profession in this matter of registration. One example of administrative and one of educational bearing will prove this.

Four years ago I pointed out, in the General Medical Council, that personation was committed by various evil-minded persons, who obtained medical practice by personating persons on the *Register*. It would have been supposed that that would have excited the sympathy of the Council: I met with nothing but hostility in bringing it forward. Eventually I obtained the appointment of a committee. That committee reported that the occurrence of personation was an important fact, that the regulations ought to be amended to prevent personation, and so on. The officials of the Council resisted me in every possible way, even with regard to the provision, insisted on by all Government departments and universities, that every person who wanted to register should write out the application in his own handwriting, so that we could trace that handwriting in future years. That precaution was actually opposed by the officials of the Council. After from three to four years' hard work, at last we got our report adopted.

Take another example: the education of medical students in preliminary science, etc. It has been a notorious scandal in London for many years, that the examination of the Royal College of Surgeons and the Royal College of Physicians in the preliminary sciences was hopelessly inadequate, that it was wholly faulty in principle, and that students were admitted to it who were not properly trained. Ten years ago the General Medical Council issued a decree relative to the five years' curriculum, which, if it had been loyally carried out, would have prevented this scandal. It was not loyally carried out, however. The Royal Colleges in England took the lead in evading it, and the Irish corporations in particular complained to the General Medical Council on that score. My first experience at that Council was to hear a discussion on that question. So it has gone on. This, gentlemen, is called "honesty" in medical politics. Because I have called it dishonesty I have been called to account. I intend to call it dishonesty again, because the position in which we now are is that, although these discussions have been going on all these years at a cost of at least £1,200 to the profession, we are exactly to-day where we were before—namely, that the Colleges resist the decisions of the Council on a point in which authority was vested in the Council by the Acts of 1858 and 1886. Last session I succeeded in carrying a resolution in the Council to the effect that the examinations of the Royal Colleges were insufficient. This session I moved that we should take the next step and go to the Privy Council. The Colleges, although professing that their examinations were all that could be desired, secretly began to alter them without letting the General Medical Council know, and this was brought up by Dr. Pye-Smith and Mr. Bryant as a reason why the Council should do nothing in the matter. To my mind, politics, like ordinary transactions of life, should be characterized and governed by the ordinary rules of honourable conduct, and it appears to me that the action of the Colleges is not honourable.

Further, not only is this the state of things in the General Medical Council by virtue of the Council's constitution, but it is leading to a decay of medical education as a whole. At the last day of the recent session of the Council a project of the Apothecaries' Hall in Ireland, which is a body which with great difficulty grants a licence to three or four men per annum, was brought forward—a project to abrogate all the decisions of the Council with regard to preliminary education and to start an examination on its own. It simply meant that this Hall, seeing that the English Colleges are flouting the decisions of the Council, intended itself to follow that bad example. It is a logical but a very immoral position.

MEDICAL ACTS AMENDMENT BILL.

It is clear that this question of registration cannot be left in the hands of the General Medical Council as at present constituted. That has been recognized by the Association for many years. A Bill has been drafted and circulated amongst the Divisions. The Divisions are answering in a way that I am sure many of the original reactionaries would never have dreamed of. The whole subject is receiving the most careful attention of the profession all over the country, and when that Bill is finally approved by the Representative Meeting, it will be brought forward in its proper place, and it will then be for the Branches in the country to move forward for the general interests of the profession. Much has been done, and much is being done; but there is one other point upon which I wish to say a few words. Although we can

have a successful machine, and although it can work itself successfully, it will do so far better, as far as our relation with the general public is concerned, if we have every member of the profession in the Association. In order that that may come about the Association must meet the wants of every practitioner fairly and reasonably. In order to do that we must have advice on all hands. At the Representative Meeting the Divisions must bring up their views by resolution. The motive power in the Association must come from the periphery. It cannot come from the central executive body in London. When this is fully achieved, when we have got practically every member of the profession in the Association, I believe that most of the existing difficulties in our medical life will disappear. I believe that many vexed questions of the present day will vanish, just as one saw in the Medical Defence Union how blackmailing rapidly declined as soon as it got known that such a thing as medical defence had been organized. The work of ethical committees, I think, will shrink, because when a man is a member of the Association he will feel the moral influence of all his co-workers upon him. Then surely the profession will gain in public reputation, and will reach that status which its disinterested and humanitarian work merits.

A Lecture

ENTITLED

AN INTRODUCTION TO THE STUDY OF CLINICAL SURGERY.

Delivered at St. Bartholomew's Hospital on December 16th, 1903.

By CHARLES BARRETT LOCKWOOD, F.R.C.S.,
Surgeon to the Hospital.

It is part of my duty to lecture to you on clinical surgery and also to teach it in the wards. I propose to try and impart to you some of the general rules by which I wish you to be guided.

In his delightful memoirs Marbot says that he has noticed that each profession has its point of honour. He instances the Alpine guide whose point of honour is never to desert the traveller entrusted to his charge. The sailor's point of honour is, first, the safety of the passengers, then that of the ship, and last of all his own. The point of honour of the medical man is the safety and welfare of the patient. Now the safety and welfare of the patient cannot be safeguarded without a correct diagnosis of the disease or injury. Clearly it behoves all of us to use our best endeavours to learn that indispensable art. To make a correct diagnosis the patient has to be examined. Now the examination of the patient is guided by a few simple rules: First, and above all, by those of Sir George Humphry, "eyes first and much, hands next and little, tongue not at all." No one could tell in a few words the meaning of these, but after a while, as their import becomes known, you will learn to use them without thinking and as a matter of habit.

Let us try to understand the meaning of these rules and begin with "Eyes first and much." In by far the larger proportion of surgical cases the effects of the disease can be seen with the naked eye. This is most fortunate, for we can be sure of what is seen, but by no means sure of what is felt, heard, smelt, or tasted; seeing is believing. But to see anything correctly, even the simplest thing, much thought and training are needed. You come here to be taught to see and to think. At first you may be disheartened by the hardness of the task, but after a while it grows easier, and you will have learnt not only to see what others can see, but perchance to show others what they have never seen. You will have become, in fact, an original observer. Seeing is far from being a simple act. The mind itself has to think over and pass judgement upon that which is seen. A clear mind which can judge correctly is a very rare gift, but I believe that every one can be trained to think clearly if he will only begin by acknowledging his deficiencies and seek to supply them. To see anything rightly is one of the hardest of tasks, but perhaps the hardest task of all is to give a clear and truthful account of that which has been seen. But after all, as the Stoic says: "No great thing cometh suddenly into being, for not even a bunch of grapes can, or a fig."

The science of reasoning is greatly neglected, and students

are strongly advised to devote a little time each day to reading an elementary book on logic, such as that of Jevons. The absence of a logical training is, in my opinion, one of the greatest defects in preliminary medical education and in English education in general.

Every day one has to wonder at the credulity in which our minds are steeped. We enter the temple of science through the portals of doubt. The everlastingly repeated story of an injury suffices to put every one on a false scent. Here is a man who says that he fell and put out a joint of his finger. A dislocation is diagnosed. Why? Because the joint is deformed, and the man says that he fell and put it out three months ago. The electrical department works at the joint with the screen, and reports that a dislocation can be seen. Doubtless the observer saw it. He had heard the history. The mind will make the eye see many things when under the influence of an obsession.

What ardently I wished I longed believed,
And disappointed still was still deceived.

You all accepted the report, and were prepared to try and reduce the dislocation. But, as I was unable to see the dislocation with the screen, a photograph was taken, and showed a very slight displacement of the articular ends of the phalanges. Such an amount of displacement is not unusual in chronic arthritis. Further inquiry threw much doubt upon the history. He might perhaps have fallen down, but clearly the arthritis began some months before the supposed injury.

Do not accept the statements of others; see for yourself with your own eyes. You may remember another occasion on which a girl said she had swallowed her false teeth, and that she felt them in her throat. Quite a number of credulous people used the screen and *x* rays, and saw the false teeth in the upper part of the oesophagus. I passed a full-size bougie into the stomach, and next day the teeth were discovered amongst the bedclothes.

Touch the patient with infinite care and tenderness lest bodily pain be inflicted. The human being fears death above all things; after death he fears pain, and after pain parting with his possessions. It has been written that "a man will give all he hath that he may live." The fear of death and of pain is deeply implanted in the human breast. The infliction of pain is nearly always the result of ignorance, carelessness, or clumsiness. No one who causes needless pain can ever hope to win the confidence or gratitude of his victims. Learn to use your eyes and if the eyes do not suffice learn to use your hands gently, skilfully, and with a definite intent. There are right and proper ways to feel for fluctuation, the kidney, the spleen, the edge of liver, enlarged lymphatic glands, and many things besides. The art is learnt by watching the methods of experienced surgeons and by constant practice. A cultivated sense of touch is a valuable possession; what Luther Holden called "surgical fingers" is a rare gift. Hence Sir George Humphry's rules "Eyes first and much" "Hands next and little." The eyes may tell everything, the hands may hurt very much and tell nothing. A little rough handling at the beginning of an abdominal examination throws the muscles into spasm sufficient to mask a tumour of large size; and the terrified patient usually declines to be hurt again.

What is meant by feeling with intent? Beginners feel without any clear idea of that which they intend to do; perhaps they do not know what they ought to do. An inflamed knee, for example, is handled anyhow on the chance of sometimes being felt. Had the feeling been done thoughtfully and in proper order, the hand would have been gently laid upon the joint to feel for heat, the tip of the finger would have touched the patella to learn whether it had been hidden by the swelling; the patella would have been gently pressed to see whether it lay in contact with the femur; and the swelling would be tested for fluctuation; finally, each constituent of the joint would be felt in turn to try and learn the condition of the capsule, synovial membrane, synovial fringes, ligaments, cartilages fibro-cartilages, and bones.

The order in which anything is done should not be left to chance. As a rule, it is best to proceed in anatomical order. In a genito-urinary case begin with the urethra, then proceed with the membranous urethra, the prostatic, the bladder, ureters, and kidneys; from the prostatic urethra proceed to investigate the prostate gland, the vas deferens, vesiculae seminales, epididymis, and body of testis. Similarly follow the alimentary tract from mouth to anus. One of the objects of an anatomical training is to enable you to work in this systematic way. If we proceed in anatomical order the superficial structures are examined before the deep. Thus

the skin and subcutaneous tissue of the abdomen are taken before the muscles, the muscles before the peritoneum, the peritoneum before the viscera.

The order of the examination may be determined by the question of pain. Thus, an inflamed joint is long looked at before being touched; the least painful part of the touching is done first, and movement is attempted by the patient before it is attempted by the surgeon. A man's thoughtfulness and gentleness are clearly shown by the way in which he handles an inflamed joint. When a joint is inflamed its movements depart and return in definite order. In tuberculous arthritis of the hip-joint, for instance, rotation is lost before abduction and adduction; and abduction and adduction are lost before flexion and extension. When the joint recovers, the movements return in due order, and those which were the first to depart are the last to return. Flexion and extension come back before adduction and abduction, and adduction and abduction before rotation. This is, I believe, a law for all joints which possess these movements. When the law is ignored and rotation is attempted before flexion and extension, great pain may be caused.

The degree of danger may determine the order of the examination. The abdomen is first examined without anaesthesia; then with the patient under an anaesthetic; and last, by means of an exploratory incision. I am accustomed to call this a surgical crescendo. The principles of progression from the easy to the difficult, from the painless to the painful, and from the safe to the dangerous pervades the whole of surgery.

The principles of the surgical crescendo also apply to treatment. For example, in congenital equino-varus the baby's foot may be massaged and manipulated, next wrenched and put in plaster-of-paris bandages; afterwards the plantar fascia may be cut, the tendons and ligaments divided; and, at last, the astragalus or portions of the tarsus may be taken away. Each step of the treatment is more severe than that which went before.

Beware of medical terms. Many are the names of mere abstractions. Such words as "diathesis," "cachexia," or "dyscrasia," or "idiopathic" call up no clear image in the mind. No one can show you a diathesis, cachexia, or dyscrasia. It is hopeless to try to define such vague terms. Let it suffice for us to use terms which serve to mark things which can be seen, handled, and measured.

It is useless to think that cases can be remembered and used for purposes of comparison. A few very striking ones may leave a strong impression on the mind, but in time these fade away and are lost for ever. Nevertheless, although cases are forgotten, the training which their investigation ought to give in seeing and thinking is never lost, and becomes a habit which helps not only in medicine and surgery, but in all the affairs of life.

Besides, a long array of remembered cases would not be very helpful, because no two cases are exactly alike. Neither the patients nor the diseases are ever the same. Should you fail to notice differences, begin to suspect that you are wanting in proper powers of discrimination. Each social grade has its own diseases. Rickets and chronic ulcers of the legs are common amongst the poor, gout amongst the rich. So that one who is familiar with the diseases met with in hospitals will be sometimes at fault when his practice lies elsewhere. It will not then help him much to remember a number of dreadful ulcers of the legs or severe cases of genu valgum.

The cases which we see together ought to be pondered over and read about in the textbooks. One who has cultivated the critical faculties cannot read too much. "Reading maketh a full man," "If he read little, he had need have much cunning to seem to know that he doth not," and Bacon also tells us how to read. "Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider." I advise you to read big rather than little books; and monographs rather than textbooks, dictionaries, or encyclopaedias. It is far easier to read about the disease than about the patient. No complete work has yet been written on human nature; perhaps memoirs and the writings of men such as Pepys tell us sometimes of what we want to know. But whatever you read let it be read critically, and remember that

Books are not seldom talismans and spells
By which the magic art of shrewder wits
Hold an unthinking multitude enthralled.

The proper mental attitude for one who desires to learn

clinical surgery ought to be one of doubt and incredulity. "Without doubt there will be no inquiry, and without inquiry there will be no knowledge" (Buckle). It ought to be instinctive to say, "What reasons have I for believing that this is true?" But before the mind can weigh the proffered evidence it must be endowed with knowledge, judgement, and wisdom. How many confuse knowledge and wisdom.

Knowledge and wisdom far from being one,
Have oftimes no connexion. Knowledge dwells
In heads replete with thoughts of other men;
Wisdom in minds attentive to their own.
Knowledge, a rude, unprofitable mass,
The mere materials with which wisdom builds,
Till smoothed and squar'd and fitted to its place
Does but encumber whom it seems to enrich.
Knowledge is proud that he hath learned so much;
Wisdom is humble that he knows no more.

In describing that which has been seen I would counsel you most earnestly to learn to use the shortest, simplest, and easiest words. Much of my time is given to showing how ill you understand many of the words which are everlasting on your lips, "For words are wise men's counters, they do not reckon by them; but they are the money of fools," wrote Hobbes of Malmesbury more than two hundred and fifty years ago. It is surprising how little we all know of the full meaning of everyday words.

Take a word which is often used, such for instance as "normal." Here is a knee-joint which is called "normal." Now tell me why you call it "normal?" After a while you will learn to base your judgement upon the position in which the joint is held; upon the appearance of the skin over it; upon the absence of swelling or tumour; upon the absence of muscular wasting or contraction; on the absence of heat; and upon the presence of a full range of painless movements. But until all of these—and more, perchance—have been thought of and verified, the statement that the joint is normal is a mere guess, and the word used carelessly and without any clear meaning. The use of pronouns leads to many mistakes. Do not be afraid to call things by their names. We are accustomed to define ironically a pronoun as "a word used instead of a noun to make a sentence ambiguous." "Never put an *it* upon paper without thinking well what you are about. When I see many *its* in a page I always tremble for the writer." How dreary, stupid, and bad is the style of the lecturer who says "Gentlemen, this structure begins here, and after passing over that ends over yonder," and yet this is not a very gross exaggeration of some we have had to endure.

The true teacher may be known because he tries to educate but not to instruct. Instruction merely teaches to know, education teaches to think. But it is not enough to know what words mean to yourself; try and learn what they mean to others. A little while ago we saw together a man who had cellulitis of the leg with death of a large piece of skin. This man was not in the least alarmed when I told him that some of the skin of the leg had sloughed. Asked what he would have thought if he had been told that it had become gangrenous, he looked anxious and said that he would have thought that that was very bad indeed; and when asked what he would have thought if he had been told that it had mortified, his face became full of trouble and he said that he would have thought that he was about to die. All patients give a sinister meaning to the word "tumour," and therefore it is best paraphrased. It is very wrong and heartless to scatter words at random. A lady was told that her child had had "a touch of infantile paralysis." She at once said to herself: "My infant has had paralysis," and next: "I have a paralysed infant"—but happily all untrue.

Cultivate the habit of attention, for those who have it can fix the mind upon the matter in hand, being at the same time alert and ready to do the right thing at the right moment. Without the habit of attention no one can follow a train of reasoning or listen to a long narrative. Both sick and well dislike one who cannot listen and whose thoughts wander. They also dislike interruptions. "Do not interrupt" is sometimes called the eleventh commandment, although the cynical give another. The assistant at an operation must possess the habit of attention; if he does not, his thoughts are sure to be far away at the critical moment when his help is needed. Try always to come to a definite conclusion. A thing either is or is not. It is impossible to escape from this alternative, which few seem able to comprehend. I remember some one saying that a child had incipient disease of the hip. His bewilderment was extreme when asked whether the child had or had

not got disease of the hip. Of course, if the child had got disease of the hip he had got it, and the word incipient merely implied that it was in its early stages. On the other hand, if the child had not got hip disease, then it may be supposed that the word incipient was intended to imply that he was about to get it and that the surgeon was prophesying. Some too weak to bear the insupportable fatigue of thought cannot make any direct statement without qualifying it with some such words as "I think," "it seems," "a somewhat," "apparently," and so forth.

Do not despise experience. "Much memory, or memory of many things, is called experience," and "much experience is prudence" (Hobbes). The surgeon who makes a mistake during an operation remembers and does not repeat it. As surgery and medicine become more scientific the need of experience grows less. Fifty years ago it needed great experience to recognize an anthrax pustule; to-day the characteristic square-ended bacillus may be found by some one who has never seen the patient, but who can nevertheless give a positive opinion upon the nature of the disease. Experience teaches us to be prudent and painstaking and not to fall into error. In addition, those who have long been in practice learn a great deal about the proclivities of their patients. It is known that one cannot take arsenic, another cannot take mercury, and another quinine.

Sir George Humphry's rule, "Tongue not at all," need not be taken too literally. It merely intended to emphasize the extreme caution with which questions should be asked and opinions given when the eyes and fingers have found out all that can be found out by their help. Information of great value can be sometimes obtained by judicious questioning, but always remember that the sick are critical, and that a silly question or remark may sap confidence. Inconsiderate questions are to be avoided. Mental pain is perhaps worse to bear than physical.

In asking questions try to avoid those which suggest the answer. Leading questions cannot elicit the truth. Also ask your questions in an orderly manner, and with a clear intent. For instance, the patient has obscure abdominal pain. Begin at the mouth, and proceed onwards. The mouth suggests the question, "What can you eat?"; the stomach, "Have you pain after food?"; the small intestines, "Do you suffer from flatulence?"; and the large, "Are you constipated?" "Have you passed blood?" Of course, many other questions have to be asked, but no important one can be forgotten if you follow this plan, and think in anatomical order.

The unconscious gestures which accompany some diseases are valuable aids to diagnosis. The gesture of the young adult who is suffering from syphilitic cephalalgia is most striking. When asked whether the head aches the patient's face becomes woebegone, the brows are slightly knit, the corners of the mouth depressed, the head drops towards the chest, and the tips of the fingers are placed upon each temple. Added to this the sorrowful voice and upturned eyes leave no doubts as to the reality of the suffering.

In chronic appendicitis the gesture is almost unmistakable. When the patient standing up is asked whereabouts the pain is felt, the trunk is slightly bent forward and to the right, the face being turned in the same direction, and the flat of the hand is placed upon the right iliac fossa. Sometimes the right thigh is at the same moment slightly flexed, adducted, and rotated inwards. These movements of the trunk and limb are instinctive. The question recalls the pain, and the attitude which gave most relief is instinctively resumed. The hand is held flat, to cover as much as possible of the painful area. A strictly localized pain is indicated with the tip of the finger.

Attitude is often a guide. A child with tuberculous caries of the lumbar spine stands in a stooping position with bent hips and knees and each hand upon the front of the thighs, so as to help in supporting the weight of the upper part of the body. When the odontoid process is carious both hands are used to hold the head. It is strange to see the patient rise from the bed by rolling over on the abdomen, and struggling into a kneeling position and thence on to the feet, the head being meanwhile held in the hands. No one who has ever seen a boy with that strange disease, pseudo-hypertrophic muscular paralysis, can ever forget how he rose from the ground by climbing with his hands up his own legs.

Sir William Savory used to say that mistakes in diagnosis were more often caused by want of care than by want of knowledge. But I seldom meet any one who is not ready to take every possible care provided that he knows what kind of care

is required. The observance of three cardinal rules of diagnosis prevents any serious blunder.

First: Look at the whole patient.

Secondly: Examine the whole of the diseased part, limb, or structure, and at rest.

Thirdly: Compare the two sides of the body.

Again, by looking at the whole patient, how much can be taken in at a glance "in a moment of time, for thought is quick." After awhile you may learn to guess the patient's social position, character, mental peculiarities, general health, and perhaps the disease. Habits of rapid observation and of rapid inference are capable of the highest cultivation and yield astonishing results.

A glance at the patient's face has revealed an error in diagnosis. One day some one said "this girl has a syphilitic rash which does not get well, although mercury has been given until she has been salivated." The girl's eyes were bright, her cheeks red, her hair glossy. Clearly she had no trace of the anaemia which is always present during the period of general syphilitic eruption. This glance at her face awoke suspicion, and the suspicion was confirmed when the rash was seen to be scaly and upon the extensor surfaces of the limbs, which had been scratched and torn to allay the itching. As a general rule syphilitic eruptions occur on flexor surfaces, are not scaly, and do not itch. The girl had simple psoriasis, which no amount of mercury would have cured.

Learn to watch the muscles of expression. The emotions of the mind always disturb the muscles of the face. Every one is born a physiognomist, but few cultivate the gift. Most of us are familiar with the commoner expressions of anger, pain and pleasure, and grief, but dead to the subtler ones. "When he spoke I saw a little muscle at the corner of his eye give a twitch, and then I knew that he was telling me an untruth." Whole books have been written upon the expression of the emotions. Those of Lavater, Bell, and Darwin ought to be read and compared. Lavater is full of observation without science, Bell betraying the dawn of science, and Darwin full of observation guided by scientific method and reasoning. Much remains to be done in this fascinating branch of science.

But the rule which tells you to examine the whole patient implies more than this. Over and over again have mistakes been made as to the nature of venereal sores when the removal of the garments would have revealed a general syphilitic eruption. By use of a little tact and kindness and the avoidance of unnecessary exposure there is seldom any difficulty in following this rule.

The second rule which tells you to examine the whole of the diseased limb or structure is often violated. Here is a man with a small ulcer upon the dorsum of the foot. He has had this ulcer for many years, but latterly it has grown bigger and become more painful. The base of the ulcer was hard, and adhered to the tarsal bones. I remember how much time was spent in endeavouring to tell what kind of ulcer this was, but no one knew until all the garments came off, and brought to light a mass of enlarged, hard, and adherent glands at the base of the Scarpa's triangle. Then it was clear that a neglected ulcer on the dorsum of the foot had become cancerous, with secondary invasion of the lymphatic glands.

It is also most important to examine diseased structures whilst the patient's body and muscles are at rest. Here is a patient with a mass of enlarged lymphatic glands beneath the left sterno-cleido-mastoideus. As he sits in the chair with his face turned towards the right, the glands feel immovably fixed to the spine, and some would think that they were enlarged by malignant growth which had spread beyond their capsules into the bone. But now ask the patient to lie upon the couch, and see how the glandular mass can be moved beneath the relaxed muscles. Further examination reveals the other groups of enlarged glands in the subclavian triangles.

Examine the whole of the diseased structure. In this instance the lymphatic glands of the neck are diseased. Examine, therefore, the lymphatic glands in the groin, axilla, and abdomen. This can be done in a few minutes. Next, go a step further and feel for the spleen. It contains a great deal of lymphatic tissue. Diseased lymphatic glands sometimes send forth lymph cells into the blood, so that a blood count has to be made.

The examination of the whole of the diseased structure may be a hard task. To find out the source of a little pus or blood in the urine the urethra may be looked at with an endoscope;

the bladder with another endoscope; the kidney may be photographed with x rays; and this in addition to the usual examination of the rectum, abdomen, and loins, and the microscopical and bacteriological examination of the urine.

Compare opposite sides of the body, for the sound side is a standard by which to judge the unsound. When a joint is diseased its healthy fellow tells the proper size, shape, temperature and range of movement. When the bones are at fault the comparison of opposite sides is all important, and may prevent serious blunders. I remember being shown the trapezium tubercle on the spine of the scapula by a man of long experience. He had taken it for an exostosis until the corresponding tubercle on the other scapula had been pointed out. When the bones are in question it is wise to have an x-ray photograph taken. Both sides of the body ought to be photographed for comparison because the shadow picture is so apt to mislead. A curious instance of misconception happened once. A man injured his hip. An x-ray photograph was taken, and as the neck of the femur on the injured side was so much shorter than the other an impacted fracture of the neck of the femur was diagnosed. The photographer had omitted to observe that on the sound side, owing to the position of his lamp, a longer shadow had been cast by the rami of the pubes, the ilium, the neck of the femur, and by the shaft of the femur, which looked twice its proper width. This made the injured side seem too short; as a matter of fact in the photograph it was the right length, and the opposite side was too long. Opposite sides of the body should be compared in feeling the arteries, testing the conductivity of the nerves, or the strength of muscles; hereafter you will learn to compare the eyes, the ears, the nostrils, and in truth all the paired organs.

Insist upon seeing what passes from the body. A man complained of a severe pain in the lower part of the abdomen, which was rigid and tender. The urine was passed into a glass, and contained flakes of lymph and mucus. He suffered from no increased frequency of micturition, and evidently did not attribute his pain and discomfort to the urinary bladder. A thin, anaemic woman had constipation and colicky pains in the abdomen. The course of the colon and sigmoid flexure was rather tender. After an aperient the motions were seen to contain mucous casts. A woman after parturition had a high temperature and rapid pulse-rate, abdominal pain, and, it is said, frequent vomiting. With very great difficulty a specimen of the vomit was seen, and found to be pneumonic expectoration. It had been assumed that she had so-called puerperal peritonitis.

Decline always to pass opinions upon things which you have not seen, and you will escape many pitfalls and humiliations. You ought to be ready to answer, "I cannot tell, for I have not seen it;" or, "I was not present." A pathologist asked to report upon a piece of tumour, said that the growth was cancerous and ought to be removed forthwith. Not having seen the patient, he was not aware that the unfortunate man had growth in nearly all the lymphatic glands of his neck. A surgeon was asked what he had found during an operation. In his reply, he advises that no further operation should be attempted, although he had not seen the patient for two years. He ought to have thought that in such a long time much might have happened. If you pass random opinions on things you have not seen, you are sure to be guilty of grave injustice to others, and will end by bringing yourself into contempt.

Learn to measure as accurately as you can what you see or feel. It is most unscientific and positively ludicrous to have tumours compared to fetal heads, oranges, apples, nuts, millet seed, and such like. Moreover, it is to my mind exceedingly nasty to compare the secretions and excretions of the body to cream, pea-soup, coffee, and other kinds of food.

These are some of the rules which I offer for your guidance. You will learn to use them by constant attendance in the wards and out-patient departments.

THE OPERATIVE TREATMENT OF CRANIAL DEPRESSION

(GREENSTICK FRACTURE OF THE SKULL).

By JAS. HENDERSON NICOLL, M.B., C.M.,
Professor of Surgery, Anderson's College, Glasgow; etc.

The following six cases were shown to the Glasgow Medico-Chirurgical Society on April 3rd last. Four of the cases were "birth fractures" and two due to injury during infancy. Of