



A HANDBOOK  
OF  
THERAPEUTICS

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A HANDBOOK  
OF  
THERAPEUTICS

## PREFACE TO THE TENTH EDITION.

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IN preparing a new edition of the Handbook of Therapeutics, especially intended for students and young practitioners, I have endeavoured to make it as practical as possible.

The method I have adopted in this work is to follow out in a certain order, in detail, the physiological and therapeutic action of individual drugs on the body. For the most part I have treated of the action of a drug, first on the skin, next on the mouth, then the stomach, the intestines, the blood, the nervous system, the lungs, the heart, and finally on the excreting organs, dwelling most of course on the organ, or organs, mainly affected by the drug under consideration.

In this edition I have endeavoured to put the reader in possession of the latest facts, and to give an account of various new and important discoveries made since the publication of previous editions.

The elaborate analytical index, prepared by the kind labour of my friend Dr. THEODORE MAXWELL, will be found a time-saving and valuable addition to my Handbook.

I am anxious to express my great obligation to my friend Dr. GEORGE BIRD, who has assisted in revising this and several previous editions of the Handbook, and who has increased its usefulness by many suggestions.

*August, 1883.*

**BY THE SAME AUTHOR.**

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**ON THE TEMPERATURE OF THE BODY AS  
A MEANS OF DIAGNOSIS AND  
PROGNOSIS IN PHTHISIS.**

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# THERAPEUTICS.

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## INTRODUCTION.

I HAVE thought it might prove useful to the student and to the young practitioner to insert in this edition a brief account of the symptoms of disease. Of late years, since attention has been more drawn to the significance of physical signs, too little seems to me to be paid to the detection and appreciation of symptoms, objective and subjective. This is a marked defect among students. One often meets with a student, thoroughly equipped with all the resources pertaining to physical diagnosis, who yet is sorely puzzled with the indications afforded by the pulse or tongue. The reason is obvious. Physical signs are soon learned, whilst it requires a longer time, more patience, and a more discriminating observation to appreciate the meaning and to estimate the value of symptoms.

The indications of disease are divided into symptoms and "physical signs." The direct information to be obtained from the pulse, the skin, the tongue, the breathing, the evacuations, &c., are, for convenience, termed objective symptoms. The indirect information we gather from the patient's description of his own feelings and sensations, which are detected only by the patient himself; these, likewise for the purpose of convenience, are termed subjective symptoms. Important though physical signs undoubtedly are, yet symptoms, especially objective symptoms, are far more valuable. Physical signs, as a rule, help us to detect only coarse and decided changes, and are chiefly useful in diagnosis, whilst symptoms are far more useful guides in prognosis and in treatment.

It may be said, that before we can efficiently treat a patient, we must first form a correct diagnosis; hence physical signs, by greatly assisting us in this respect, must likewise greatly aid in the treatment. In some measure, this proposition is no doubt true; but when we have accurately diagnosed the disease, we treat, in most cases, the secondary effects rather than the primary disease; and these secondary effects generally make themselves apparent solely as

symptoms. Only in a few instances, as ague and syphilis, can we directly cure the disease itself; but in other instances we must be content to combat the secondary and often fatal effects. A disease often neither endangers nor destroys life by its direct effect on the organ attacked, but through a secondary effect manifested on another organ or organs. Thus to take the case of pneumonia; here, by no means unfrequently, the dangers depend, not on the condition of the lung, but on nervous or cardiac depression. The fever depresses the nervous system, shown in sleeplessness and delirium, and this depressed state of the nervous system causes cardiac weakness and so endangers and destroys life; or the fever may directly depress the heart and so weaken it that the patient dies. Now in both these instances, the effects on the nervous system and on the heart are manifested solely by symptoms, and without due appreciation of, and proper attention to these symptoms, so much the worse for the patient.

Instances like this might be multiplied to any extent. Moreover, there is the wide range of diseases in which physical diagnosis is unavailing when there are only symptoms to guide our treatment; and unless trained in the recognition and estimation of symptoms, these are just the cases in which the young practitioner is more likely to find himself at sea.

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## ON THE TONGUE.

WE examine the tongue to ascertain whether it is clean or furred: dry or moist; its colour, &c.

What is the meaning of a furred tongue?

A tongue may be furred from febrile disease; from local causes; or from sympathy with the stomach, intestines, or liver.

The condition of the tongue in fever is, perhaps, more a help in prognosis than in treatment. In most fevers the tongue at first is covered with a moist fur; but in some cases the tongue, strange to say, remains quite clean. Sometimes this is the case in typhoid fever. Now the coated tongue in fever does not give us much suggestion with regard to treatment, for whether the tongue is clean or foul, if there is constipation the bowels must be relieved; and if the tongue is very foul, that is, thickly coated, a mercurial purge is best, though whilst the fever continues some fur usually remains.

Local causes often foul the tongue. Enlarged tonsils often coat the back of the tongue. Decayed teeth often fur a portion of the tongue. If one tonsil only is enlarged, or if the decayed teeth are situated on one side, then only one longitudinal portion of the tongue

is furred. In neuralgia of the fifth, when the lower branches are affected, the tongue on the neuralgic side is apt to become furred.

Excessive smoking almost always furs the tongue.

The tongue very frequently indicates derangement of the stomach, bowels, or liver. For instance, if there is no fever, and no local cause, as enlarged tonsils, bad teeth, &c., then a coated tongue indicates some disturbance of the *primæ viæ*.

What does a coated tongue under these circumstances indicate? We shall rarely go wrong in taking this furred tongue as an indication for one of four medicines, or some of them combined: namely, mercury, podophyllin, tincture of *nux vomica*, or nitric acid.

How are we to determine which to give and its dose? If there is constipation then give a mercurial preparation or resin of podophyllin in purgative doses. Any purgative, it is true, will here be useful, especially the natural purgative waters, as Pullna, Friedrichshall, or Carlsbad; but these, though valuable remedies, are in many instances inferior, in the cases in question, to mercurial and podophyllin purges.

As regards mercury, our choice falls either on calomel or blue pill for adults, or calomel or grey powder for children. The calomel or blue pill should be combined with extract of belladonna or of hyoscyamus, since this addition obviates the griping and certainly seems to enhance the action of these drugs. An effective dose is half a grain of calomel with three grains of extract of hyoscyamus, for three consecutive nights; the first pill generally purges pretty freely, the second much less freely, and the third scarcely at all, though it helps to clean the tongue.

Which should we choose—mercurial purges or podophyllin resin? The answer to this question depends on the colour of the stool. If the motions are too light-coloured mercurial purges are best. If, on the other hand, the motions are too dark then podophyllin is needed. For this clinical fact I can give no explanation.

What is to be done when the bowels are freely open, or have been relaxed by medicine, but where the tongue still continues furred? We meet with such cases often in gastric, biliary, or intestinal disturbance, and sometimes in the early convalescence from acute illness the tongue does not clean so quickly as it should—a sure sign of impaired digestion. Here again a mercurial preparation or podophyllin is useful, given with tincture of *nux vomica* and nitric acid. If the motions are too light then give a third or half a grain of grey powder, night and morning or three times a day; if the motions are too dark then give a small dose, say a thirtieth to twentieth of a grain of podophyllin resin, night and morning. Five drops each of tincture of *nux vomica* and dilute nitric acid thrice daily, will much

promote the action of the mercury and the podophyllin. Sometimes the fur is dirty or brown, and the patient complains of a disagreeable bitter taste, especially in the morning, and this symptom is an additional indication for the foregoing treatment. Sometimes, however, in spite of this treatment, the disagreeable bitter taste persists in the morning, or even during the greater part of the day. Rinsing the mouth with a solution of permanganate of potash will generally temporarily remove the annoyance.

As the tongue cleans the fur recedes from the tip and edges and gradually becomes thinner, especially at its margin. With a little practice we can generally detect when the cleaning process is going on.

After an acute illness like typhoid fever, the tongue sometimes parts with its fur in flakes, leaving clear smooth patches, especially at its back. This tongue denotes a slow convalescence. In typhoid fever this tongue may a second time become dry, with a return of the abdominal symptoms. In a case like this turpentine is indicated in 10- to 20-minim doses every two or three hours.

A dry tongue occurs most frequently in fever. The dryness first invades the tip and extends up the centre, spreading the meanwhile laterally, till the whole tongue becomes dry. It grows moist in the inverse order of its invasion. A dry tongue generally indicates nervous depression, often shown by delirium, usually of a low muttering kind. This nervous prostration is often dependent on want of sleep. Narcotics therefore, like chloral, bromide of potassium, or opium, by inducing sleep, soothe and strengthen the nervous system, and indirectly moisten the tongue. Opium is often more useful than bromide of potassium, or chloral, for opium appears to have a greater effect on the tongue than either of the other drugs, probably inducing a moist condition by its direct action on the tongue and stomach as well as through its sleep-producing effect on the nervous system.

Being frequently a sign of nervous depression, the dry tongue becomes also an indication for giving alcoholic stimulants. If, however, the nervous depression is due to wakefulness it is better, if possible, to secure refreshing sleep by a soporific, which, by soothing and strengthening the nervous system, renders the tongue moist, promotes digestion and assimilation, and incites the patient to take more food.

The two chief uses of alcohol are to assist digestion and to sustain the nervous system. Now sleep is the best restorative; hence fever patients who sleep well do not as a rule require stimulants.

If sleep cannot be secured, or if in spite of sleep the tongue remains dry and the delirium persists, then alcohol is indicated, though

the pulse is a better guide. Usually, however, a patient with a dry tongue has a frequent, quick and compressible pulse calling for alcoholic stimulation.

Whilst the tongue often affords evidence of the necessity for alcohol, sometimes it shows when it does harm, for if the tongue grows coated or drier, it is evident that the stimulant is doing mischief.

The tongue in an aged person often readily becomes dry even in non-febrile illnesses; hence a dry tongue has not quite the same serious import as a dry tongue in a younger person. If with the dry tongue there is sleeplessness we must be careful how to give soporifics; for though in many cases a soporific is very beneficial, yet in old people sometimes it produces great excitement. If the dry tongue is associated with depression or exhaustion we not at all rarely find that alcohol increases the dryness and destroys the appetite; hence, at first, stimulants must be given to aged patients in a small quantity, the effect of which must be carefully watched.

In typhoid fever, a dry, smooth, and glazed tongue, or simply a dry tongue, indicates the employment of oil of turpentine; ten to fifteen drops in mucilage, every two hours.

The colour of the tongue is a useful sign. A broad, pale, flabby teeth-indented tongue, indicates anæmia with a relaxed condition of the tissues. It is met with in simple anæmia, and chlorosis, and in some chronic diseases, as in Bright's disease, in which, in addition to anæmia, there is hydræmia—an excess of water in the blood. This tongue always signifies the need for iron; and the astringent preparations in large doses are, as a rule, far the best. A swollen teeth-indented tongue during a course of mercury, is one of the earliest signs of salivation.

In diabetes, in severe and advanced cases, the tongue is often characteristic. It becomes smooth, glazed, shiny, beefy-looking, abnormally clean, often with a tendency to become dry, and sometimes quite dry.

The tongue may be red, with prominent red papillæ most marked at the tip; and this red tongue too clean, too smooth, or slightly furred points to "the irritable tongue" and a corresponding state of the stomach. It is met with in certain dyspeptic cases sometimes in drunkards, and especially in phthisis when the intestines are ulcerated or there is tubercular peritonitis. Small doses of arsenic, say one minim of the liquor, given shortly before food, will generally improve this tongue and the associated conditions. It should be borne in mind that great irritation of the stomach or intestines or tubercular peritonitis may exist, unaccompanied with this irritable tongue.

In scarlet fever, a few days after its commencement and before the fever declines, this tongue is met with, and it continues during the early part of convalescence. It is the very characteristic "strawberry tongue," always suggestive of scarlet fever. Its appearance arises from desquamation of the tongue, for the cuticle of the tongue being moist is more easily separated than the cuticle of the skin, hence the tongue desquamates some days before the skin. I need hardly say, that whilst the fever lasts, we should not treat the tongue with arsenic, though, if convalescence is tedious and the tongue retains its strawberry character, arsenic and nitric acid will be found useful.

The "nervous tongue" is also very noteworthy: generally it is very slightly coated and covered with a slight froth, most marked close to the edge. We meet with it in persons of nervous temperament, especially during the period of excitement, and in cases where the nervous system has been depressed by overwork, and worry.

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## THE PULSE.

WITH each contraction of the heart, a wave is sent through the arterial system, which, in its journey along the vessels, distends them; and this periodical distension, readily felt when the fingers are placed on an artery, is the pulse. Dr. Broadbent, however, denies that the pulse is due to distension of the artery, and ascribes it to the wave forcing or trying to force the vessel flattened by pressure of the finger back to its cylindrical form. The pulse, therefore, depends on the heart; and varies with the condition of the heart. It is influenced also by the condition of the vessels, the pulse varying according to the contracted or dilated condition of the arteries; moreover, it is also modified when the walls of the vessels become fibrous or calcareous. The pulse is an accurate index of the condition of the heart, and is therefore the most valuable guide in disease.

The importance of the pulse is manifest when we consider that disease kills by arresting the heart. Whilst the heart beats there is life and hope. In many instances, the pulse gives the promptest signs of danger and the earliest indications for treatment. To illustrate this by an example, take the case of pneumonia, in which disease so long as the pulse continues good we have fair hopes of our patient. In some patients the heart fails early and the pulse soon



reveals this condition; the patient fails, we say, at the heart. In other instances, the nervous system first gives way, shown by sleeplessness and muttering delirium; but though these symptoms cause anxiety, yet so long as the pulse remains good, we hope to save our patient. The anxiety we feel with regard to this nervous perturbation arises from its depressing effect on the heart; for if the patient does not sleep, this unrest, with the consequent delirium, rapidly depresses and weakens the patient, and at last arrests the heart. The disease, therefore, may directly tell on the heart, or it may indirectly affect this organ by its depressing effect on another system. In any case it is the ultimate effect of the disease on the heart that destroys life. It is hardly possible, therefore, to over-estimate the cardinal importance of the pulse.

The pulse-beats may be frequent or infrequent; slow or quick; small or large; compressible or incompressible; regular or irregular; or intermittent.

By the frequency of the pulse we mean the number of beats in a given time.

In a quick pulse each beat occupies less than the usual time, that is, each wave is of short duration relatively to the pause between the waves.

When the volume of the pulse is greater than usual, it is said to be large; or the volume may be less than usual when it is said to be small.

When the fingers can easily stop the pulse it is said to be compressible; when, on the other hand, it can be arrested only with difficulty or not at all, the pulse is said to be incompressible.

The pulse may be irregular or intermittent. In an irregular pulse, succeeding beats differ in length, force, and character. In an intermittent pulse a beat is from time to time lost.

The frequency of the healthy pulse varies; thus in some persons the normal pulse is 100, in others as low as 50 a minute, but these extremes are rare.

Five conditions produce a frequent pulse: Fever, debility, excitement, hysteria, and cardiac disease, as in some cases of mitral disease; and the pulse in exophthalmic goitre is greatly accelerated. We seldom experience difficulty in determining the cause of the accelerated pulse. In excitement the acceleration is not persistent and lasts only whilst the excitement continues. Hysteria may greatly and permanently accelerate the pulse to even 150 or 160 beats per minute. But in a grave illness, whether febrile or not, hysteria, if present before, generally passes away at once, so that we may safely attribute the frequent pulse to the invasion of another and more serious disease.