing he may be led to be what he ought to look like. This applies both to temporary and to permanent states of the character and

feelings. In trying to look cheerful, a man may succeed in cheering himself up; and in trying to look true and brave, a sneak may deal a rude blow at his own untruthfulness and cowardice.

In the endeavour to appear as one ought to do, many and grave dangers beset one's path. How often a military bearing overgrows into a pompous swagger, and the gentleness and refinement of well-bred girlhood into a lackadaisical namby-pambyism! After all, the genuine article runs the least danger. It has to guard against one extreme only. But that which is false has to be fabricated up to a certain point, and then prevented alike from inflating and from collapsing. These reflections are of course no consolation when one is engaged in a legitimate attempt at 'seeming,' *e.g.* in trying to appear cheerful while one is really very doleful.

Of the various directions given by teachers of deportment, or taught by parents and governesses, all which are really just and admirable will be found on analysis to be based on certain principles.

Besides those already mentioned, it may

be added that no individual in society should take up more room than is essential to reasonable comfort. That is the principle from which many well-known rules are deduced. That is why the legs should not be straddled or the elbows stuck out. Neglect of such a rule implies a kind of greed, and is therefore selfish and immodest. There is no intrinsic ugliness in spreading out the lower extremities. When Cæsar is said 'to bestride the narrow world like a Colossus,' the picture conjured up is an imposing and not unpleasant one. Not so when young Mr. Pompeius Midas takes up the same attitude on the hearth-rug. Even the principle just mentioned is obviously included in the more comprehensive one that the bearing shall not be indicative of any unpleasing quality.

While never forgetting the first principles upon which a suitable and a pleasing carriage is based, the productions of great sculptors and painters should be studied. So also should the bearing of accomplished and experienced actors and actresses, especially those distinguished in high comedy and legitimate drama. If corrected by common sense and a sympathy with modern feeling,

there is not the least necessity for such a study to conduct a person into the excesses of Maudle, Postlethwaite, Bunthorne, and the love-sick maidens in 'Patience.' As well might an admiration for Taglioni have been expected to lead our grandmothers into a style of waltzing anticipatory of the eccentricities of Mr. Fred Vokes.

CHAPTER XIX.

THE VOICE.

My authority for the chief statements contained in the present chapter is a book on 'The Cultivation of the Speaking Voice,' written by John Hullah, and published by Macmillan and Co. I could, however, affirm the truth of them from my own observations. The book in question should be obtained and studied by every one.

It is strange that Englishmen should be, compared with most other Europeans, remarkable for their unmusical speech, and for their ungraceful gesture when they make use of gesture at all. For the English language is surpassed in sonority by only one other European tongue, and equalled by, at most, two or three others; while the number of individuals who have voices which are agreeable naturally, however spoilt by the method of producing them, is acknowledged to be nearly

as great in this country as in any other. Whether it be the trying climate of these islands, or the eternal round of toil to which their inhabitants are for the most part subjected, not to mention the competition, the hurry, and the money-grubbing that may blind us to defects of speech, as to the want of other personal graces, it is not easy to say; but, at all events, the Englishman, as a speaker, has great faults. Perhaps the greatest of these is the practice of using excessively and almost constantly the 'head register,' as it is called.

Every voice includes three 'registers;' namely, (1) the chest, (2) the head, and (3) the falsetto. The last mentioned is not used in the speaking voice, excepting by mimics and ventriloquists. The chest voice is the natural one with which to produce not only all the lower, but also the middle notes in the compass of any individual's voice; and, as these middle notes are the ordinary ones used in every-day speech, it follows that the chest voice should be in every-day use. The difference between the chest and the head voice can be learnt in a minute from any competent teacher of singing. In producing the chest voice the mouth is opened comparatively

wide (*i.e.* from above downwards, not from side to side), and the voice is allowed to come, as it were, from the larynx, straight out of the open mouth. But in producing the head voice the mouth is not opened quite so wide, and the words seem, to the speaker, to strike against the front of his palate, close to the bases of his upper teeth.

The following simple scheme of the mechanism of the voice is quoted by Hullah from Professor Willis :—

Variable cavity | Larynx Windpipe Lungs (bellows).	The variable cavity consists of the *pharynx* (the cavity behind the tongue), the *mouth*, and the *nose*.

The lungs of course furnish the current of air which, passing through the larynx, causes the sound, which the pharynx, &c., finally modify into the complete natural voice. From the lungs the voice derives its intensity, its force, not its volume (which depends rather on the capacity and form of the pharynx), nor its penetration, which depends on method of delivery or production.

The larynx is a kind of living box, across which stretch two living ribbons, called the vocal cords. When the breath is driven, by the lungs, with sufficient force between these vocal cords, they vibrate, and produce what might be termed the raw or unprepared voice.

Taking 'intensity,' 'compass,' 'flexibility,' and 'timbre' as the four properties of a voice, by far the most important of them is timbre, or quality; and this depends comparatively little on the larynx with its vocal cords, but very greatly on the action of the mouth, tongue, palate, and pharynx. As all the latter parts are extremely under the control of the will, subject to education, and visible even when in action, it is easily seen how much training can do for the voice.

The only class of people competent to teach the art of producing the voice are, with the exception of a few professors of elocution, thoroughly trained singing-masters. For this reason alone, and for others also, perhaps the best way to learn to speak lies through learning to sing.

It is therefore very necessary to consider the differences between the singing and the speaking voice.

Speech differs from song as follows :—

'In speech the voice glides up and down what, by an allowable figure, may be called an *inclined plane*; in song it makes *steps*, the proportion of which to one another is ascertained.

'Speech is for the most part heard only during the *passage* of the voice from one sound to another; it is the result of intervals: in song, intervals are traversed silently, and the voice is heard only in *sounds*—the terms or boundaries of intervals. The variations of pitch in speech may be compared to the effect produced by sliding the finger up and down a vibrating string; those in song to that produced by "stopping" such a string at certain points, and *at no others*.

. . . . .

'But as the differences between speech and song are great, so are the resemblances. True, speech consists of concrete, and song of discrete sounds; but sounds are sounds, whether concrete or discrete. Moreover, they are produced by the same instrument—the voice, and, though in a somewhat different manner, yet according to the same laws, similar varieties of pitch, intensity, and even

timbre resulting from its action in both, only resulting more frequently and rapidly in speech than in song.'

And I might add, as a point of resemblance, that the best speech is musical just as truly as song is; and, as a point of difference, that, while the singer has his melodies composed ready for him, the speaker has to compose his as he goes along, using his ear, his fancy, his judgment, his taste, his knowledge, and, in short, exhibiting plainly whether or not quickness of apprehension combined with the soul of an artist lies within him. No wonder, then, that it is not always the most charming singer who is the most musical speaker.

'The *compass* of the speaking is normally the same as that of the singing voice. But in both speaker and singer the portion of the voice most often called into requisition, and therefore most important, is that which is farthest from its extremes. The notes between F and B flat lie nearest the middle of the average voice of man.' An average voice naturally and conveniently exchanges the chest for the head register at about B flat.

The *dominant* note of a voice is always near its middle, and is 'that note on which

the vocalist can "speak and sing with the best effect, with the greatest ease, and for the greatest length of time."' The first thing to be aimed at in the culture of the voice is control over the dominant note.

Respiration.—The management of this is of the most intense importance. Unfortunately for the student of singing and speaking, the vocal mechanism is not furnished with a reservoir of air like the 'wind-chest' of an organ, or the bag of a bagpipe. Moreover, the lungs have to perform, without cessation, duties more essential than forcing air through the larynx for vocal purposes. However, happily, skill and practice enable an individual so to use his lungs that they may simultaneously do their vital and their vocal work, each without detriment to the other.

During singing and speaking, the breath should be taken often enough. The effect of neglecting this rule is a frightful gasp at the end of each sentence. Inspiration—that is, taking the breath in—should be as quick as possible; but expiration—that is, giving the breath out—should be slow and controlled. Not an atom of breath should be allowed to escape without producing its share

of vocal effect. There should be no waste. The moment the breath issues from the mouth, the sound of the voice should come with it.

An easy position, with the head erect and the shoulders back, is very favourable to respiration. A cramped one, or the arms a-kimbo, or the head bowed down—all these are unfavourable.

Practice.—Daily practice is essential. The voice should be practised on—

(1) The sound of 'a' as in 'father.'
(2) The other vowel sounds:
    (*a*) The long vowels,
    (*b*) The compound vowels (*e.g.* 'oi').
(3) The combination of 'a' (as in 'father') with the various consonant sounds.
(4) The combination of the other long vowels and compound vowels with the various consonants.
(5) The short vowels with the different consonants.
(6) Complete words.
(7) Complete sentences.
(8) Complete passages of prose and verse, specially chosen for their euphonious character.

The tables given by Hullah of various possible combinations should be used.

Only on the vowel 'a' (as in 'father') can the quality of the human voice be heard in its highest perfection.

'During the perfect utterance of this vowel, which, to distinguish it from *a* pronounced as in "day," we shall in future write as *aa*, the teeth will be at least sufficiently apart to admit of the insertion of a finger between them; the tongue will be along the bottom of the mouth, its tip resting on the lower teeth, and forming a curve corresponding to that presented by the roof of the mouth. If the teeth be not sufficiently apart the *timbre* will want resonance and openness; if the tongue be not sufficiently advanced, or if it approach the roof of the mouth too nearly, it will also want purity—become guttural or nasal. This last imperfection may likewise be induced by extravagant retrocession of the corners of the mouth, the slight smile formed by the lips being tightened into a grin.'

The student should not attempt to advance a step further until he has learnt to produce the sound *aa* in perfect style. In

learning this he will be greatly assisted by the guidance of a singing-master, by continually bearing in mind the directions in the above paragraph, and by the use of a looking-glass, which will enable him to see to a great extent whether he is correctly following these directions.

He should practise sustaining the '*aa*' as long as possible, also suddenly attacking and suddenly leaving it. He should practise all these modes at various degrees of intensity. He should also practise uttering the *aa* with a crescendo and diminuendo. At first he should do everything on his *dominant* note only, then on the notes nearest to it, and last of all on notes further removed.

Having mastered the *aa*, he should next deal with the other long vowel sounds in exactly the same way, taking them in the following order of succession, *o*, *a*, *oo*, *e*, and then return to *aa*.

Then should follow the practice of the combinations with consonants, &c., above referred to.

In the course of his practice the student should soon recognise that certain sounds and combinations present especial difficulties to

him. To these he should pay particular attention. Very likely he may have trouble with the *s*'s and *r*'s.

The maintenance of the proper pitch may be tested from time to time by means of a tuning-fork.

The exercises should be mainly done on the first register, the chest voice. The head voice is very likely to have been already exercised too much. But the transitional notes, those which are very easily produced in both registers, should be exercised in both.

When the student endeavours to put his knowledge into practice, he is apt to find or to think he finds his friends noticing the alteration in his voice not altogether with approval—in fact, suspecting affectation. 'Only on the ripe scholars does scholarship sit easily and gracefully.' If, however, he persists in practising long and steadily in private, reading and reciting aloud with care, he will escape all unpleasantness, and improve almost unconsciously both to himself and others. At the same time he ought to take some little pains in public also.

So far I have confined myself almost entirely to the question of the culture and

production of the voice. The remaining and major part of the whole art of elocution lies somewhat beyond my province, just as much as does that of the art of music.

In another chapter of this work I have dealt with beauty of movement, and in still another with 'Tricks and Habits;' but I cannot refrain from one more quotation from Hullah:—'If profound and original thought, expressed in well-chosen and well-sounding words, tells most on an English audience when these words issue from a frame with no more sympathy or connection with them than has the case of a pianoforte with the music of which it is the medium, be it so. The Englishman is a reticent, undemonstrative creature, not predisposed even to vocal expression, and decidedly indisposed to pantomimic. No doubt: then let him stand still when he speaks. But this he never succeeds in doing.' These words, which refer especially to the public speaker, have obvious truth, and an obvious application.

CHAPTER XX.

TRICKS AND HABITS.

THESE are usually more or less disfiguring. How much so, is only fully seen when they make ridiculous and mar the effect which should be produced by some highly gifted and trained public character, whether on the stage, in the pulpit, or in the senate.

To enumerate them all would be impossible, for their variety is as infinite as the perverse ingenuity or circumstances of man can make them. But some are particularly common, and deserve to be named. They are:—

Movements of the features expressive of emotions which are not really felt. For example, raising the eyebrows when listening to a statement incapable of exciting any astonishment, or, indeed, when the mind is perfectly vacant at the time; or knitting the

brows when no pain or mental labour, or anything of the kind, is being experienced.

Then there are twitchings of the nose, sniffing, and even working the end of that organ about in a wild, indescribable way without either rhyme or reason.

The mouth is a very favourite feature with amateur contortionists. Now it is a sensation of idiotic pleasure that is expressed by a fatuous smile, and then again it is a most excruciating toothache or unbearable agony in some distant region that is being indicated by drawn and compressed lips. Or the same parts are busy sucking the air and the saliva perpetually through and through the intervals between the teeth. Or they are arranged as if in a position for whistling. Or, most odious of all, they actually do keep up a subdued, semi-audible whistle. Or the under lip every now and then protrudes slowly, and with a malignant prehensile movement softly draws the moustache within the grasp of the teeth, and again and again repeats the action.

Fancy an individual addicted to all the ordinary known varieties of personal tricks! In addition to those already mentioned he

would occasionally pass one hand carefully and lovingly over his forehead and nose, especially the latter, as if to assure himself that those parts had lost nothing of their original shape and elegance in the last five minutes. Then the whiskers, moustache, and possibly eyebrows would be examined with equal care and also adjusted. Now the hair on the head would be stroked down and softly pressed up two or three times, being at last lingeringly left with an affectionate pat as if it were a little dog. Next the ear would have to be examined, pinched, scratched, and pulled, afterwards our friend would proceed to inflict the most humiliating of all known indignities on himself by pulling his own nose, not once only, but twice or thrice in succession. Next the knuckles would get well rubbed into the eyes, the eyebrows raised to their utmost, and the eyelids opened to a stupendous stare, as if they were going to swallow the room.

Presently a certain amount of rubbing would have to be applied to various parts, and as much scratching as was considered consistent with gentility. This would perhaps lead to the discovery that no single

article of clothing on the person was quite what it ought to be as regards fit. The collar would cause a circumduction of the head, like the motion of a top slowly expiring in its spin. The chin would describe a circle in the air, at the same time arranging itself and the lower lip as if about to be operated on by the razor. The shoulders also would have to be drawn back and the chest expanded, apparently to prevent imminent asphyxia. Of course the throat has to be cleared either with a stentorian grunt, perhaps a succession of them, or with a meek, melancholic, little, high-pitched 'hem.' Then follows the adjustment of the shirt cuffs, rearrangement of the lower extremities, shuffling of the feet, a trumpet-like blowing or a nasty little puffing through the nose, and so on, and so on.

One of the commonest tricks is the continual repetition of some senseless movement, such as keeping up a kind of tattoo with the feet.

In order to cure a person of a trick or habit, the first thing to do is to discover and remove any physical basis that may exist and give rise to it. But usually this has

already disappeared long since, leaving the habit behind it.

The cause is not always in the same locality as the habit. Thus, knitting the brows and drawing in the corners of the mouth are often caused by habitual irritation of some distant part of the body. The irritation in such cases frequently cannot be said to quite amount to pain, and depends upon a trivial cause, hence it is apt to be neglected.

Defects of sight and hearing lead to well-known tricks, such as, in the former case, a peering look with the head forward and the eyes half shut; and, in the latter, a rather dazed and absent manner, not to mention a look of perplexity. Persons who do not see and hear well should be mindful of these tendencies and not give way to them.

For the removal of a habit or trick, the exercise of the sufferer's will is, of course, essential. The first effort and early part of the struggle are most difficult. By and by a habit of resisting the habit is formed, and the same endowment of the human being which led him into the evil habit helps to guide him out of it. In getting rid of a

trick, great assistance can be obtained from a friend or relation who is willing to remind the subject of it from time to time as he unconsciously gives way to it. A deep debt of gratitude is due to such a friend or relative, because he generally undertakes a task much more likely to provoke resentment than to win thanks.

APPENDIX.

THE BANTING SYSTEM.

THE scientific basis of the system of reducing corpulence, introduced to the public by the late Mr. William Banting, and invented by the late Mr. William Harvey, surgeon, of Soho Square, may be shortly explained as follows :—

Food consists mainly of two chief elements, one of which has been termed 'plastic,' while the other may be termed 'respiratory.' From the former the body receives essential nourishment; the latter is mainly used as fuel with which to keep up the heat of the body, and, when not used up for those purposes, goes towards the production and accumulation of fat.

The articles of food, of which a plentiful use is allowed by Banting, contain abundance of the 'plastic' variety of nourishment; whilst those of which he bids fat persons to be chary are rich in the 'means of respiration.'

There is an alloy of error in what I have stated, but there is truth enough for practical purposes ; and it is obviously impossible in a work of this kind to go very deeply into the chemistry and physiology of food.

All ordinary articles of aliment contain both 'plastic' and 'respiratory' varieties of food ; but, as a rule, the 'plastic' predominates in articles derived from the animal world, and the 'respiratory' in those of vegetable growth, such as potatoes, sugar, bread, and rice.

With regard to alcohol, of which Mr. Banting is by no means sparing, the teaching of Liebig would tend to indicate that herein Mr. Harvey had misled his patient. But, as a matter of fact, not only Banting's own experience, but experiments like those of Hoppe-Seyler, and others, prove that alcohol is not fuel burned up in the body, like so much fat or sugar, but that it is mainly or entirely thrown out of the body in an undecomposed state.

The reader will kindly bear in mind that we are now considering *only* the relations of alcohol to the production of fat. Its tendency to do good or harm in other ways is a different question.

Harvey was also quite logical in forbidding beer. The more highly malted kinds of beer contain considerable quantities of 'respiratory' food.

The great German physician, Niemeyer, observed that had Mr. Banting been forbidden the use of wine as well as beer, 'I much doubt whether the Banting system would then have gained so many

adherents. The sacrifice of drinking wine instead of beer is much easier than the sacrifice of abstaining from all spirituous liquors.'

The details of his diet are thus given by Mr. Banting himself:—

'For breakfast, at 9 A.M., I take five to six ounces of either beef, mutton, kidneys, broiled fish, bacon, or cold meat of any kind except pork or veal; a large cup of tea or coffee (without milk or sugar), a little biscuit, or one ounce of dry toast; making together six ounces solid, nine liquid.

'For dinner, at 2 P.M., five or six ounces of any fish except salmon, herrings, or eels; any meat except pork or veal; any vegetable except potatoes, parsnip, beetroot, turnip, or carrot; one ounce of dry toast; fruit out of a pudding not sweetened; any kind of poultry or game, and two or three glasses of good claret, sherry, or Madeira—champagne, port, and beer forbidden; making together ten to twelve ounces solid, and ten liquid.

'For tea, at 6 P.M., two or three ounces of cooked fruit, a rusk or two, and a cup of tea without milk or sugar; making two to four ounces solid, nine liquid.

'For supper, at 9 P.M., three or four ounces of meat or fish, similar to dinner, with a glass or two of claret or sherry and water; making four ounces solid, and seven liquid.

'For nightcap, if required, a tumbler of grog (gin, whisky, or brandy, without sugar), or a glass or two of claret or sherry.

'This plan leads to an excellent night's rest, with from six to eight hours' sound sleep.'

Banting wisely says, 'I do not recommend every corpulent man to rush headlong into such a change of diet (*certainly not*), but to act advisedly and after full consultation with a physician.'

He sums up the effects of this diet on himself as follows :—

'I have not felt better in health than now for the last twenty-six years.

'Have suffered no inconvenience whatever in the probational remedy or since.

'Am reduced nearly thirteen inches in bulk, and fifty pounds in weight.

'Can perform every necessary office for myself.

'The umbilical rupture is cured.

'My sight and hearing are surprising at my age.[1]

'My other bodily ailments have become mere matters of history.'

Poor Mr. Banting, who appears to have been a most amiable, kind, and pious man, introduced his system, or rather Harvey's, in a pamphlet published just twenty years ago, and almost at once had the gratification of seeing it create an astonishing sensation both at home and abroad. Very speedily a new verb was invented, and stout people found themselves asked the question, 'Do you bant?' Numerous living proofs of the success of Banting's system began to appear everywhere.

[1] About 66.

But the philanthropist had to pay the penalty of fame by becoming the butt of unmeasured ridicule, often ill-natured. To the comic journalists, so often in the position of the chosen people who had to make bricks without straw, he came as a gift of priceless value.

A cabinet-maker [1] and undertaker by profession, it was considered an excellent joke that he should take so much trouble to keep alive and well his fellow-men, whom it was his especial business to place underground.

Of the many anecdotes told about him, the following is a specimen.

Her Royal Highness the Duchess of Teck, then Princess Mary of Cambridge, requested to see Mr. Banting. He presented himself before her, first in his former clothes, in order to show her the old Banting; and then metamorphosed himself before her eyes into the present Banting, by throwing off one coat after another.

This story, told as authentic in a lecture delivered by a German physician before the King of Wurtemburg, from which I quote it, has had its authenticity denied by the hero of it.

Banting's pamphlet is entitled 'Letter on Corpulence,' and was published, price one shilling, by Harrison, 59 Pall Mall.

[1] To H.R.H. the Prince of Wales.

MASSAGE.

This is a term occasionally used in this book, and applied to certain proceedings which may be shortly described as follows :—

1. Vigorously and forcibly rubbing the part acted on, the rubber laying on his whole force and weight, or at all events a great part of it. The hands of the operator may sometimes be oiled with advantage to prevent the friction from irritating the skin too much. The rubbing, when applied to a limb, should be directed from its distant extremity towards the body. It is the deeper parts rather than the skin itself which are desired to be acted on.

2. A process of pinching, nipping, or squeezing. This also is especially meant to act on the deeper parts, and therefore *they* should be thoroughly grasped, and the operator should not merely pinch up the skin in a mincing and feeble way.

3. Percussions ; that is to say, beating the parts affected, using either the hand or the fingers, or a flat, smooth, and light piece of wood like a paper-knife. Care should always be taken to apply this exercise to parts where there is a layer of flesh between the skin and the bone.

Massage should in most cases where it is useful be employed every day, or even twice a day. In the instances in which it is recommended in this book, from ten minutes to half an hour would be a sufficient period to use it at one time.

Not everybody is endowed with the physical strength, the manual skill, and the intelligence required to make a good 'rubber.'

RICKETS.

This is another term used in this book, and perhaps requiring a short special explanation. It is applied to an affection of early childhood, very common among the ill-fed, badly clothed children of the poor, especially of our large cities. It chiefly manifests itself in a tendency for the bones of the sufferers to grow out of shape. More especially the bones of the limbs curve, the head grows out of proportion to the face, the countenance acquires a characteristic appearance, and the joints become larger than normal. The stature has a tendency to be stunted.

am satisfied that a minor degree of rickets often escapes observation, or is neglected, and that such a minor degree is quite capable of modifying the personal appearance in ways indicated in various parts of this work.

The treatment of rickets is simple, and is noticed in another part of the book; but the affection is not one to be trifled with, and demands the care of a doctor.

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