

# A MEDICAL HANDBOOK.

## CHAPTER I.

### INTRODUCTION.

**Contents.**—General remarks—The constitutions and cachexiæ—Height and weight—Hints on the diagnosis of children's diseases—**Method of case-taking.**

IN introducing the subject of Practical Medicine, a few remarks, by way of caution and advice, may be of service to young Practitioners. The student fresh from the medical schools is apt to forget the great object of his profession in the interest which his cases produce. In the clinical wards the absorbing pursuit of the *diagnosis*, and the satisfaction excited by the clever differentiation of obscure cases, are likely to engender a feeling that disease exists only for the pleasure of finding it out. In practice, however, our clients are *patients* and not *cases*, and the most successful practitioners are those who not only bring skill and knowledge to the case, but who are also able to look at it from the patient's point of view, and to remember that the great end of all our work is the relief of human suffering. Without sympathy there is little likelihood of success as a physician, and no class is more ready to detect its absence than those who seek relief at our hands.

It is important, therefore, in the first place, to *give attention to the patient's own statement of his complaint*. When the circumstances do not allow of his making a statement, the same attention must be given to the history of the illness, as related by the friends. The complaint may not be very well expressed; and very frequently the symptoms are ascribed to false or imaginary causes. A little experience, however, soon enables one to grasp the important points. When *pain* is present, its severity can only be estimated by the patient's own words, along with the expression of the face and aspect—due regard being given to the character and *diathesis*. To disregard the *preliminary information* may lead to awkward mistakes, and especially is this true in relation to cases of chronic disease. There is nothing to prevent a man suffering from chronic valvular

disease of the heart, or phthisis, &c., from being afflicted with a totally new and independent affection; but whether a new disease be present or not, if the patient is not allowed to give expression to his symptoms, he will not feel satisfied that his case has received careful attention at our hands.

The temperament and physical appearance of the patient are generally the first subjects to engage the attention of the physician in the examination of a case. It is while hearing the statement of the complaint that the physician's mind instinctively endeavours to know the person he is called upon to treat; but, while there is often much to be learned from simple physiognomical study, it should be noted that all such information is merely conjectural. Except in Mental cases, it is less the disposition that we seek to know than the physical conditions which certain symptoms may indicate; and, while attention should be given to the *tone of voice and manner of speaking, the attitudes and gestures, features, expression, and muscular firmness* of the patient, it is with the view rather of learning his constitution, a knowledge of which is so important in the treatment of disease.\*

The term "Diathesis" (from Διατίθημι, to arrange) means the tendency to certain morbid states. *Dyscrasia* (from Δύς, difficult; κράσις, temperament) and, *cachexia* (from κακος, bad; ἔξις, a habit) mean the actual morbid conditions themselves. The term "constitution" is used in a general sense, including tendencies and their results. It even, sometimes, is applied to the *temperament*. The study of "Physiognomy of Diseases," therefore, to the practical physician, means the study of the *constitutions*, including such morbid appearances and signs as are readily noticed. A short, condensed sketch of the different types is here given.

**The Constitutions.**—The *Sanguine* temperament is described by Laycock, who takes "John Bull" as the typical example. He is vigorous, healthy, and well-developed. The head is large, complexion ruddy, hair thick, and teeth good. His limbs are thick, feet large, and abdomen capacious. He is predisposed to rheumatic and gouty diseases—as angina pectoris, fatty heart, and apoplexy.

The *Rheumatic* constitution is a degenerate sanguine. It is less vigorous. The teeth are apt to decay, and arthritic symptoms begin to manifest themselves (see *Rheumatism*).

The *Lymphatic* temperament is also a degenerate sanguine. The patient is listless and phlegmatic. The complexion is pale. The body and limbs large and clumsy. The functions are sluggish. He easily passes into the strumous condition. The heart is often dilated, and recovery from disease is slow and imperfect. This temperament is common in women.

The *Strumous or Scrofulous Diathesis*.—Two types are described. The one has the body large and clumsy, head and chest ill-shaped, and the neck, ankles, and wrists thick. The complexion is pale, the *alæ nasi* are thick, and the teeth decayed. This is the degenerate *strumous*

\* The student interested in Psychology should read "Laycock's Lectures," *Medical Times and Gazette*, 1862.

*lymphatic* constitution. The second type is the small-boned, thin, and delicate individual. The head may be small or large, the face generally small, and chin pointed. The complexion is finely tinted, nose small, and teeth small and apt to decay. The hair is fine in quality, and generally fair in colour. In both types the chest is badly shaped, the circulation and vitality weak, and the joints, the eyelids, and glands are apt to become affected with strumous disease. The fingers are often club-shaped. The appetite is fitful, and the mucous membranes are irritable. They are predisposed to phthisis and tubercular disease, and having little recuperative power, they recover slowly from acute affections.

The *Gouty Diathesis*.—The figure is neat and well-developed; hands and feet small. The complexion is high coloured, the nose has a tendency to redness, and the teeth are large, regular, and white. The hair tends to become early grey. The arcus senilis appears early, and is well marked. The patient looks full-blooded and robust, the heart being strong; and there is a marked tendency to gouty diseases—as angina pectoris, atheroma, fatty heart, apoplexy, aneurism, Bright's disease, &c.

The *Nervous Diathesis*.—The figure may be small. The head and face small, and chin pointed. The complexion flushed or pale. The patient has a bright look and restless manner—his nerves being "high-strung." There is liability to nervous disease—as epilepsy, hysteria, spinal disease, and insanity.

The other constitutions sometimes described require only to be named—the *bilious, melancholic, malarial, hæmorrhagic, and alcoholic*—as they either suggest the appearance, or they are mentioned in connection with their diseases. It is far more common to meet with the "mixed" varieties, and hence the *neuro-sanguine, neuro-vascular, neuro-arthritic, strumous-neurotic*, and other combinations, according to the more or less prominence of the different signs and symptoms present.

The foregoing types, therefore, are merely sketches of standards, by which the practical physician may classify his patients. The constitution should be kept well in view in the treatment of the case.

**The Cachexiæ.**—Whereas the constitutional conditions are the natural and inherited, the *cachexiæ* are acquired.

The *Cancerous Cachexia*.—Along with the debility and emaciation, there is an earthy or yellow-brown discolouration of the skin. The features are pinched and sharp, the expression anxious or pained. This cachectic appearance may be present in other painful diseases, besides cancer, as in severe hæmorrhoids, uterine and rectal tumours, &c.

The *Scorbutic Cachexia* has a somewhat similar discolouration of the skin, but there is also cyanosis, and a tendency to bleeding from the gums, &c., accompanied by the debility and other symptoms of scurvy.

The *Splenic Cachexia*, sometimes described, is the pallid appearance and other symptoms associated with Hodgkin's disease and leucocythæmia.

The *Syphilitic Cachexia*.—There is an unhealthy or dirty appearance of the skin, the bridge of the nose has fallen in, and the teeth are peg-shaped. There may be opacities of the cornea, loss of the hair, presence of nodes in the bones, fissures at the angles of the mouth, or other indications of tertiary syphilis.

The *Diabetic Cachexia*.—In this, there is a pinched or drawn appear-

ance of the face. The skin is dry, and often in the young, there is a hectic flush, suggestive of phthisis, which is frequently present. Pavy describes a "rolling and smacking of the tongue" (due to thirst) which has enabled him often to diagnose the disease.

Other cachexiæ are described as *malarial, alcoholic, tubercular, gouty, dropsical, &c.*; but these are treated in the systematic account of their respective diseases.

After the *preliminary information* comes the examination of the *general condition*, including the relations of **height and weight**.

A healthy man of

5 feet	should weigh	8 to 9 stones.
5 " 4 inches	"	9½ to 10½ "
5 " 8 "	"	11 to 12 "
6 "	"	12½ to 13½ "

*i.e.*, a difference of 1½ stones for every 4 inches.

These are the weights usually given, but they are only approximate. They differ according to the development of the individual. Thus a thin, slender man, or "light weight," or the youth who has "shot up" rapidly, may be *below* the average, and the thick-set, robust, corpulent figure may be considerably *above* it—and yet the weights may not be incompatible with health.

The further examination of the case is indicated in the *case-taking chart*, at the end of the section; but in the ordinary course of practice it is not expected that such an exhaustive examination should be made in all cases. The methods used in the hospitals are intended to train the student to careful and thorough work, and to develop a good style. As much of the *method* is used in practice as is necessary for the correct diagnosis, prognosis, and treatment of the case. The *extent* of the disease should be known, and the examiner should always keep this in view. Experience will soon teach the student how much of the *method of case-taking* may be necessary, and the more obscure a case is the more thorough must the examination be. In such cases the chart may be useful to revise; and, if a consultation be necessary, the practitioner should previously examine *all* the systems again, in order to supply the consultant with the fullest information. *No* case can in any way be considered complete without an examination of the heart and pulse, and often of the urine; while inquiry should always be made as to the state of the stomach and bowels, and as to the presence or absence of cough or breathlessness—whatever organs be the seat of the primary lesion. The temperature is important in all acute cases. The diagnosis will rest upon the consideration of the history, symptoms, and physical signs. How much it may be necessary to inform the patient must be left to the judgment of the practitioner. In some cases, especially of minor affections, it is useful to explain to the patient the nature of his complaint; but in others, when the disease is a grave one, it is better to take the patient's friends into one's confidence, and to allow the patient himself to divine the gravity

of the case from the seriousness of the physician's manner. Sometimes, however, even in grave cases, it is better to inform the patient.

**Hints on the Diagnosis of Children's Diseases.**—Much may be learned from the *features* and *external appearances*. The cheeks are congested in feverish conditions; but transient circumscribed flushes of the face or forehead are indicative of cerebral disease. The latter may also be associated with squinting, inequality of the pupils, ptosis, &c.

*Frowning* is frequent in meningitis. A rapid wasting of the face, with sunken eyes and prominence of the cheek bones, points to a diarrhoeal affection. Gradual emaciation may be due to a more chronic disease of the same nature—generally *tuberculosis*.

Lewis Smith considers a thick Meibomian secretion, puriform in character, and collecting between the eyelids, as a very unfavourable symptom in children. It is frequently present just before death, in severe cerebral and intestinal disease. An examination of the skin may also reveal the presence or absence of eruptions. The *attitude, movements*, or the character of the *voice* may be very suggestive. Irregular muscular movements, while conscious, indicate chorea. The fingers are frequently carried to the mouth, ear, or head in teething, otitis, or meningitis, &c. Rubbing the nose is common in cases of intestinal worms. In obstructive lesions of the throat, the child may clutch at the neck. In grave cerebral disease there may be a sharp piercing cry—the head being retracted, with rigidity of the limbs, &c., and light or noise may irritate or produce a convulsion. The voice may be hoarse or croupy (laryngitis). In pleurisy or pneumonia it is abrupt, or the words are uttered in short jerks. The voice becomes very feeble in abdominal affections, or in any severe wasting disease.

**Circulatory System.**—The pulse in children is very easily affected. It is increased in frequency—one hundred and twenty to one hundred and sixty beats per minute being very common in feverish states. Derangements of the digestive system, dentition, and the presence of intestinal worms, very readily affect the pulse in children. In meningitis it is frequently slow and intermittent. Lividity may be due to disease or malformation of the heart, &c.

**Respiratory System.**—The normal breathing in the young child is not only faster, but is apt to be irregular. It is frequently slow in cerebral disease, and much accelerated in capillary bronchitis. Obstructions of the larynx may cause the inspiratory portion to be prolonged. In pleurisy and pneumonia it is quick, and often accompanied by an "expiratory moan"; or abruptly terminated by pain. The breathing is also affected in abdominal disease when there is much distention.

The character of the cough may yield important information (see croup, bronchitis, pertussis, &c.). A cough may be an early symptom of measles and other fevers. It is frequent during dentition, and it may be the result of the presence of intestinal worms, irritating ingesta, &c. Such a cough is dry and painless. Dilatation of

the *alæ nasi* points to inflammatory disease of the respiratory organs.

**Digestive System.**—The ordinary examination of the mouth, tongue, and pharynx, &c., should be a matter of routine. Vomiting is not only a symptom of many diseases of the digestive system, but it is also an early symptom of cerebral disease, or it may usher in the symptoms of scarlet fever, &c.

Flatulence and distention of the abdomen, with colic pains, are very common; and in feeble, rachitic, or scrofulous children these symptoms may be more or less permanent. In meningitis, and exhausting diseases, the abdomen is often retracted. Vomiting, with *straining*, suggests intussusception.

The *stools* may be *green*, from over-feeding, irritating ingesta, cold, or inflammation. Almost all children have occasionally green stools. In enteritis the stools may be muco-sanguineous. Blood in the stools, with constipation, is suggestive of intussusception. In many diarrhoeal affections the stools are acid and sour-smelling. Threadworms are common, and should be looked for by the nurse.

**Nervous System.**—A simple headache may be due to coryza or to commencing fever. If protracted it may indicate meningitis, &c. In acute inflammatory affections, children often have hyperæsthesia of the anterior surface of the trunk. Other symptoms of cerebral disease have already been mentioned.

Grave disease of the thoracic and abdominal organs may be present without much pain. A continuous pain, lasting for weeks, in the epigastric or umbilical regions, should suggest an examination for caries of the vertebræ. A pain in the knee should suggest disease of the hip.

The *temperature* is very easily raised in children. Two or three degrees need not excite any alarm in itself. If, however, 106° Fahr. be reached, there will, probably, be a fatal result if the fever be not shortly relieved by treatment. The temperature in meningitis rises slowly, but it never is high in the early stages. In diphtheria, the temperature often falls to the normal, during the stage of toxæmia.

By the kind permission of Dr. Wyllie, the complete method of Case-taking used in his wards in the Royal Infirmary, Edinburgh, is here appended:—

## METHOD OF CASE-TAKING.

### PRELIMINARY INFORMATION.

1. Name; age; married or single (if married, how many children); occupation; native place; present residence; by whom recommended. Date of admission, and No. of Ward (if in side room append letter S. to No.).

2. Very brief note of the chief complaints for which the patient has sought admission.

3. History (*a*) of present illness; (*b*) of previous health, social condition, and habits; (*c*) family history.

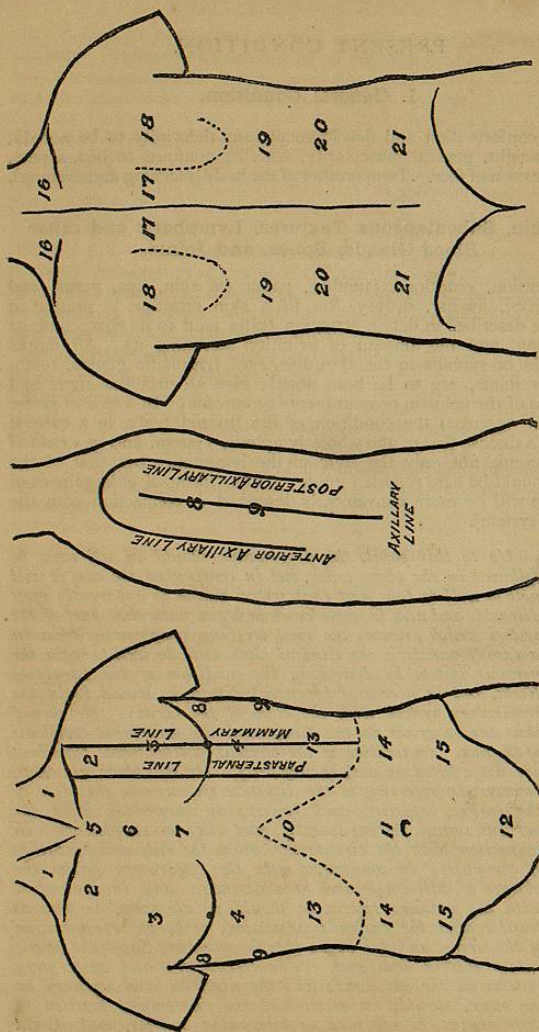


Fig. 1.—Regions of the Trunk.—1, 1, supra-clavicular; 2, 2, infra-clavicular; 3, 3, mammary; 4, 4, infra-mammary; 5, 5, 7, superior, middle, and inferior sternal; 8, 8, axillary; 9, 9, infra-axillary; 10, 10, epigastric; 11, 11, umbilical; 12, 12, hypogastric; 13, 13, right and left hypochondriac; 14, 14, right and left lumbar; 15, 15, right and left iliac; 16, 16, supra-scapular; 17, 17, inter-scapular; 18, 18, scapular; 19, 19, infra-scapular; 20, 20, 21, 21, dorsal and lumbar.

## PRESENT CONDITION.

## I. General Condition.

As to conformation and development (any deformity to be noted); height, weight, general muscularity, whether confined to bed, aspect, and expression of face. Temperature of the body (morning and evening).

## II. Skin, Subcutaneous Textures, Lymphatic and other Blood-Glands, Bones, and Joints.

Perspiration, eruptions, jaundice, pallor (of skin, lips, gums, and conjunctivæ), lividity, dropsy, &c. (if a skin eruption is present it should be described in detail, attention being paid to its characters, its distribution, and the amount of irritation attending it). All marks of scrofula or syphilis in the skin, lips, eyes, lymphatic glands, teeth, bones, or joints, are to be here noted; also all articular signs and symptoms of rheumatism or gout (acute or chronic). In a case of goitre (simple or vascular) the condition of the thyroid body, in a case of Hodgkin's disease that of the whole lymphatic system, and in a case of leucocythæmia not only the state of the lymphatics but that of the spleen, should be here reported upon. (Other forms of enlargement of the spleen will be more conveniently described in connection with the digestive system).

*N.B.*—Up to this point, the programme should in all cases be followed in the above order, but in continuing the case it will now be well to take first that system which is apparently most diseased, and also in some cases to begin with that part of the system which presents the most striking symptoms. Thus in a case of paralysis the clinical clerk will do well to begin the nervous system by describing the condition of the paralysed limbs, and in a case of laryngeal disease he should begin the respiratory system with the state of the larynx. He should thus try to group in the foreground the prominent symptoms of the case. In treating of the various systems whose functions are not affected he may be very brief. He should in all cases, however, in referring to the digestive system, note the state of the tongue, appetite, and bowels; in connection with the nervous system the existence of good sleep or sleeplessness; in connection with the circulatory system the rate and condition of the pulse; in connection with the respiratory system the absence of all cough and breathlessness; and in connection with the urinary system he should in all cases, as soon as possible after the patient's admission, make an examination of the urine, and fill in on the Temperature Chart the particulars therein indicated. The circulatory and respiratory systems on the one hand, and the digestive and urinary on the other, should, on account of the anatomical position of their organs, be regarded as companion systems, and should always be treated of in juxtaposition.

## III. Circulatory System.

1. *Subjective Symptoms.*—Cardiac dyspnoea, palpitation, pain at precordia, syncope or faintness, angina pectoris, &c.

2. *Characters of the Radial and other Superficial Pulses.*—Pulse-rate; nature of the radial pulse as regards its regularity, force, and fulness; tension of the artery from blood-pressure; rigidity, tortuosity, or calcareous degeneration of the vascular coats, from disease; equality or inequality of the two radial pulses. Condition as regards tortuosity, &c., of the temporal and other superficial arteries.

3. *Physical Examination* by inspection, palpation, percussion, and auscultation of (a) the Heart; (b) the Aorta in thorax and abdomen; (c) the Large Arteries and Veins in the root of the neck. (In describing a cardiac or vascular *bruit* note should be made of its acoustic characters, its seat of maximum intensity, its relation to the ventricular systole or diastole, and the extent and directions of its propagation. In describing the area of cardiac dulness the limits of both superficial and deep dulness should be given).

4. *Examination of the General Circulation.*—Varicose veins and hæmorrhoids; blueness or coldness of the hands and feet, and point of nose; lividity or pallor of skin and mucous membranes; cardiac dropsy. (If dropsy, &c., have been already described under the heading No. II., they need here only be referred to as already described.)

5. In Special Cases (anæmia, leucocythæmia, &c.) give the results of a microscopic examination of the blood, including an enumeration (by means of special apparatus) of the red and white corpuscles, and an estimate of the hæmoglobin.

## IV. Respiratory System.

## I. PHYSICAL EXAMINATION OF CHEST.

(a) *Inspection.*—Measurement of chest at level of nipples; general form of chest, with special note of any general or local flattening or prominence. Condition of costal parietes, as regards emaciation, distinctness of intercostal spaces, &c. Action of the chest during respiration; number of respirations per minute, their character, easy, laborious, or wheezing; note whether inspiration or expiration is the more laborious and difficult; note also how much the manubrium sterni and clavicles are drawn up during ordinary inspiration; note action of *alæ nasi*; also the attitude or "decubitus" of the patient, whether he is able to lie down or requires constantly to sit up, or be propped up, in bed (orthopnoea); compare by means of inspection and palpation the expansion of the two sides during inspiration. Ask the patient to cough, and note if emphysematous apices are bulged up into the root of the neck.

(b) *Palpation.*—Compare, as just indicated, the expansion of the two sides; also test, and compare on the two sides, the "vocal fremitus," or thrill of the voice.

(c) *Percussion.*—Test the characters of the percussion note over the various parts of the chest, noting the degree and limits of any local hyper-resonance, or dulness, or "crack-pot sound."

(d) *Auscultation.*—Character of breath sound. Morbid accompaniments, such as ronchi, crepitation, or friction. Character of vocal resonance when patient speaks aloud and when he whispers: note any local increase, diminution, &c.

## 2. SUBJECTIVE SYMPTOMS.

Difficulty of breathing. Rapid or laborious breathing having been already described under "Inspection," note here if the patient suffers much distress or loss of sleep from it; also whether it is constantly present or only comes on during exertion, or paroxysmally from other causes. Cough: its character, severity, and frequency; if it deprive patient of sleep, &c. Expectoration: its amount; its physical characters, as regards viscosity, wateriness, frothiness, colour, presence of pigment, blood, pus, &c. Odour of breath and expectoration; special note to be made of any fœtor. Microscopical examination of the sputum. Pain in chest: its character, situation, and limitation.

## 3. EXAMINATION OF THE LARYNX.

In describing the symptoms of a laryngeal case, bear in mind the four following functions performed, or taken part in, by the Larynx. (a) *Phonation*.—Is the voice natural, husky, weak, or altogether lost? (b) *Coughing*.—Is the cough natural in sound, husky or loudly metallic and ringing? (c) *Deglutition*.—Is there pain in the larynx during deglutition, or choking from the entrance of food or fluid into the air-passages? (d) *Respiration*.—Is there any impediment in the Larynx, as indicated by stridor in breathing; and if so, is the difficulty constant, or paroxysmal? If paroxysmal, note the time (day or night) during which the paroxysms most frequently occur, and state, if possible, by what causes they seem to be induced.

Examine the Larynx externally by palpation. Note the presence of any tenderness to touch, or of any swelling.

Results of Laryngoscopic Examination.

## 4. STATE OF THE NARES AND EUSTACHIAN TUBES.

Catarrh, &c. Characters, microscopic and otherwise, of the secretion. Fœtor of breath.

## V. Digestive System.

## 1. SUBJECTIVE SYMPTOMS.

Appetite, thirst, deglutition, digestion, action of bowels, &c.

*Difficulty in Deglutition*.—Cause the patient to indicate as clearly as possible the seat of obstruction; report result of examination with bougie, if such have been made.

*Pain in abdomen*.—Note situation and limits, character and degree of severity, if constantly present or intermittent, if aggravated or relieved on pressure. When pain or uneasiness is situated in the region of the stomach, enquire if it extends through to the back, if it is relieved when food is taken, or if, on the other hand, it comes on, or is distinctly aggravated, after meals; if the latter, carefully note the usual interval after meals at which the accession or aggravation of pain occurs. If *paroxysms of pain* occur only at rare intervals, note their exact situation, their severity, their mode of accession and disappearance (gradual or sudden), and their accompaniments and sequæ (such as vomiting and

slight jaundice, &c.); and mention any cause which the patient may have observed as probably productive of them.

*Vomiting*.—Note its relationship to meal-time, its frequency and severity, and the characters (microscopic and otherwise) of the vomited matters. Note particularly the presence at any time of blood or coffee-ground like material. If vomiting be of acute character and of recent origin, as in a case of obstruction of the bowels, examine at once for hernia, in all the hernial localities.

*Gaseous eructations, heart-burn, and water-brash*.—Note their relationship to meal-times, and give the patient's experience as to the articles of food he may have found most apt to produce them.

*Diarrhœa*.—Note if any apparent relationship to meal-times, or to particular articles of food; character and frequency of the evacuations; presence of griping pain in the abdomen (termina), or bearing-down pain about the rectum (tenesmus).

*Constipation*.—State how often the bowels are evacuated. If bowels are apparently "obstructed," state precisely the day and hour of the last evacuation, and give patient's statement as to its nature and amount.

## 2. OBJECTIVE EXAMINATION.

*State of tongue, teeth, fauces, and pharynx*.

*Physical examination of the abdomen*, by inspection, palpation, and percussion.

If abdomen is *enlarged* from other causes than mere adiposity, take its *circumference* at the umbilicus, examine by palpation for fluctuation, and if this be present percuss and observe the limits of tympanitis and dulness, noting particularly how much the tympanitis and dulness remain fixed or shift about when the patient is turned from the back upon the side, and from one side to the other. If any *tumour* should be detected on palpation, state in what region of the abdomen it is situated, and describe particularly its apparent size, its hardness, and the distinctness or indistinctness of its outline. (The regions of the abdomen are nine in number, and are limited by four imaginary lines: two drawn down perpendicularly from the cartilage of the eighth rib to the middle of Poupart's ligament on either side; and two drawn horizontally across the abdomen, the upper at the level of the lowest part of the costal arches, and the lower at the level of the highest part of the iliac crests. Of the nine regions thus marked out, the three upper are the epigastric in the centre and the hypochondriac on each side; the three middle are the umbilical in the centre and the lumbar on each side; and the three inferior are the hypogastric in the centre and the iliac on each side.)

In many cases of abdominal disease, and particularly in cases of obstruction of the bowels, important information, positive or negative, will be obtained from a *digital examination of the rectum*. In all cases of *anæmia* inquire as to the existence of bleeding hæmorrhoids.

In dealing with a case in which one or other of the *solid abdominal organs*, such as the liver or spleen, is enlarged, ascertain and describe the limits of the enlargement, as in the case of a tumour. Note any irregularities, such as protuberances, on the surface of the organ.

## VI. Genito-Urinary System.

*Urine*.—Amount in twenty-four hours; specific gravity; colour and transparency; acidity; odour; deposits; chemical and microscopical examination.

(In the case of every patient admitted the state of the urine should be noted upon the temperature-chart as soon as possible after the patient's admission, and a fuller account of it should be made in the general report of the case.)

Examination of the kidney, bladder, urethra, &c.

Menstruation; condition of the genital system, with note of abnormalities.

### VII. Nervous System.

In cases of *Convulsive or other Seizures*, note manner of onset, and the progress of the attack. Character of the convulsions; character of the breathing; complete or partial loss of consciousness; indications of hemiplegia; localised spasms, &c.; state of pupils (contracted, dilated, unequal, insensible to light, &c.). If the patient is not seen during the attacks by the house-physician or clinical clerk, as good an account of them as possible should be obtained from the friends or others who may have seen them. Describe the mental and physical condition of the patient in the intervals between the seizures.

In examining the various functions of the nervous system in chronic or subacute cases which may admit of detailed examination without detriment to the patient, the following notes may perhaps be of use:—

#### I. THE MOTOR FUNCTIONS.

In cases of Paresis or Paralysis, define the limits of the condition, and indicate in what degree the motor power is lost.

In examining the *upper extremity*, if the case be one of only partial loss of power, compare the grasp of the affected with that of the sound hand. Test *co-ordination of movement* by causing the patient to pick up minute bodies, or to write, &c. Test the *muscular sense* by putting into the patient's hands, his eyes being closed, objects of the same size but of different weight, such as coins, &c.

In examining the *lower extremities*, if the patient is able to walk cause him to do so. Note how much he betrays *loss of muscular power*, in any slowness of movement, or appearance of great effort, or dragging of the feet, or scraping upon the floor with his toes. Note if he presents, as evidence of the loss of *co-ordinating power*, the high-stepping irregular action of the ataxic; if so, ascertain how much the want of co-ordination is associated with loss of muscular power by causing the patient to lie down in bed, and when he is in this position, try what resistance he is able to overcome in flexing and extending the legs. Test his *balancing power* by observing any staggering in his gait as he walks, noting particularly if he can turn round without staggering; cause him to walk along a straight line marked on the floor; and cause him to stand upright with heels and toes together and eyes closed. Examine as to the *reflex functions of the spinal cord*. Test especially the *plantar* and the *knee reflexes*, and try if you can elicit the *ankle clonus* (the plantar is a superficial, and the knee reflex and ankle clonus are deep reflexes). The other superficial reflexes which may be tested in some cases are the gluteal, cremasteric, abdominal, epigastric, erector spinæ, and scapular. Inquire as to the condition of the *organic reflex centres* situated in the lumbar enlargement of the cord, namely, the centres for micturition and defæcation and the sexual centre. In morbid states of the first distinguish between

dribbling of urine from an over-distended bladder, constant dribbling from an empty bladder, and frequent involuntary contraction and evacuation of the bladder; always state in what degree the patient is conscious of the evacuations. If thought desirable, the *muscular sense* of the lower extremities can be tested by hanging weights from the feet, whilst the patient sits upon an elevated seat with the feet dependent.

In examining a case of *Facial Paralysis*, note if the patient can close both eyes perfectly, how much the mouth is dragged to one side, how much the natural wrinkles of one side are obliterated; cause the patient to whistle, and note action of lips and cheek; note any drooping of the arch of the palate on one side, and any loss of taste on one side of the tongue; observe if the patient protrudes the tongue in the middle line, or if it inclines to one side.

In *Paralysis of any kind* examine and report upon the *condition of the paralysed muscles*: whether firm and of good tone; or flaccid and deficient in tone; or rigid and contracted (spastic paralysis—when rigidity present always note attitude of the limb); or markedly atrophied (amyotrophic paralysis); or presenting an appearance of increased bulk and unnatural development (hypertrophic paralysis). In some cases report as to the reactions of the muscles when subjected to the Galvanic and Faradaic currents.

In reporting upon a case of nervous disease which presents *spasmodic or rhythmical movements* of the body, either general or localised, the nature, extent, and duration of those movements should be described. If they are localised to particular groups of muscles, their limits should be defined as strictly as possible, and it should be particularly stated if, in the same groups of muscles, there is any degree of paresis or paralysis.

#### 2. TROPHIC FUNCTIONS.

Some of the derangements of trophic functions have been already alluded to in connection with the muscles. There are many other important trophic lesions, such as those of the skin (examples of herpes and other inflammatory eruptions, certain atrophies of hair and pigment, "glossy skin," &c.), and of the joints (the arthritic changes in locomotor ataxy, &c.); but all of these will have been treated of more conveniently under the heading No. II. than under the "Nervous System."

#### 3. SENSORY FUNCTIONS.

(a) *General Sensations of Patient*.—General feeling of well-being or exhaustion. Vertigo, constant, occasional, or occurring only when patient walks. Headache, over whole head or limited in area, frontal, vertical, occipital, unilateral, or bilateral, deep or superficial, constant or periodic, aggravated or not at night, with or without tenderness of head to touch or pressure. Backache, with any specially tender spot. Ovarian, infra-mammary, and lumbar pains. Neuralgic pains in divisions of fifth pair, in great sciatic, &c. General or wandering pains. Sudden shooting (lightning) pains about the body or in the joints.

(b) *Special Senses—Vision*.—Protrusion of eyeballs; strabismus; nystagmus; ptosis; lagophthalmos; spasms of the palpebral muscles. Indications of recent or old inflammation of the iris, &c. Size and equality of the pupils; contraction of pupils on exposure to strong light and on accommodation of the eyes to near vision. Double vision. Imperfect sight from errors of refraction or from disease of external or

middle parts of eye. Imperfect sight or blindness from disease of brain, optic nerves, or retina; dimness of sight, limitation of the field of vision, loss of colour sense, blindness of one half of each retina, patches of blindness in the field, spectra (such as dark spots, sparks or flashes of light, coloured spectra). Results of ophthalmoscopic examination.

*Hearing.*—Defect of hearing on one or both sides. Tinnitus aurium. Examination with watch or tuning fork. Results of examination with otoscope.

*Taste.*—Test each side of the tongue with sweet and bitter, also with acid and salt substances, the tongue being protruded during the examination.

*Smell.*—Test each nostril separately with various odours, as those of strong-scented flowers.

(c) *Cutaneous Sensibility.*—Test the *tactile* sensibility of the skin by touch with finger. If an exact estimate is required use Weber's test, the compasses, and note at each spot examined the shortest distance between the points that permits of the patient's recognition of their separate impact. Test sensibility to *pain* with the point of a pin. Test sensibility to *heat* and *cold* with two test tubes, one filled with cold and the other with hot water; or with hot and cold sponges. Note all abnormalities, such as anaesthesia, or hyperaesthesia, or creeping feeling (formication), or feeling of "needles and pins" (prickling).

*Note.*—In describing a case of paralysis, it is best not to take the sensory functions in the above order, but to begin with "cutaneous sensibility" immediately after having described the motor and trophic conditions of the part paralysed.

#### 4. THE INTELLECTUAL FUNCTIONS.

How is the general consciousness or intelligence affected? Is it well retained, or is it obscured or perverted? Note the condition of the memory, and of the power of sustained attention. Note how the emotional nature is affected, particularly if *self-control* is maintained or impaired.

*Loss of Language.*—Distinguish between the loss of the power of calling up words in the memory (amnesic aphasia) and the difficulty of articulating words which may have been rightly enough chosen (ataxia aphasia). In the former case note in what degree the memory for words is obliterated or confused; and in the latter case note what consonants the patient has most difficulty in articulating. In both varieties of aphasia cause the patient to write to dictation, and preserve a specimen of what he has written.

#### 5. THE SLEEP FUNCTION.

Character and amount of sleep at night, dreams, somnambulism, &c. Sleepiness during day, &c.

#### VIII. Treatment of the Case, and Notes from time to time of its Progress.

*N.B.*—The Clinical Clerk will be careful, in taking a report, not to exhaust the patient by too prolonged conversation or examination, caution in this respect being especially needed when the

*patient is feverish or very ill. In cases of very severe illness, the Physician or Resident Physician will furnish what facts may be required as to the physical examination, and a history of the case may sometimes be obtained from the patient's friends.*

*The Clinical Clerk need not burden his report by using all the headings of the above programme. He is at liberty to select only such headings as he may think required for the particular case he may be describing, and to arrange them as may best conduce to clearness and consecutiveness.*

*When a patient is discharged, the Clinical Clerk will finish his notes, and report the case as finished to the Resident Physician. In the event of a patient's death, an abstract of the pathological report should be added to the notes of the case.*

*P.S.*—In drawing up the above programme, I have in some particulars followed the "Method of Case-taking" used by the late Professor Sanders, as given in Finlayson's Clinical Manual p. 37.