Introductory Lecture

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GENTLEMEN,—In a work written nearly 600 years ago by a Franciscan friar, one of those early cultivators of science who were looked upon as magicians by their contemporaries, and whom we too often picture to ourselves as merely engaged in vain searches after the philosopher's stone, occur these remarkable words:—"If every man from his youth would exercise a complete regimen, which consists in (the regulation of) these things,—meat and drink, sleep and watching, motion and rest, evacuation and retention, air, the passions of the mind; if a man would observe this regimen from his nativity, he might live as long as his nature assumed from his parent would permit, and might be led to the utmost term of nature, which term, nevertheless, he could not pass."

And following up this idea, the author, Roger Bacon, wrote another remarkable treatise, entitled, "The Cure of Old Age and the Preservation of Youth," which, if divested of its antique garb, and freed from some subtleties which the acute but fanciful mind of the Arabian physicians had introduced into medicine, will be found to embody much thought and shrewd observation on these subjects of universal interest. For who is not interested in the preservation of youth and the cure of old age?

The cure of old age! We do, indeed, know an old age which needs no curing. We can all recall examples of an old age with which Time has gently dealt; in which the body has indeed preserved its youth, even to its fullest term, and the mind, enlarged by experience and corrected by trials, has even increased in clearness and truthfulness of view, and has lost nothing of its youthful strength. We all know old men who are the very types of a higher and purer manhood; whose age is no decadence, but only an onward step in a life of activity and usefulness; who unite, indeed, the wisdom of the serpent and the innocence of the dove; and on whose ripened years wait "honour, love, obedience, troops of friends, and all that should accompany old age." That is not an old age that need be cured. We might as well desire to rebuild those old churches which adorn the land, grey and venerable it may be with the lapse of many generations, but still stable and enduring as when the piety of our forefathers first reared them.

Roger Bacon was no idle dreamer, who sought in some universal elixir the means of staying the course of time, and of preserving for ever the bloom of youth and the freshness of the morning. He did indeed, with the natural enthusiasm of one who saw how much evil could be averted, fancy that the term of man's life might be prolonged, even, it might be, for two hundred years; but he also clearly saw that Nature has, as he phrased it, "an utmost term," which cannot be exceeded. Yet he perceived, as we do, that there is an old age to be cured; that there are numberless instances of age which comes before its time—of a body decayed even before its term of growth has passed—of strength gone—of intellect waning—of death commencing at a time of life when, according to Nature's laws, the body should be in all its vigour and the mind in all its strength.

Nothing, indeed, is more certain than that there is an extraordinary—an appalling waste of human life. Let us remember how many children die before a single year is completed; how many fall in early youth; how few, how very few, attain the Psalmist's term of threescore and ten years. And this mortality represents an unknown but immense amount of illness and suffering—of bodily and mental pain, which the mind cannot at first sight reconcile with those attributes of benevolence and love which yet, we firmly believe, guide the stars in their courses, and regulate the government of the world.

There may be, indeed, men who refuse to see in the waste of
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human life anything unusual and exceptional; who point to the fact, that Nature everywhere creates and destroys with inconceivable rapidity; that every flower produces, it may be, hundreds or thousands of seeds, of which only one survives; that many animals multiply at such a rate that their progeny would soon fill the earth if the extraordinary balance of natural conditions did not destroy on a scale of equal magnitude. Man, it may be argued, is placed under the same conditions, and it is chimerical to suppose that his puny intelligence can modify the inflexible and impartial laws which regulate matter and its forces. To a belief so gloomy and depressing as this, it is, perhaps, sufficient to reply, that there is evidence to prove that man's intelligence has been purposely made great enough to influence his own destiny, and that he has been really permitted to direct, in a certain degree, the material agencies which encompass him.

There may be others again who, admitting the possibility that man by his intelligence may influence the conditions which affect his health, yet entertain little hope that this will practically be done. The carelessness, the selfishness, and the vices of men; the temptations to which the weakness of his nature too often renders him a prey; the extremely complex conditions of his social life; and the arduous efforts, both of body and mind, which in many cases he must make to gain even a bare subsistence,—render it in their view improbable that the Utopia will ever be reached in which the causes that act prejudicially on life will be removed, and only those which favour health remain.

Some reasoners again may ask, What is the object aimed at? Is it wished to prolong life? But we do not know what is the natural term of life. The "threescore years and ten" may merely imply that some few men reach that age, not that it is the average duration, for if it were so it could hardly be true that at "fourscore years" there would be only "labour and sorrow," since an average of seventy years of life would imply the possession on the part of a large number of men of much strength at that age, and of a duration of life considerably over a century. Doubtless there is a natural term of life, and a certain period of decay, as of growth; but it may be said that whether it be the thirty-eight or forty years which is the average age at death in this country, or the seventy years of the Psalmist, or the one hundred years which Flourens has attempted to deduce from his law of growth, or the two hundred years which the Vicomte de la Passe has still more vaguely inferred, or any greater number, is yet uncertain.

What, then, it may be said, is aimed at, and what reason is there for thinking that there is any waste of life at all, or any anticipation of that utmost term which even Roger Bacon knew could not be overpassed?

But arguments such as these carry no weight whatever. Even granting that the normal length of human life is not known, the slightest observation shows that it is much shorter than it ought to be. If we adopt Roger Bacon's point of view, and look at the effect of individual management, how many men do we see busily occupied in shortening their lives, either from ignorance of the simplest laws of health, or from a contemptuous disregard of them! No one can at all have investigated the great subject of the causes of disease, without seeing how marvellously the ignorant or the vicious man shapes his own course and determines his own future. And if it be answered that it is chimerical to expect that Roger Bacon's precepts will be attended to, and that every man will "exercise a complete regimen from his youth," and will have eyes to see and sense to act in the manner that is most beneficial to him, the reply may be, that whether it is likely or not, it is at any rate possible, and that its likelihood is increased by the fact that, as in so many other cases, it is for a man's self-interest to adopt the most reasonable and proper course.

But passing from Roger Bacon's somewhat narrow point of view, not only is life thus shortened by a man's own actions, it is also greatly influenced by circumstances which admit of alteration by others, if not by himself. How immensely some men influence the health of their fellow-men I need not say. What a step it would be if everyone would see that there is no isolation in this world, but that links which cannot be broken connect us all! If it were possible that every employer of labour in these countries suddenly endeavoured to realize that profound Christian law which recognises the mutual action of man on man as one of the great means by which the moral government of the world is carried on, and tried to do his duty to his neighbour, how great would be the effect on health! Unhealthy trades, which annually kill their thousands, would disappear; unhealthy dwellings, which sap the health of entire communities, would no longer disgrace our towns; selfish laws,

which benefit one class at the expense of others, would never be enacted; and every man would know that in some way or other, small or large, direct or indirect, he had power to influence the health of some of his fellow-men, and was responsible for his power.

One of the most cheering features of our time is the growth of public opinion in this direction. It is owing to this public opinion that the unhealthy factory life of the last generation is now, thanks to better buildings, improved ventilation, and well-arranged hours of labour, becoming a healthy trade; that landlords all over the country are improving the dwellings of their labourers; that men of science are constantly endeavouring to avert the hazards of dangerous trades; and that Government is gradually becoming convinced that legislation must give force and direction to the convictions of the public conscience.

In no way has this been more strikingly shown than in the case of the Army and Navy. In these services Government is a gigantic employer, and places its labourers under its own conditions. It does what it likes with its soldiers and its sailors—sends them over the world, locates them, clothes them, feeds them as it likes. It destroys almost entirely the free agency of the individual, and to a great extent holds in its own hands the influences which regulate health and life. On Government therefore, and on every officer who acts under it, is thus thrown a vast moral responsibility; and if our religious belief is to have any weight at all, we must recognise this to be no mere phrase, but an actual obligation, which all those concerned will have to meet. Government therefore, and all its administrators, are bound to see that the health of those whom they employ is in no respect damaged, or, at any rate, that every known means is taken to prevent damage. And it so happens that in this case, as in so many others, the duty of Government and its interest are identical. Even on the lowest grounds, as a matter of economy, as a means of obtaining willing and faithful service, as a means of increasing efficiency, and of deriving the greatest effect from the materials employed, the improvement of the health of men in the public service is a question of paramount importance. That this is now fully recognised by Government I need not say; it has been shown in a variety of ways: improvements have been initiated, evils removed, customs changed; and thus already, as we shall hereafter see, a marvellous effect has been produced on the health of the army.

But it may be said, even if such somewhat Utopian dreams could be realized, and if all that man could do individually or in community to improve his health and prolong his life were done—if the Priest and the Physician were alike listened to and obeyed, there would yet remain agencies enough to poison the springs of health, and to shorten even that narrow span of life which a vain philosophy may dream about, but cannot enlarge. How, it may be asked, can we deal with that mysterious problem the effect of race and inheritance which induces so many of the more recondite and fatal maladies? how control the elements ever at war against the feeble frame of man? how neutralize the unknown agencies which spread the epidemic and contagious diseases, and scourge as with a sword from Heaven the nations of the earth?

And, indeed, these questions embrace some of the most difficult points the physician has to consider, and cannot as yet be thoroughly answered. Yet something may be said. The effect of inheritance is, indeed, great; and "the nature assumed from the parent," to use Roger Bacon's phrase, often weighs upon a man during his whole life. Yet even here the dominant tendency can be often neutralized or weakened. If it is foreseen, much may be done to ward off disaster both to the mind and body, and the tendency then weakens with each successive generation, or is controlled by the healthier influence of the other parent. Or if, unhappily, this is not done, and if the tendency, of whatever kind, is intensified in the offspring by predisposition from both parents, a remedy—a stern but necessary remedy—is still provided, which sacrifices the individual to the race. Such unhealthy families die out: the stronger races survive, the feebler succumb; and by this process of selection the health of the community is preserved—perhaps, under certain circumstances, is even improved. And however slowly such a custom may arise in our social state, there can be little doubt that more and more attention will be paid by each generation of men and women to the bodily and mental health of those with whom they elect to pass their lives; and thus, as among the lower animals the principle of selection secures a continual increase of beauty and strength, so among men the effects of inherited disease will be continually weakened, and at length averted.

As to the material conditions which surround man, and which certainly influence greatly his health, nothing is more certain than that his intelligence can greatly control them. They are formidable because misunderstood or misdirected. The soil may pour forth its malaria, but the engineer can drain it and turn the deadly morass into a fruitful and healthy field; the cold wind may chill, but we can call into use hidden sources of warmth; the air may carry its poisons, but yet bears within itself the means of its own purification, if men will assist, or will even only refrain from arresting, the beneficent changes of Nature. No, we may safely hold to the faith that Nature is no hard mother to her children, and only punishes them for their ignorance or neglect.

And as to the contagious and epidemic diseases which appear so mysterious, their causes oftentimes lie at our own thresholds. It is not wonderful, indeed, that men should have thought otherwise. Those fearful plagues which have passed over the earth, and have half depopulated countries, have naturally strongly excited the imagination of those who witnessed them. In their eyes the grandest images could alone adequately express the effect of those storms, before which courage grew pale and even religion faltered. We all remember the lofty terms which have alone seemed to some writers appropriate for the opening of their works on the mediæval plagues of Europe. The powers of nature are represented as coming into violent collision: in the air are thunder and storm; a dark pall shuts out the sun; blood rains on the fields; strange portents cross the sky; dumb creatures tremble and fly the accursed spot; and over the doomed people the destroying angel waves his flaming sword. And yet these are but the wild imaginings which great events excite in the awestruck mind. The wrath of Heaven is, indeed, acting, but man is the instrument of his own punishment, and it is his ignorance which creates these terrible catastrophes. Granted that there are many things yet obscure; that it is wonderful how the agents of small-pox or scarlet fever should be gifted with a potency so enduring; that it is inexplicable what force should ever and again send cholera wandering over the face of the earth, it is yet certain that we must look in many, if not in all, cases to the most simple conditions for the spread of the zymotic diseases, and to the most elementary hygienic rules for their prevention. In fact, it is in this direction that the greatest triumphs of hygienic science have been, and will for some time continue to be, won.

The more, indeed, we consider the causes which shorten and destroy life, the more shall we be convinced that the possibility of a great improvement in the health of the individual, of the community, and of the race, is no empty dream. How far such an improvement can be carried no one can tell, but the concession of the possibility at once points out a duty and necessitates an action. Suffering and pain may, indeed, always be our destined lot, but still we should infer that it is not intended that intelligence shall always remain unrewarded and hope unsatisfied. The greatest encouragement for hope and for action is to be found in the results which have constantly followed the application of the laws of health which physiology and pathology point out. There is no case yet known in which disappointment has followed properly-considered measures for improving the public health, and there are many instances in which unexpectedly favourable results have been obtained.

Examples could be cited in abundance, were this the time, to show how easily public health can be improved, and human life prolonged, and which prove how immense is the power men can thus exert over their own welfare. To make this power known, and to show how it must be used, should be one of the great objects of the science of Medicine. To teach the individual to preserve his own health—to awaken his sense of the responsibility to the power he can exert over the health of others—to show him how to apply his mastery over Nature for his own good, is, I believe, the great philosophy, more glorious than that of the Garden or the Porch, which the Physician must in future proclaim by the side of those still higher truths which fall within the province of the Priest.

But, in truth, physicians in all ages have not been slow to perceive and to proclaim these things. Roger Bacon was not the first to write on the "cure of old age." He constantly refers to writers of older times, and these in turn call up the opinions of those who have gone before. And thus the subject can be traced back, dimly it is true, but still perceptibly, to the most ancient records, and can be shown to have excited the interest alike of the Arabian, the Roman, and the Greek. And since the time of Roger Bacon there has been no want of writers on this topic; some dreaming, some speculative, some wise and

clear, until we come down to the days of Hoffmann, with his "Seven Laws of Health," or later still, to the unequalled teachings of Andrew Combe, and to the cogent statistical arguments of William Farr.

Amongst the best English writers on this subject must certainly be placed a large number of army and naval surgeons. Owing, probably, to the circumstances under which they were placed, circumstances which showed more commonly than in civil life the vast and rapid destruction of human life which sometimes occurs, their attention appears to have been forcibly directed to the prevention of disease. And many of them discussed this matter with a good sense which renders their works still most instructive, and some with a sagacity which places them in the highest rank of observers. The works of Pringle, who witnessed the campaigns in Flanders in 1741 and succeeding years; of Donald Monro, who saw those in the Low Countries and in Germany in 1760; of Brocklesby, who served at a period a little later; of Robert Jackson, the prince of army surgeons, who saw the whole of that stormy period which commenced with the American war of independence; of Hunter and Lempriere and many others, who witnessed the tragedies in the West Indies towards the end of the last century; of Sir James M'Grigor, the able administrator and man of business; or of Luscombe, the model of the efficient army surgeon in the Peninsular campaigns; of Henry Marshall, that man of genius whose lot was cast in the torpid times which followed the wild excitement of the imperial wars;—these, and many other works by military and by naval surgeons, (by Lind, Trotter, Gillespie, Blane, &c.,) have had an immense influence in gradually developing the grand subject of the preservation of health and the prevention of disease.

And coming down to our own time, we find no falling off in this respect. It would be impossible, and perhaps invidious, to attempt an enumeration of the numerous papers and essays which have of late years been written by army surgeons. But one or two works have exerted a great effect. It is decidedly from the reports of Marshall, Tulloch, and Balfour—which illustrated by the irresistible logic of statistics the causes of the mortality among the Queen's troops,—that the measures for reducing the death-rate in the army took their commencement. And these reports have had also a large effect in calling the public attention to the subject of preventable disease generally, by appealing to evidence which the general as well as the scientific public could at once understand and appreciate.

In another direction the writings and exertions of an army surgeon, the present Physician to the Council of India—whose name will hereafter be placed in the same roll which includes the honoured name of Robert Jackson,—consistently directed, for more than thirty years, the attention of the Government and the nation to the sanitary condition of India and its army, and have had no small share in bringing about that series of improvements which are now commencing, and which will inevitably add in an untold degree both to the happiness and the efficiency of the British soldier serving in the East.

And even the fiery trial of the Crimean War has not been without its good result. Throughout the whole army it appears to have made this great subject one of unusual interest; it excited to the utmost the energies of army surgeons; it produced the excellent and elaborate "Medical History of the Eastern War" of Andrew Smith; it brought to bear on military hygiene the sanitary aptitude of Sutherland; excited the earnest and self-sacrificing efforts of Miss Nightingale; and engaged in the task—alas for too brief a time—the noble powers and grand opportunities of that statesman who died too soon for his country, and with whom died

"The many hopes of unaccomplished years."

Under the influence of a growing public opinion, created partly by writers on hygiene, and partly by the stern experience of war, the health of the army has been for some years more and more attended to. It was time; for the great losses of men which had yearly taken place in time of peace had been hardly borne by this country, and in years to come would not be borne at all. We are even now like the old Romans, and our frontiers are almost too large for our strength. With a population not numerous, and well employed in a great and growing trade, this country garrisons vast dependencies, and at all points confronts formidable neighbours. From year to year, while trade continues good, an increasing difficulty will be found in obtaining men, or the wages of service must be raised. To consider, then, the health of the soldier in every way; to render the service worth his seeking; to obtain from him the longest period of work, and the most vigorous career

of duty, is a matter of policy as evident as the moral obligation which should bind us to the same course.

And there is every reason to think the improvement now obvious will go on—first, because, great as it has been, there are yet on every side evils to be combated; and secondly, because there are such unusual facilities for combating them. With one or two exceptions, the life of the soldier, considered as a trade, need not be carried on in time of peace under adverse sanitary conditions. It is true that the man born in the most temperate of islands passes to all climates, and may be subjected to the fiercest extremes of heat and cold. But climate has been the scapegoat of many sins, and everywhere in the British dominions healthy spots are found in singular abundance. A second evil is greater: the strong young man, brought into the highest state of vigour at an age when passions are strongest, and self-control is weakest, is then like a young monk (but without the young monk's moral restraints), shut out from the domestic ties which are the safeguards from so many and such frightful evils. In the trade of the soldier this is one great and persistent difficulty; he is unnaturally torn from those influences which it is not good for man to be without. That the immense standing armies of our time will widely affect the populations from which they are drawn is evident. Our descendants will trace better than we can this curious action. For us the chief interest is in the effect on the soldier himself. How this matter is to be met it is not easy to say: whether by stationary legions and military colonies, as among the Romans, or by a greater expenditure in allowing a much larger proportion of women to accompany their husbands, is not clear. But certain it is that the evils of an enforced celibacy are great and manifold, and must not be neglected. Apart from this the soldier can manifestly be placed in time of peace under almost any conditions that may seem desirable, and the great object is now to define precisely these conditions, and to apply them in all cases where insuperable military objections do not exist. In time of war, however, the question is not so easy.

War is a ruthless master, and pitilessly scatters to the wind the most careful arrangements. In all wars the sacrifice of life has been enormous, and in fact this has been one great check on aggressive and martial nations. It is, indeed, wonderful to see how in campaigns a great army melts away like snow under a midday sun. Napoleon, the great captain of modern times, assembled an immense army, and provided for it with all the forethought which his far-seeing genius could command. Before he entered the nearest province of Russia, before even the first note of real war had been sounded, his eagles had seen the loss of 50,000 men. Our own day has shown us something similar. The great Federal American army has been cared for as no other army ever was before. Profiting by our experience, and applying as an ingenious and quick-witted people might be expected to apply, the rules laid down in the English army since the Crimean war, the Americans succeeded, during the whole of last winter, in maintaining their immense army in an extraordinary state of health. It did, indeed, seem as if at last war was to be robbed of half its victims. But how have these anticipations been shattered by the rude touch of actual movements in the field! We shall never know the losses by disease in those wild campaigns; the sombre veil which covers them will never be raised for us, but enough is known to assure us that the destruction, great as it has been by sword and shell, has been, as in all other wars, far surpassed by the arrows of disease.

And yet, in looking over the history of wars, it is singular how obvious seem the causes which have produced the great mortality, and how easily one can put one's finger on the errors of omission and commission. If this had been done, if this had not been done, we may say, all would have been well; and yet war after war the same conditions are again repeated, and are followed by the same results. Is it that war is so intricate a thing that it is impossible to meet in time its ever-varying conditions? or is it thus that Providence designs to check the turbulence of men?

And yet our own history, and especially the last campaign in China, seems to show that a wise forethought *can* greatly prevent the diseases of war. The military history of the Romans, as far as it is known, shows that that martial and imperial race knew how to guard against many of the evils which have often almost swept away the armies of modern states.

At any rate here is another task for the army surgeon. His military superior will naturally require him to study profoundly the diseases of war, to trace their causes, and, as far as possible, to point out their remedies. The army surgeon should be, in fact, the right hand of his general, watching for and warding

off, as far as it can be done, those causes of weakness which may enfeeble the force the soldier directs.

It is impossible to read the works, reports, and essays which have been published by the medical officers of the British service, without acknowledging that many of them understood perfectly how to perform this great and responsible office. The profession of medicine may well be proud of the members of this service, who have enhanced the dignity and increased the usefulness of our common calling.

In the list of those who have belonged and who still belong to this noble service some of those who hear me to-day are about to enrol themselves. In so doing they will inherit a portion of the fame which rests on the past, and will become responsible for the exertions and conquests of the future. I am sure I need not urge upon them the responsibility they undertake in entering the medical service of the army—a responsibility greater even than that in civil life, inasmuch as the professional position of the army surgeon is more isolated, and those who depend upon him for advice can seek no other aid. There are many duties to perform for which our civil training does not prepare us, and many professional topics which require a fuller discussion than they can receive elsewhere.

In this school you will have explained to you by my colleagues the various surgical and medical points in which the practice of our profession differs from that in civil life, and will have your attention directed to those canons of health which are applicable to your future duties.

By attention to what is taught in this school you will be prepared to enter on your service, and to perform its multifarious duties with success; and in performing them with success you ought to find, and will find, your chief happiness. You will be in a position of great usefulness—"a helper of man," as the old motto has it, literally, "throughout the world;" and in all the varied phases of that famous military life which you will accompany and witness, officers and men should alike turn to you with confidence as able to do for them all that can be done in their hours of sickness and peril. You will then be recognised as a worthy associate in that grand English army which is now engaged all over the world in the work of peace; which everywhere is the servant of justice and of right; which watches over the youth of infant nations; which in the East and in the West alike represses anarchy, repels aggression, and in the midst of turbulent and disorderly nations maintains the rights and advances the cause of humanity. No nation has performed such a work since the Roman legions recoiled before the barbarian hordes. To do one's part worthily in so great a labour, and to spread throughout the wide range of the British possessions those rules of health which render both mind and body better instruments in the great work of improvement, is surely a career which might satisfy the ambition of anyone. Such a career is now open before you, if you have strength enough honestly and loyally to fulfil its duties; and these duties possess happily something of the divine quality of mercy, which we are told carries a twofold blessing—blessing the giver and receiver. In endeavouring to preserve the health of others you will ensure your own; and when old age comes, it will not be as an evil to be cured, but as an ending which worthily crowns a life of labour—an ending which has been anticipated without repining, and will be endured without regret.

OBSERVATIONS

ON THE

PRACTICE OF THORACENTESIS IN SEROUS EFFUSION INTO THE PLEURA.

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AMONGST numerous questions arising in the extensive domain of medical practice, the subject of this paper is not the least difficult of solution. The well-being, nay the life, of a patient so affected is not seldom at stake; and the deliberate and mature judgment of his professional adviser is called for in deciding upon the most efficacious and prompt treatment to be adopted. Considerable discrepancy of opinion still exists as to the practice of chest puncture in these cases. When accepted as occasionally requisite, much uncertainty prevails as to the description of case in which an operation of the kind may be

warranted, and as to the stage of pleural effusion in which favourable results may be expected.

Many eminent physicians, amongst whom the late Dr. Hope may be mentioned, assert that chronic pleurisy with effusion will usually yield to the administration of mercurials, iodine, diuretics, and local counter irritation; and that when these fail, no benefit will arise from operative procedure. Moreover, objections have been raised on the grounds of the assumed dangerous results consequent thereon. The most prominent of these are—the occurrence of syncope; the risk of renewing or aggravating inflammation; and the pernicious effects of the ingress of air into the pleural sac.

On the other hand, there are not a few modern physicians, amongst whom Dr. Hamilton Roe, the late Dr. Hughes, and MM. Trousseau and Aran of Paris may be named, who advocate an early performance of paracentesis. They hold a strong opinion, based on their professional experience, with respect to the favourable effects of the prompt removal of effusion by this method. It is affirmed by Dr. Roe that the untoward accidents just referred to never occurred once in the cases (over twenty) thus treated; that pleuritic inflammation has for the most part subsided when considerable effusion has taken place; and that renewal of the effusion subsequent to operation may be prevented by mild constitutional remedies, which will also remove any traces of the primary affection. It is also forcibly inculcated that to withdraw the superincumbent effusion by early operation will remove a source of functional disturbance, and will speedily enable the lung to regain its normal volume and functional activity. With respect to the alleged injurious effects of the admission of air into the thoracic cavity by creating irritation in the pleura, with formation of pus or fresh exudations of lymph, such results have not been witnessed in the cases published by Dr. Roe, and successfully treated by operation. It is moreover argued, that to try and promote absorption when this process is slow in appearing, is but to lose invaluable time, and permit of irremediable damage being done to both lung and pleura, and that the means used with this object are calculated to further debilitate the system, already reduced by disease and by the remedies resorted to, a repetition of which is as tedious in the removal as they have been powerless in the prevention of effusion. Dr. Hamilton Roe has further pointed out that the rapid effusion occasionally occurring in these cases may jeopardize the life of the patient if it be not removed by some more expeditious means than those commonly resorted to, and that an operation deferred till the strength of the patient be reduced by the disease and by depressant drugs cannot reasonably be expected to prove as successful as if performed at an early period, whilst the absorbents retain their activity and the lung its expansibility. Much depends upon accurately seizing that stage in a case where the use of drugs should be replaced by tapping. Acute symptoms, if at all present, having subsided, and a physical exploration having determined the suppression of the respiratory movement in the implicated lung, no time should be lost in removing the effusion by paracentesis. Complete restoration of respiratory function must not be looked for if the operation be delayed beyond five or six weeks from the commencement of the attack. Three weeks have been assigned as the period when it may be resorted to with the most perfect success; blistering, dry cupping, with the use of tonics (of which the tincture of the sesquichloride of iron is one of the best) and nutritious diet completing the cure. Hazardous and inefficacious medication, having, in the first instance, been discarded for the more prompt remedy, may subsequently prove beneficial and curative.

It cannot be denied that many cases of acute pleuritis, with effusion, yield to suitable medical treatment, or that tapping the chest will prove merely palliative in passive effusion consecutive to chronic structural disease. Still, instances do occur of subacute or latent pleuritic effusion attacking delicate subjects, in which the speedy and beneficial effects by tapping contrast most favourably with the often nugatory and mostly tedious effects of medicinal agents.

Having briefly stated the views of those who advocate the operation, I shall first glance at the characteristic states in which it seems most appropriate, and then proceed to give a few cases lately coming under my notice, which will serve to illustrate the chief points above referred to.

In the first group of cases there is slight fever, with feeling of languor and indisposition, but little local uneasiness. The symptoms are obscure and unperceived by the patient, whose usual habits may be little interfered with. I have lately heard the case related of a gentleman visiting Paris, who complained one day to a physician with whom he was acquainted