

Measures taken to cope with the situation include skiagraphy of all admissions, suspects and equivocal cases, the segregation of suspects and arrested cases and the culture of stomach washings as a means of diagnosis.

Pulmonary tuberculosis constitutes a particularly formidable menace to closed communities composed of biologically inferior and mentally subnormal persons; the danger is increased when war-time circumstances modify their environment and regimen. Under such conditions there may be an incidence of the disease so high that it may assume the proportions of a "local epidemic."

There are grounds for the opinion that the mobilisation for active service of half the trained male nursing staff may have been a contributory factor of major importance to the higher mortality rate of male as compared with female inmates.

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THE LIFE AND DISCOVERIES OF RENÉ LAENNEC*

By CLIFFORD HOYLE

THE century which saw the childhood of Laennec in its closing years had been disastrous for his country. There were incessant ruinous wars and restless signs of approaching turmoil. Both the arts of peace and the craft of government steadily decayed. France's interests in India and Canada were largely lost, and her own people brought near to beggary. There was no political freedom, no fair taxation, no efficient executive and no shadow, let alone the substance, of social equity. So the seeds of revolution were sown; and nourished by such events, those seeds grew fast in a country that was still essentially a feudal state. Thus Laennec spent his boyhood at a time of violent change, his manhood during the Napoleonic era, and his last years in the aftermath of frustration and disillusion. We need to take into account this

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historical setting of his life before we can rightly judge the man. For it was not an age conducive to calm and protracted thought and observation, or to the pursuit of knowledge for its own sake. Yet these are the very qualities in which Laennec excelled.

René Théophile Hyacinthe Laennec was born on the 17th February 1781, the year which saw Johnson's *Lives of the Poets*, and the second and third volumes of Gibbon's *Decline and Fall*. Wordsworth was a lad of eleven. Napoleon, a little older, was already two years on with his military education at Brienne. John Hunter was in his prime at fifty-three. Seven years before Priestley announced the discovery of oxygen. Albrecht von Haller, the "prince of physiologists," died four years ago. Morgagni had already been dead ten years. But the most important date near by was that, nineteen years earlier, on which Rousseau's *Contrat Social* appeared; and his opening words, "Man is born free and is everywhere in chains," had not been lost upon his generation. Adam Smith had taught something of the wealth of nations; Voltaire had outraged established orders and amused the others; and Burke was still in his grandest vein. No one had any reason to suppose that the infant son of a Breton country lawyer was destined to reach an equally enduring fame. Certainly the good people of Quimper, the little port about thirty miles from Brest, could not have guessed. For the Laennecs, though respectable Celts and reputable lawyers, had never achieved anything but a local name; and, in point of fact, René's father was a rather shiftless improvident character who neglected his family and lived on his sons later in life.

His neglect was a fortunate thing for the boys in one respect. For when their mother died in a fourth confinement, René and his brother were sent eventually to an uncle at Nantes, Guillaume François Laennec. There they entered a home of common sense and good judgment. Guillaume was Rector of the University, a man of high intelligence, a scholar and a doctor, a good speaker and writer, with a precise and critical mind. And he also had a flair for encouraging the best in others. Here René remained for thirteen years under his kindly, humorous and paternal eye, as a schoolboy to begin with, and later as a medical student, until he left for Paris at the age of twenty. This period saw the growth of his character and mind; and we cannot doubt that his uncle's influence was very great during these formative years. To Guillaume Laennec, therefore, we owe a debt we can never pay; for had René been left to his father instead, maturity would certainly have seen a different person.

At the time Laennec arrived, Paris was the seat of a great new school of morbid anatomists—Bichat, Corvisart, Dupuytren and Bayle. Necropsies on hospital patients were invariable: for twelve years no patient died in the Charité without examination. Jean Nicholas Corvisart led the staff. He was a lawyer's clerk who ran away from home, a great character, the first cardiologist, and a fine teacher—who wrote his thesis on "The Pleasures of the Study of Medicine and the Disagreeableness of its Practice," who refused a hospital appointment because it meant appearing in powder and wig, and who became Napoleon's personal physician and seems to have been one of the few who could manage him. There, from 1801, we find Laennec absorbing his teaching and soon joining Bayle and Dupuytren in their researches. The three became firm friends at the time, planning a book on morbid anatomy. Though the

project fell through, much of the work was reported in various places. Laennec's first paper came within a year, a report of a patient with an ossified mitral valve. Two months later he did an account of six cases of peritonitis, in which he set forth the clinical forms and facies for the first time. This was his first step on the ascent of fame. Next year he described the subdeltoid bursa, and a year later showed that hydatid cysts were due to a parasite, and did not grow, as had been thought, from the tissue in which they appeared. Also he described the capsules of the liver, spleen and kidneys, and gave the first considerable account of portal cirrhosis. Then, for a change, he wrote on *ascaris lumbricoides*. That same year he did his thesis and received his diploma. After that came a fine paper on melanosis. By now he was teaching morbid anatomy and starting to build that reputation which drew all and sundry to his lectures later on. But for some time to come he published nothing new: teaching, hospital work, an editorial appointment and an increasing practice consumed his time.

Laennec's interest in morbid anatomy went far beyond its teaching. For he saw that the new science of descriptive pathology allowed correlation between diseased states and their clinical features during life for the first time. Thus Laennec took morbid anatomy into the wards—and what happened there to the necropsy. This approach was new: nothing like it had been done in earlier times. It is true that he was not its first or only exponent: Morgagni had started and Corvisart continued much the same thing. But within the field of discovery presented, Laennec made greater and more fundamental contributions than any of his fellows.

These depended to a large extent upon a single discovery. Searching for the links between the living and the dead, he began to wonder whether anything might be learnt by studying the sounds made in the lungs and heart in health and disease. To do this properly he needed an instrument with which to intensify the individual sound. That instrument was the stethoscope. Its early discoveries in his hands he gave to the Academy of Sciences in Paris on February 28, 1818. Within a month he also announced the discovery of ægophony and pectoriloquy; and in August of the following year published his collected observations in two volumes entitled, "A Treatise on Mediate Auscultation in the Diagnosis of Diseases of the Lungs and Heart, based Principally upon a New Method of Examination." The two volumes cost thirteen francs, a stethoscope two and a half.

Laennec was thirty-seven when he wrote his book, a thin meditative man of about five feet three, with chiselled features, high cheek bones, a long head, light brown hair and blue-grey eyes. He was neither handsome nor robust. Also one imagines he was rather shy and aloof, a little austere, lacking a keen sense of humour, and thus not one of those to whom success comes easily. Neglect at home as a child and dependence on his uncle, acting on a temperament naturally reserved, must have made him chary of the world at large. But his power of application and sincerity were immense, and seem to have left few who came into contact with him in any doubt about his greatness. There was nothing flamboyant, nothing ostentatious, about Laennec. Throughout life he remained simple in his tastes, content with very little in the way of personal comforts and amusements, and wrapped in his work. In

what time he spared he learnt to play the flute very well, danced a bit, read widely in the classics and rambled in the countryside near Paris or by the shores of his native Brittany. He was hardly versatile as some great men have been. His memorable work dealt with one branch of medicine only. Nor was he particularly learned in an academic sense. He was, essentially, a pioneer; and like many pioneers, he had penetration rather than range, depth rather than breadth, an immense grasp of detail rather than that kind of ability which roves more superficially through large tracts of knowledge. We know that he was well aware of his own ignorance on many things, and readily confessed it. But on the subject of his own choice he made the knowledge of others seem like the simplicity of the child or the savage. For in a few brief crowded years he fashioned the science of diagnosis of diseases of the chest so completely that, as Lawrason Brown truly said, "he who now adds a single stone to the structure is deservedly acclaimed by his fellows."

How should we fare today if we were barred from easy information of heart sounds and murmurs, of pericardial friction, of bronchial breathing and whispering pectoriloquy, of absent breath sounds over fluid and pneumothorax, and of the innumerable adventitious sounds within the lungs? Perhaps some of us do manage without these things; if so, we owe nothing to Laennec in our training on physical signs. But if we pretend to know anything about diseases of the chest we are automatically in his debt. For there is hardly a topic which he did not touch, hardly a disease which he did not describe or redescribe, hardly a clinical picture which he did not either sketch or paint in that particular branch of medicine. Today we have three brilliant additions to the methods of diagnosis current after his day: radiography, bronchoscopy and exploration of the chest. If we are ever inclined to compare, or to set one or other of these against the methods practised by Laennec, we need to remember that when the newer method is superior, it is not always as practicable, as reliable, or as safe. Every method has flaws and fallacies. Errors of interpretation are not confined to stethoscopic signs. It takes at least as long to read radiographs correctly as it does to learn how to use a stethoscope. And there are situations in which the latter is still the only means of diagnosis. Perhaps the fairest thing to say is that all means are complementary and that the passage of more than a hundred years has not seen the value of his work decay. In Laennec's day there was no complement to the stethoscope; it was the only way by which certain evidence could be found. He observed and correlated, and gave, one after another, a whole series of clinical and pathological descriptions either unknown or imperfectly appreciated before his time. And he did it all with a command of words not often found in medical writing.

That his book made a stir is not surprising, for it is one of the greatest works in medical literature, one of the few without which medicine could not have grown to its present stature. It starts with a quiet introduction: "I began, three years since, the researches of which I now publish the results," and goes on to give his reasons for making morbid anatomy the foundation of clinical diagnosis. But it is in the second edition of his work, some years later, that we see the mature Laennec at his best in his opening paragraphs. Here he begins: "Of all diseases which are essentially local, those of the thoracic organs

are unquestionably the most frequent; while in point of danger, they can only be compared with organic affections of the brain. The heart, lungs and brain constitute, according to the happy expression of Bordeau, the tripod of life: and none of these organs can sustain any considerable or extensive morbid change without the greatest danger." He recalls that diseases of the chest also take first place among those affections which, either as complications or effects, are found to accompany other diseases of a general nature. In maladies of every sort, whatever be their seat, death scarcely ever occurs without the chest becoming affected in one way or another. However frequent or dangerous such diseases may be, they are, nevertheless, more often curable than any other severe internal disorder. These simple sentences, with which Laennec begins the approach to his subject, have something of the grand manner in the ease with which he succeeds in creating atmosphere by the expectation derived in his readers. It is all so far removed from the recitation of observed fact which is the real business of the book. Yet he establishes the importance of his subject and arouses our interest in what he has to say. At a glance we see the design of the book; and before Laennec has reached the end of his first paragraph we have to add the qualities of the artist to whatever others we find him to possess.

Then he begins his theme: that correct diagnosis is so essential, and yet hitherto has been so often balked. He pays tribute to current methods, giving to Auenbrugger the honour of one of the most valuable discoveries in medicine. But percussion needs amplification. Even direct auscultation, just beginning, has a limited value. "Independently of its deficiencies, there are other objections to its use: it is always inconvenient both to the physician and patient; in the case of females it is not only indelicate, but often impracticable; and in that class of persons found in hospitals it is disgusting." But Laennec's objections to direct auscultation were wider than these; they were scientific. For he goes on to say that "for these various reasons this measure can but rarely be had recourse to, and cannot therefore become practically useful since it is only by numerous observations, and the comparison of numerous facts of the same kind, that we ever, in medicine, separate the truth from the errors which are constantly derived from the inexperience of the observer, from the varying fitness of his perceptive powers, the illusions of his senses, and the inherent difficulties of the method of exploration which he employs." Nowhere is there a more apt or cogent statement of the pitfalls with which an investigator may expect to meet, and of which he must be well aware.

Laennec then tells the experience which set him to defeat the difficulty. In a stout young woman with a diseased heart neither percussion nor palpation gave any help. He tried a roll of paper with which to listen to her heart sounds, and "was not a little surprised and pleased to find that I could thereby perceive the action of the heart in a manner much more clear and distinct than I had ever been able to do by the immediate application of the ear." He began observations at the Necker Hospital, where he had about a hundred beds. The first stethoscope saw the light of day after various trials. It was a wooden cylinder an inch and a half in diameter and a foot long, with a central bore just over two millimetres wide. The cylinder was in two parts screwed together for convenience, and had a hollowed out funnel-shaped

depression at the chest end into which fitted a small brass tube attached to an end-piece. Modifications of this instrument never affected the principle of its construction; a wide concave ear-piece is the sole addition to the monaural stethoscope of today. Laennec made his first wooden stethoscope in 1817, and before his book appeared the instrument was already known in this country. A Dr. Granville brought one from Paris in November 1817, and when he settled in practice in Saville Row began to use it, much to the amusement of his friends. By 1820 the stethoscope was imported for sale. Trentell and Wurtz, a firm of booksellers in Soho Square, brought some over, and when the supply ran short a wood turner named Allnut, living in Piccadilly, started to make them. Medical officers in the British Army were asked to try the new method and to report their results; and the Navy, not to be outdone, did the same.

Reverting to the book, Laennec proceeds to describe examination of the chest. We need select only a few of his observations to show how thoroughly he was the master of physical examination. For instance, he notes that fluctuation in the intercostal spaces can only be seen when fluids have penetrated the intercostal muscles and become extravasated beneath the skin; or, still more rarely, when the intercostal spaces are rendered prominent by pressure of fluid within the chest. He remarks the many occasions on which palpated voice sounds fail to inform, or on which we are not justified in drawing conclusions from their absence. His views on inspection are at first glance faulty, for he deprecates the value of differences in thoracic movement, and even goes so far as to say that he cannot recall a single case in which reduction of movement added anything to the certainty of percussion and mediate auscultation. To us, who think so much of a functionally efficient lung and of breathing exercises, this sounds like heresy. Yet he notices the difference between abdominal and thoracic breathing, and cites in his list of causes of reduced respiratory movements variations due to age, the state of wakefulness or sleep, of motion or repose, of calmness or agitation of mind. He thought that differences on the two sides were constant only with large effusions or deformity. "I have repeatedly assured myself that the dilatation was equable in phthisical subjects, whose lungs were very unequally charged with tubercles"—a remark from which we can scarcely dissent.

Those who parade the uncertainties of percussion as though their own discovery might be referred to Laennec. "It enables us to detect the existence of an obstruction of the lungs or an effusion into the pleura of a moderate extent; but it cannot discriminate these from each other. Many causes, moreover, conspire to circumscribe the number of cases in which it is of use. Its indications are very equivocal when the disease occupies the centre or roots of the lungs, or when both lungs are simultaneously affected; they are deceptive when the chest is deformed even in a slight degree, and they are extremely uncertain or cease entirely when the integuments are oedematous or loaded with fat, and yet more, when they have become flabby from the removal of this excessive degree of obesity." These criticisms might well have come from one long trained in radiological methods. He makes no attempt to contrast the fallacies of percussion with the certainties of auscultation as a lesser man would have been tempted to do; and there is no trace in his comment of anything but fair and disinterested assessment. When we consider also that the method was

new, that Laennec had been trained and still worked in the school led by Corvisart, who enthusiastically sponsored percussion, we begin to see something of the depth of insight and balance of judgment which he enjoyed.

There follows an account of mediate auscultation, describing first the normal breath sounds heard in the lungs, the trachea and the larger bronchi. Puerile, bronchial and cavernous breathing are all clearly separated from each other and from normal vesicular breathing. Pectoriloquy and bronchophony come next; and then ægophony. On this Laennec says: "My uncertainty as to the nature of ægophony was of long duration, because it does not exist in every case of pleurisy; because the analogous phenomenon of bronchophony is still more frequently wanting in peripneumony; because these two diseases and consequently the two phenomena in question are frequently combined; and, finally, because the number of fatal cases of these diseases, and more particularly of acute pleurisy, is too inconsiderable to afford many opportunities of verifying, by examination after death, the accuracy of the diagnosis derived from auscultation." He came to associate ægophony exclusively with pleurisy, where in fact he was in error; but he found it in every one he saw for five years, excepting very slight or far advanced effusions. Very acute effusions show it for a few days only, but chronic effusions may do so for several months, the sign varying then with the quantity of fluid. With very large effusions, particularly those sufficient to distend the chest, it ceases entirely. He never observed it in old cases of empyema with the lungs compressed upon the mediastinum, but found it even when the pleura contained two or three pints of pus, provided that the lungs were prevented from being quite removed from the side by previous adhesions. We must remember that these observations were his own and were new; yet they sound so modern that they might come from any present textbook. Laennec's teaching has indeed become part of the current coin of medicine.

Another instance of the same thing is seen with adventitious sounds, of which he gave a detailed description and classification. He used the term *râle* for all sounds, apart from those of health, produced in the act of respiration by the passage of air through fluids in the bronchi or lungs or by its transmission through any of the air passages, partially contracted. He separated *râles* into five different sorts: the moist crepitant *râle*, or crepitation; the mucous *râle*, or gurgling; the dry sonorous *râle*, or snoring; the dry sibilant *râle*, or whistling, and the dry crepitant *râle*, or crackling. As on other matters his account was not only accurate but complete. Though the term "*rhônchus*" has come into general use for Laennec's dry sounds, there has been no real addition to his description. A musician once remarked that when Beethoven had finished with a tune no one could ever use it again, for he had devised every possible elaboration which the human mind could conceive. That remark applies equally to Laennec and his stethoscope.

But we must not suppose that his contribution to thoracic medicine was confined to an account of physical signs. That part, in point of space, took no more than a fraction of his book. The rest was given to individual diseases. At the start he made it clear that he thought very little of the theorists. He refused to divide diseases into genera or species: "Still less shall I endeavour to ascertain the primary, or as they are called, proximate causes of diseases.

The vanity of researches of this kind is sufficiently proved by the profound oblivion into which all theories of this nature have successively fallen. I shall content myself with describing the diseases of the thoracic organs—that is to say, such pathological phenomena as are well marked and easily distinguishable from others.” With bacteriology still more than half a century ahead we can hardly deny that he was sound in his refusal to indulge in profitless speculation.

We might pick at random any one of his accounts of thoracic disease and find there today something which we did not know or had forgotten, or that illuminated some problem with which we had wrestled. To say this is to pay tribute again not only to his originality but to his artistic love of completeness. Take, for instance, the onset of acute bronchitis; here is what he has to say: “The pulmonary catarrh is usually preceded by coryza, which is an affection precisely similar of that pituitary membrane. After some days, or perhaps hours, and, in most cases, just as the stuffing of the nostrils begins to yield, the inflammation reaches the air passages. Its transmission to the larynx is indicated by a sense of uneasiness and irritation, or a titillation like that of itching, which provokes to cough; and if the mucous membrane is much affected there is hoarseness, and occasionally loss of voice. When the inflammation extends to the bronchi, there is sometimes a slight pain, more commonly a sense of dryness and roughness, behind the sternum or at its lower extremity. When the disease is very severe, there is greater, sometimes indeed very sharp though transient, pain extending over the whole chest, particularly after the fits of coughing. When the cough is violent, the patient also feels pain and weakness about the attachments of the diaphragm, along the borders of the ribs and in the back.

“The cough, at first dry, is soon accompanied by a serous expectoration which is saltish and slightly glutinous, but not distinguishable from the saliva with which it is intermixed. This, in adults, is usually intermixed with some small pearly sputa which is more or less tinged with the black pulmonary matter, and generally softer than those expectorated in the dry catarrh. As the disease advances, the expectoration becomes thicker and more yellow, and is intermixed with particles of an opaque whitish colour: by degrees the whole becomes opaque, of a pale yellow or slightly greenish hue, viscid, enclosing air bubbles, tasteless and somewhat saltish, and occasionally marked with dots, or small streaks of blood. The cough returns by fits, and is more or less frequent according as the expectoration is copious or otherwise; it is particularly troublesome on waking in the morning, and sometimes after meals.” Here we see the quality of precise description raised to the status of genius in its capacity for taking pains.

So it is for everything which Laennec touched. His accounts of acute suffocative catarrh and of whooping-cough are masterpieces of clinical recording. He described bronchial dilatation, with chapter and verse, both in its acute and chronic forms, linking it with whooping-cough in childhood. He pointed out that “in cases even of the most extensive dilatation the symptoms rarely indicate the severity of the disease. Most commonly there is neither fever (at least continued fever) nor emaciation; and if the patient is not obliged to undergo severe bodily labour, he is scarcely sensible of any diminution in strength. Even the respiration is not impeded, except under the

influence of quick and rapidly renewed movements. The expectoration is not more characteristic. When the dilatation is very extensive, it is extremely copious. It is always mucous, but occasionally resembles the secretion in the last stage of acute catarrh, and is sometimes quite puriform. It is generally without smell, but occasionally has the odour of pus, of good or bad character. The secretion is sometimes so copious as to simulate the rupture of a vomica."

The account of emphysema, one of his best, earned from Rokitansky the remark that had Laennec done no more than this his name would have been immortal. It was not only new and complete, but it revealed to the full his remarkably fresh and fertile powers of clinical writing. Note, for instance, his way of lighting important facts in the following passage, giving them the same sort of visible reality conferred upon fictitious creations by a great novelist. "Both the local and general symptoms of pulmonary emphysema are rather equivocal. Dyspnoea being its principal feature, it is usually confounded under the name of asthma. The difficulty of breathing is constant, but is aggravated by paroxysms, which are irregular both in the period of their return and their duration; it is likewise increased by all the causes which usually increase dyspnoea, from whatever source arising: such as the action of digestion, flatulence in the stomach or bowels, anxiety, living in elevated situations, strong exercise, running, or ascending a height, and above all, the supervention of an acute catarrh. There is no fever, and the pulse is generally regular. In slight cases the complexion and habit of the body are little altered; but when the affection is more considerable, the skin usually assumes a dull earthy hue, with a slight shade of blue here and there. The lips become violet, thick and look swollen. In every case that I have met with there existed an habitual cough. Sometimes this was infrequent, slight, and either dry or attended with a trifling expectoration of a very viscid, greyish and transparent matter; at other times, it was more severe, returning in paroxysms, and accompanied by the usual mucous expectoration. In some cases the patients denied having either habitual cough or expectoration: but on watching them carefully, it was found that they coughed slightly, at least once or twice daily, and expectorated every morning a little of the viscid bronchial mucus above mentioned." He then describes the signs we know so well, associates the disease particularly with long-continued asthma, and points out that of all the forms of dyspnoea it is unquestionably that which affords to the patient the best prospect of long life.

We have already noticed some of the qualities of Laennec's writing—his sense of design, his regard for selection and emphasis, and his ability to describe his subject completely. To these we can add another: his powerful use of comparison. For instance, he likened the dry sibilant râle to the chirping of little birds, or at times to the sound of two oiled slabs of marble suddenly separated. A good example comes in his account of aortic aneurysm: "There are few diseases so insidious as this. It cannot be certainly known until it shows itself externally. It can hardly be suspected, even when it compresses some important organ and greatly deranges its functions. When it produces neither of these effects, the first indication of its existence is often the death of the individual as instantaneously as if by a pistol-bullet. I have known men cut off in this manner, who were believed to be in the most perfect health, and

who had not complained of the slightest indisposition." Here the aptitude of the comparison gives all the force to his description that the suddenness of the event confers in life.

But it is, perhaps, for his work on tuberculosis that Laennec's name is most justly praised. In March 1804 he gave the famous lecture in which, with one exception on the mode of healing of cavities, he incorporated his ideas on the disease. He started by confirming Bayle's views on the morbid anatomy of the tubercle, from its miliary form to the ultimate fibro-cavernous destruction of lung substance. He described the disease in other organs as recognised by the presence of tubercles, gave a list of the frequency with which these were affected, and stressed its insidious character. He pointed out the unity of tuberculosis as a diseased entity, with the softening of caseous material as its salient feature wherever found. Phthisis, until then confounded with many other diseases, was simply tuberculosis of the lungs, admitting that the cause was unknown, though not to be found in the long list of suspected disorders. It is true that he studied advanced phthisis in the main; had he begun with early lesions he could never have given proofs of his diagnostic contentions. And, in what is almost the most interesting part of his account, he dealt with the possibility of recovery, describing that form of chronic phthisis now known as the bronchitic form, where a long life is not infrequent, though disturbed by catarrhal symptoms. Laennec has sometimes been accused of starting disbelief in recovery; though he hardly did that, he admitted it was not an easy feat.

At the time his book appeared Laennec was a sick man, and his symptoms gave reason for thinking that the trouble was tuberculous. Michaud, his brother, and Bayle, his friend, had already died from the disease. With Laennec the diagnosis was less certain; and his cousin, a good judge, at any rate thought not. But Laennec determined to rest from his labours. He sought a long leave from the Necker Hospital, and on October 8, 1819, set out by chaise for his house, Kerlouarnec, at Ploaré on the beautiful coast near Quimper. There he stayed recuperating for two years—reading classics, studying the dialects and folk-lore of Brittany, riding, hunting and shooting whenever the weather permitted. He did a little practice locally among the poor, helping the country doctors, whom he taught to use the stethoscope. It is from this period that the story comes of the man believed to have a cavity in his lung and to be moribund from phthisis. Laennec, asked to see him, failed to find a cavity and thought the signs pointed to a pleural effusion. Two and a half pints of pus were let out, and the patient recovered.

By the summer of 1821 Laennec was so much better that his pressing desire to return to Paris could be fulfilled. He was far from rich; and a second edition of his book would be needed soon. Nor was his the temperament to remain secluded from medical interests when recovery made resumption possible. Also Corvisart had died; and in the following spring Laennec took his place at the Charité, resigning from the Necker. At the Charité he had twenty-six male and fourteen female beds, with two chief assistants, his cousin Meriadec and Victor Collin. His round began at 10 a.m. five days a week, and lasted about two hours. Often he drew as many as fifty students and post-graduates. He talked a great deal in Latin, still a common language among scientific men;

and reviews of his work appeared twice a year in the *Revue Médicale*, though they were never written by Laennec himself. Not until August of next year, 1822, was he elected Professor and Royal Lecturer at the College of France, and then only after difficulties. That year he gave his summer holidays to preparing lectures for the College; and from then until he left Paris for good he lectured there three days a week, in time covering the whole of medicine. By now his reputation was European and his practice large. On one occasion he went to see a wealthy Spaniard in Bordeaux for a fee of ten thousand francs and made, incidentally, one of his most brilliant diagnoses. Though no longer haunted by fear of poverty as he had been all his life, his industry still knew no bounds. Besides practice and teaching he examined candidates in the Faculty and was Physician to the Duchess of Berry, a Court appointment. When the first edition of his book became exhausted he started to prepare another; he changed the title and the order, added much new material, and in effect almost wrote a new work. This second edition appeared in the summer of 1826.

But Laennec was already a dying man. While correcting proofs he had fallen ill, with great weakness, fever and a sore throat, soon followed by diarrhoea and night sweats, a continuous discharge of pus from an infected upper molar socket, due perhaps to empyema of the antrum, and severe cough with foetid sputum. The illness has been regarded everywhere as phthisis; but I find this a little difficult to believe. Though we shall never know, for there was no later necropsy, the sequence of events is more like that with which we are familiar from a lung abscess or suppurative pneumonia. The ominous symptoms told Laennec how matters stood; he made his will, put his affairs in order and prepared to go to his home, Kerlouarnec, once again.

This time his wife went with him, for he had married, two years before, a Madame Argou whom he had long known. Those years had been the happiest of his life, despite ill-health. On May 30, 1826, they left Paris together for the last time. In a small carriage bought for the journey, two days passed pleasantly enough, with Laennec fairly well. Then they were halted by the weather and after that were never free from trouble until they reached Brittany. Laennec suffered agonies, with an overturned chaise and three days' delay for repairs to add to the miseries of illness. Once he arrived safely hope of recovery returned for a time. But his malady worsened as the days wore on, and soon he was emaciated and at times delirious. On August 13, waking in the afternoon, he took the rings from his fingers and placed them on a table by his bedside, saying that it would soon be necessary for another to do this for him and he did not wish that anyone should have the trouble. A little later he died serenely. He was buried near the parish church, a place he would have chosen, for, as Hale-White said, "from his tomb the eye wanders far over grey, rugged cliffs and the wide, deep, ever-changing blue-grey sea."

Thus, in his quiet way, Laennec left the medical world to which he bequeathed so great a legacy. None would dispute the size or the quality of his achievements: they were admitted in his own day, they have been accepted ever since. Yet, great as they were, they have scarcely served to place him among illustrious Frenchmen in general estimation. This is a common fate for those who dominate the history of technical discovery: we know the ones in our own subject; of the others we are unaware. Laennec is no exception.

That he was contemporary with some of the most famous figures in his own profession is no excuse, for he outshone them all but a very few. That he was contemporary, too, with the vivid figures of the Napoleonic era is, perhaps, a more human reason for neglect. Yet he stands almost any test of greatness we care to apply immeasurably better than those crafty adventurers and covetous soldiery who left more pretentious but far less splendid claims to the admiration of posterity.

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MEETINGS OF SOCIETIES

JOINT TUBERCULOSIS COUNCIL

A MEETING of the Council was held on Saturday, November 20, 1943, in London.

The Chairman of the Council, Dr. James Watt, welcomed the appointment of Dr. H. Selby of Leicester and Dr. C. K. Cullen of London as representatives of the Tuberculosis Group of the Society of Medical Officers of Health and Dr. W. Sheldon as the representative of the British Pædiatric Association.

Nomination of Officers for 1944.—The following officers were nominated for 1944: Chairman, Dr. James Watt; Vice-Chairmen, Drs. D. P. Sutherland and N. Tattersall; Honorary Treasurer, Dr. A. P. Ford (in succession to Dr. G. Jessel); Honorary Auditor, Dr. D. P. Sutherland; Honorary Secretary, Dr. Norman J. England (in succession to Dr. J. B. McDougall).

Reorganisation of the Tuberculosis Association.—A Report on this subject was presented to the Council by the Convener of the Committee, Dr. Norman England. There was a long and interesting discussion, but time did not permit a full and complete consideration on a number of the points on which there was a considerable difference of opinion. Much attention was given to that aspect of the Report which dealt with the re-organisation of areas and regions under which tuberculosis might be administered in the future. There was general agreement that periodic inspections by the Ministry of Health should be a matter of importance in future administration. It was suggested that the Report of the Notification Committee should be incorporated in the final Report of the Reorganisation Committee, and much the same feeling was