longing life in comparative comfort, that the operation of colotomy has been proved so advantageous. Six months, twelve months, or more, may thus be added to the life of a patient suffering from cancer; and one patient of mine survived the operation two years and nine months in great comfort, although latterly the disease had encroached upon and perforated the vagina—a complication most offensive under ordinary conditions. To show how little a lumbar colotomy interferes with the health or comfort of a patient, I may mention that, in January 1872, I performed colotomy on a lady (a patient of Dr. Grigg), who was suffering constant torture from a recto-vesical fistula, following and connected with a pelvic abscess. She is perfectly well at the present time; has no pain or trouble; and is able to attend to her domestic and social duties without inconvenience. Another female patient, whose colon I opened, in 1873, for intractable syphilitic ulceration of the rectum, is living and well; but the rectum is completely closed by the cicatrization of the ulcers.

Recto-vesical fistula in the female must be very rare; but the distress caused by the escape of feces into the bladder, and frequent blocking of the urethra, is very great. In the male, recto-vesical fistula is more common, both as the result of abscess and of cancerous perforation. The operation of colotomy could, of course, be of service only in the cases in which feces passed into the bladder: for it could afford no relief to the irritation of the lower rectum, caused by the passage of urine into the bowel. In one case, however, of an old clergyman, with cancerous perforation, on whom I performed colotomy, with great relief to the escape of feces, I found that, as the patient lay in bed, the urine flowed backwards to the opening in the colon, where it escaped, with little or no irritation compared to that excited in the sensitive sphincter ani.

It is remarkable how insidious the symptoms of cancer of the rectum are—so that patients complain of dyspepsia, diarrhoea, and vague uneasiness about the pelvis, for some time before their attention is specially directed to any alteration in the size of the motion, or any difficulty in defecating. I know that one of our leading physicians, who very properly insists upon making a rectal examination, when the symptoms of dyspeptic diarrhoea cannot be otherwise explained, has, on several occasions, thus detected unsuspected cancer of the rectum; and it has happened to myself, in explaining the case of a patient suffering from early cancer of the rectum to her friend, to light up a suspicion of the presence of the same disease in the friend, which turned out to be only too true. Cancer may have attained very considerable proportions without producing the small feces, which are erroneously thought to be characteristic of the disease; and the tendency to diarrhoea, which is so often present, prevents, for the most part, any just estimate of the calibre of the bowel.

Epithelioma not unfrequently invades the anal portion of the rectum, and, possibly, but one side of it; and such a case is, no doubt, well suited for the removal of the lower end of the rectum—an operation which has of late been revived with some success. But when, as often happens, the cancer, whether scirrhus or the columnar epithelioma, involves the whole circumference of the bowel, as far as the finger can reach, with possibly a ring of cicatrization at the upper part; or, when the lower part of the rectum is quite healthy, and the finger comes upon a structure, so like the os and cervix uteri that one is almost doubtful of being in the bowel at all, then removal is quite impossible, and colotomy is the only operation available.

I do not, of course, mean that colotomy is desirable in every case of cancer: for the progress of some cases is slow; and much may be done to relieve pain and promote comfort by the use of morphia suppositories, or of starch and opium enemata, and the careful selection of bland and unirritating food and drink.

As regards the operation itself, I would say that, though it often is extremely easy and simple, yet, in some cases, it is of the greatest difficulty. In a case of obstructive disease, the colon is often distended and easy to reach; but, again, when distension is great, the colon may be contracted, and the small intestines overlap it completely, and cause great difficulty; or the peritoneum, distended with air, may closely simulate the bowel. Again: the anatomical arrangement of the meso-colon may be such as to render it impossible to reach the bowel without opening the peritoneum. Should the peritoneum be opened, I believe the best mode of proceeding is to bring up the colon to the opening, and stitch it carefully before opening the bowel—so that the two peritoneal surfaces may be well in contact and rapidly adhere, when a good result may be anticipated. It is said, by a distinguished lithotomist of the day, that every case of lithotomy has its own peculiarities; and the same may, I think, fairly be said of colotomy. Although my experience of the operation is now not inconsiderable, I must confess to a feeling of relief when I have fairly opened the colon without misadventure.

In the after-treatment of cases of colotomy, some little care is required in washing out, periodically, the diseased piece of bowel below the artificial anus: for, if this be neglected, the mucous secretion collects, and is apt to irritate. It is undoubtedly the fact, though it is difficult to explain it, that fecal matter does occasionally find its way into the rectum, in some cases; but the bulk of the feces is, of course, discharged at the loin, and with great regularity, and singularly little discomfort. A simple bandage, with a pad of tow or wool, applied over the anus, is sufficient to prevent injurious friction of the part; but if, as sometimes happens, there be a tendency to prolapse of the mucous membrane, another air-pad may be added.

THE NOMENCLATURE OF PNEUMONIA AND OTHER ALLIED LUNG-INFLAMMATIONS.*

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It seems worth discussing whether the present names for pneumonia and other allied affections are the best that can be devised for expressing the actual facts of the case. The present nomenclature has not been deliberately planned, but has grown up by degrees as knowledge advanced or opinions altered. It bears marks of this mode of construction in its want of symmetry, complexity, and incongruity. At first, when the term pneumonia had a very loose signification, and was not even distinguishable from acute pleurisy, there was hardly room for any classification at all; but so soon as auscultation had taught us to recognise clinically many conditions of lung having an inflammatory origin, not only did each of these require a distinguishing name, but it became necessary to define pneumonia itself afresh in some stricter phrase, which should express this later and fuller knowledge of its particular phenomena. Thus pneumonia became known as "false" and "true," "active" and "passive," "croupous" and "catarrhal," until, in our own day, the condition that we all have in our minds in using the single word is found to need the company of no fewer than three attendants, and is spoken of as acute, sthenic exudative pneumonia.

It is easy to see that a system of classification thus contrived, and which gives currency to such complicated expressions, is not perfect. But there are other faults besides complexity. I need not now allude to our official nomenclature (that of the College of Physicians of 1869), for this is about to be superseded. I take rather the common nomenclature of the books. We have there—(1) *lobar* (or *croupous*) *pneumonia*; and (2) *lobular* (or *catarrhal*) *pneumonia*; or otherwise, as Dr. Bristowe would prefer, we have "diffused" and "patchy" pneumonia. There is then (3) "chronic pneumonia", with its synonyms "cirrhosis of lung" and "fibroid phthisis"; while for the other varieties of phthisis there is the adjective "pneumonic".

Dr. Walshe's nomenclature is somewhat different. "Chronic pneumonia" is by him defined as "the local attendant on adventitious products in the lung", but is reckoned a second time amongst "tissue-destroying diseases" (Walshe *On the Lungs*, p. 379). Acute pneumonia is distinguished, as I have said, as "acute sthenic exudative pneumonia", with topographical, subjective, and intercurrent varieties.

The chief objections to the mode of classification thus generally indicated seem to be these.

1. It draws a distinction between *croupous* and *catarrhal* pneumonia which cannot always be recognised clinically; while, by the introduction of such a term as *croupous*, it suggests a likeness which few would admit, and needlessly entangles together two diseases, croup and pneumonia, each of which has difficulties enough of its own to contend with.

2. It employs the term "lobular pneumonia" in a variety of ways, using it both for the secondary lung-consolidation which succeeds to acute bronchitis, especially in childhood, and is a fairly definite affection; and also to that disseminated patchy, lung-inflammation of adults which occurs with many and various associations, sometimes nearly resembling and sometimes not resembling at all simple pneumonia.

3. It employs the words "chronic pneumonia" in two separate senses, neither of which is free from objection. It is a local alveolar catarrh attendant upon tubercle and other adventitious products (Walshe, *loc. cit.*), and it is also a fibrosis or induration of lung-tissue. These two conditions are totally distinct, and the relation of either to the proper pneumonic process is doubtful and remote. The word "chronic pneumonia" carries a theory along with it; it also takes possession of a term for which there is other and legitimate use. The name would fitly describe that temporary delay or arrest of pneu-

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Cambridge, August 1880.

monic resolution which occurs when the inflammation-products are retained, wholly or in part, and the acute disease becomes for a while, in a true sense, a chronic pneumonia.

4. It makes use of the adjective "pneumonic" to describe forms of phthisis which in fact arise, not out of pneumonia, but (even in the contention of those who use that word most freely) out of "chronic pulmonary catarrh" (Niemeyer, *On Phthisis*, p. 9 *et seq.*); the proper signification of the word pneumonia becoming obscured by such extension.

5. Many of the terms made use of are in themselves cumbersome, ambiguous, and inexact. "Catarrhal" is liable to be confused with "lobular", and with "bronchopneumonia". "Pleuropneumonia" is all one with "pneumonia". Words like "pure", "genuine", "false", "insidious", apply to morals rather than to physic. Words like "acute sthenic exudative" pneumonia carry their own condemnation. No one could find time to use them.

There are many other terms and modes of classification freely in use, but which have no high sanction, and to which, therefore, I need not particularly refer. Pneumonia has been named after certain organs which are prominently involved, as "cerebral" and "renal"; after the supposed vigour or feebleness of its symptoms, as "sthenic" and "asthenic"; after the distinctness or the obscurity of its objective phenomena, as "latent" and "frank". It is obviously impossible to frame any nomenclature having a claim to exactness, if expressions like these are admitted.

The real aim of nomenclature must always be to present in correct perspective some preliminary picture of the actual facts, as these will presently appear when the subject is further investigated. While avoiding hypothesis in the main, words must yet be so used as to give prominence to that form of the disease which is regarded as furnishing the central pattern, the subordination of the rest being marked by such qualifying expressions as shall best indicate the particular manner of the declension. It is within the province of a nomenclature to indicate, by the repetition of a word through several of its terms, that the same or some similar morbid condition is being named under as many modifications; while, by the change of such word, it is signified that all intimate likeness ceases. In so far as the classification is anatomical, it must make choice of descriptions which are not open to question, and which refer to the living patient rather than to the dead subject. In a word, it is required of a nomenclature that it should be simple, descriptive, and catholic, not so intricate as to demand a more intimate knowledge than common men possess, nor yet so inexpressive as to leave out of view all indication of the mutual relations of the several conditions that are named; above all, avoiding the use of any expression that shall seem to make those that are to employ it the disciples of a particular school. "Words are wise men's counters, but they are the money of fools"; so these words of ours need serve only to enable us to indicate to one another certain conditions of disease, without carrying anyone's mint-stamp, or requiring of anyone that he should accept them at a particular valuation.

Following these general principles in the nomenclature I am now about to attempt, and remembering as well the importance of retaining the old names in something like their old signification, I would propose, in the first place, to set up the single term *pneumonia* as expressing, in one word instead of four, that form of lung-inflammation which, whatever questions there may be about it, is very distinctly formulated as to its clinical characters and morbid anatomy. It is very desirable, for statistical purposes, that this form of disease should be prominently recognised and compendiously expressed. It is, moreover, convenient and fitting that, as forming the type or picture of lung-inflammation from which the other forms are modifications or declensions, it should be known by a single word. The proper characters of *pneumonia*, regarded as a definite affection running an uniform course, and tending, within a certain time, to spontaneous recovery, are supposed to be included in its name, descriptive adjectives being reserved for expressing the several ways in which this pattern is departed from. Thus, for example, pleurisy is an almost constant (if it be not a constant) attendant of ordinary lobar pneumonia. There is no need to signify as much in the name, there being no means, indeed, very often of discovering during life by any notable sign whether there be pleurisy or not. It happens, however, sometimes that there is not merely pleurisy, but fluid effusion. In such case, the disease, although at first conforming to the usual pattern, is lengthened and otherwise modified. Such variety might suitably be called *pleuropneumonia*, this compound word (now almost synonymous with pneumonia) being reserved for such use. Similarly, the word *bronchopneumonia* fitly describes that form of the simple disease which arises in the course of bronchitis. How the two affections are connected is matter for question—matter, therefore, which should be carefully excluded from any nomenclature. There is the obvious clinical fact, however, of the antecendency of bronchitis and of

the origin of such pneumonia, after a manner which is seen to be quite different from the sudden, and as it were spontaneous, origin of the simple disease.

With these three varieties, *pneumonia*, *pleuropneumonia*, *bronchopneumonia*, all expressive of an active orderly process of lung-inflammation, I would propose to relieve that word from further service. Yet, for the better guarding of the term *bronchopneumonia*, which is apt to be put to very general use, as well as in justice to a morbid condition, fairly definite in itself, and having some features of likeness to pneumonia, I would employ, for once, the adjective "pneumonic". The patchy consolidation of lung which ensues often upon bronchitis (in young children more especially), sometimes openly and sometimes insidiously, and with symptoms nearly or remotely resembling lobar pneumonia, well deserves a term of recognition. It might be called *secondary pneumonic consolidation*; not "lobular", because the lobular arrangement is not strictly preserved, and because auscultation cannot, in fact, distinguish between contiguous patches of consolidation and one large patch; and our terms are wanted for the wards, and not merely for the dead-house. I would restrict the word "pneumonic" to this single use, and adopt henceforth a separate category of terms for a separate, or in large measure separate, series of phenomena.

For, in fact, the several forms of lung-inflammation which yet remain for description are, for the most part, associated with chronic and permanent tissue-changes, such as are included in the general term *phthisis*. We pass from an acute and short-lived inflammation, to one that is chronic and abiding, and often destructive. The same histological elements that we have seen hitherto as the factors in an active, orderly, and commonly innocuous process (to which the words "pneumonia" and "pneumonic" have been applied), become now the agents of degeneration. What is wanted of nomenclature is, that it should express this identity of histological elements, while it indicates at the same time the diversity of operation in the two cases respectively. I would submit that the term *pulmonary catarrh* fitly describes that local inflammation attendant upon adventitious growths which Dr. Walshe calls "chronic pneumonia". Such an expression applies accurately to the condition of lung which Niemeyer and his followers intimately associate with phthisis, and describe as "originating, with rare exceptions, in the extension to the finest ramifications of the bronchi, and from them to the alveoli themselves, of a chronic bronchial catarrh".

It is far from my intention to intrude upon the vexed question of classification in phthisis, but I would ask those who employ themselves in this way whether the word *catarrhal* might not take the place of *pneumonic*, as best expressing the actual character of the lung-inflammation with which phthisis is connected. "Pneumonic phthisis" would then cease to be applied as at present, and be understood to refer exclusively to that form of lung-destruction (be it a rare or a common event) which arises out of true pneumonia. *Pulmonary* or, if you will, *alveolar*, *catarrh* is the obvious anatomical expression for the condition of occupied air-sacs surrounding tumours and adventitious growths, and which is sometimes stationary, and sometimes makes slow progress to destruction. If, then, we apply the term *fibroid phthisis* to induration of lung, where the alveolar walls exhibit (consequently, it may be, upon this catarrhal occupation) fibroid overgrowth, we avoid the use of the equivocal word *chronic pneumonia* altogether; or at least reserve it for those comparatively rare cases where the ordinary course of pneumonia becomes suddenly arrested for a while, owing to the retention within the lung beyond their proper time of the inflammatory products.

And while the term *alveolar* or *pulmonary catarrh* correctly describes the condition of those isolated patches of lung surrounding tubercle and other growths, a condition which for the most part only comes into view *post mortem*, the same word is suitable for *clinical* use. That variety of crepitant rhonchus which is just coarser than fine crepitation, and of which the precise significance varies with the locality, may be often interpreted by *pulmonary catarrh*. Such an expression has many advantages of convenience and simplicity. It coincides with the views of Niemeyer and others as to the extension of bronchial catarrh to the vesicular region of the lung; it names without further designating a condition which is often spoken of as though it were presumptive evidence of phthisis; and it supplies a term applicable to that more or less chronic state of lung (affecting the bases, or occurring in isolated patches, especially in childhood) to which the word *capillary bronchitis*, owing to its accepted meaning and associations, does not apply.

There still remains to be named a form of pulmonary consolidation not included in any of the foregoing categories, and which can only be described for clinical purposes by its physical characters. I allude to the secondary consolidation, which is apt to occur insidiously, and to our view capriciously, towards the close of lingering diseases, giving rise to no new symptoms, and often remaining undiscovered until after death, which, in fact, it only anticipates by a little. The actual advent

of such consolidation is frequently overlooked, even although the antecedent pulmonary congestion has been duly noted. This is the case, for example, in chronic phthisis, in obstructive heart-disease, in many of the deaths after surgical injury, or after long lingering in whatever disease. Apart from the mere question of terms, many would probably object to regarding this condition, in the words of Dr. Bristowe, as "a pneumonia of which pulmonary congestion was the predisposing cause". We are quite ignorant, indeed, of the reason why, with precisely the same antecedents, this consolidation is sometimes present and sometimes absent. We say, in fact, all that we know of it when we call it *secondary pulmonary consolidation*, a term which correctly indicates the actual difference between a passive and unperceived process of doubtful origin, and that more or less active lung-inflammation which we describe under the name *pneumonia*.

The following are some of the advantages which I think would ensue from this new arrangement.

1. It would distinguish by a cardinal term, *pneumonia*, a disease having well recognised phenomena, and one which it is important to identify and separate in order the better to observe and record the many points of interest in its natural history, as regards especially its varying frequency and mortality, epidemic prevalence, and response to treatment.

2. It would group together, along with pneumonia, and apart from other lung-inflammations, certain allied conditions—*pleuropneumonia*, *bronchopneumonia*—wherein the essential features of the primary disease are maintained with such modification as the names express.

3. It would separate from the aforesaid group, by the use of the word *catarrh*, other pulmonary inflammations which have no definite or uniform clinical course, but arise in such various associations that no name can be rightly applied to them save one that merely describes an anatomical condition.

4. It would abolish, or at least restrict, to a single and definite use, the ambiguous expression "*chronic pneumonia*".

5. By excluding the word "pneumonic" from the description of phthisis (except of such phthisis, be it rare or common, that has its origin in true pneumonia), and substituting the word "catarrhal", it would correctly indicate the relationship between lung-inflammation and the several forms of lung-tissue degeneration.

6. It would introduce no new terms, and dispense with some that are objectionable.

OLD ARRANGEMENT.

1. *Pneumonia*: acute, lobar, croupous; or acute sthenic exudative pleuro-pneumonia.
2. Broncho, catarrhal, lobular, pneumonia; secondary pneumonia.
3. Chronic pneumonia.
4. Acute (pneumonic) } phthisis.
5. Chronic (pneumonic) }

NEW ARRANGEMENT.

1. *Pneumonia*.
Pleuro-pneumonia.
Broncho-pneumonia.
2. Secondary pneumonic consolidation.
3. Pulmonary (alveolar) catarrh.
4. Fibroid phthisis (fibrosis).
5. (Secondary) pulmonary consolidation.

CLINICAL MEMORANDA.

GOUT.

I HAVE read with much interest Mr. Hoare's criticisms on my theory. In my short article, I quoted Chrzonszczewsky's experiment, and from it I drew my own deductions. This physiologist found that, if he tied the ureters, urates accumulated in connective tissue corpuscles, and in the lymphatic rootlets springing from them. Hence he concluded that urates originate in connective tissues, and are habitually carried away by the lymphatic stream. A little reasoning will show that this deduction is an error; for, if urates so originate, and are normally so removed, how can tying the ureters inhibit their removal? The lymphatic circulation will continue as before, sweeping away the urates as they are formed, and pouring such as survive the selective activity of the lymphatic glands into the blood-vessels at the root of the neck. If the lymphatic circulation habitually removes urates from their sources of origin, urates cannot accumulate at those sources unless the circulation be in some way inhibited. Tying the ureters has no such inhibitory effect, and will merely negative the removal of urates from the blood. Chrzonszczewsky, I think, failed to perceive that fibrous tissues, containing as they do the entrances to the lymphatic system, are, upon this account, eliminative centres; and my own conclusion, that, when the kidneys fail in their elimination of urates, the lymphatic system takes on compensatory activity, seems to me a very fair one. Mr. Hoare asks, "How is it that other noxious material circulating in the blood, and requiring elimination, does not produce the same train of symptoms?" To this I can give a very satisfactory answer. In blood-poisoning of many kinds, congestion of fibrous tissues around joints is a very prominent symptom. This congestion, associated as it

very often is with swelling of the lymphatic glands and large lymph-sacs, is neither more nor less than excited activity of this eliminative system. Fibrous tissues are the passages between the blood and the lymphatic systems, and liquid containing effete matters is passing through those passages in excessive quantity. A recognition of the fact that these fibrous tissues are really eliminative centres enables us to elucidate in a very beautiful manner the otherwise obscure pathology of blood-diseases. But there is one great difference between these acute blood-poisonings and the condition known as gout. In the latter, the kidneys are slowly strangled, year by year; and the elimination of uric acid gradually devolves upon the lymphatic system; and as that system in turn as gradually fails, from its undesigned and excessive labours, failure first supervenes at its periphery—in other words, it withers—uneliminated urates accumulate, and congestion ensues. But in acute poisoning there is no such gradual failure; and congestions occur haphazard about the joints, in regions where there happens to exist an excess of uneliminated matters. But there is a form of chronic and slow poisoning which we very often meet with. I mean lead-poisoning; and I quote it as a very remarkable piece of evidence in support of my theory, that in that condition the phenomena of gout are accurately imitated.

In conclusion, it is evident that, before we attempt to comprehend the phenomena which tissues exhibit in disease, we should first ascertain the duties they perform in health. This principle is generally recognised. Why, then, should fibrous tissues form an exception to the rule? In no writings upon rheumatism and gout have I ever seen the very important functions which these tissues subserve as eliminative media even hinted at; and it is not, therefore, a matter of surprise that our knowledge of these diseases should have remained a constant quantity.

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THE USE OF "CORRIGAN'S BUTTON" IN RESTORING THE HEART'S ACTION.

IN the recent numbers of the BRITISH MEDICAL JOURNAL, the articles appearing under Clinical Memoranda in reference to the restoration of the heart's action, have attracted my attention. The importance of the subject leads me to presume upon offering a suggestion. The simple and efficient instrument known as "Corrigan's button", invented by the late eminent Irish physician whose name it bears, might be used with success as a means of arousing a non-working heart to action. The method of its application for the purpose under consideration might consist as follows: holding the instrument so that the tip of the index finger would rest on the metal portion one inch from the bend of the shaft, and placing the disc in the flame of a spirit-lamp until the metal is so warmed that the finger can just bear the heat; then, over the region of the heart, quickly give a few taps—short, sharp, and decisive, imitative of a postman's knock. By this method, two incentives for action are combined: the effects of the tapping itself, and the shock of quickly applied heat—more potent, perhaps, than electricity. Whilst believing that the best and neatest method of acting is by using a heated "Corrigan's button", yet, in an emergency, an ordinary metal spoon or iron key, warmed in the flame of a candle or gas-jet, might be used instead, as has been before suggested by many distinguished physicians for sciatica.

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THERAPEUTIC MEMORANDA.

ASTHMA TREATED BY LOCAL APPLICATION OF IODINE.

I WISH to record the following case in connection with Dr. Saundby's letter, published in the BRITISH MEDICAL JOURNAL of November 20th.

A lady, aged 40, had suffered from asthma for ten years. The attacks had been much more frequent for the last year and a half, and longer in duration. For six months, no single week had been passed without three attacks or more, which, whilst not always severe, were sufficiently so to prevent sleep for three or four hours. Occasionally, this state of things became worse, the paroxysms being of more severity. On November 26th, I painted over the line of both pneumogastric nerves with iodine liniment, full strength; but this rendering the surface too tender, an application of half strength was substituted for it, and applied for the next two days at night. Alternate nights were then considered sufficient, and ultimately once in three. The lady's condition, from the date given above up to the present time, has much improved in every way, she having suffered slight discomfort only on three or four evenings, rest being at no time interfered with. Moreover, she has been able to