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Articles and notes, either of general or technical nature, of interest to the medical profession will be welcomed. They should be addressed to the Publicity Section, "The South Indian Medical Union," and should be accompanied by a stamped addressed envelope if their return is desired in case of non-publication. The Editor cannot, however, assume any responsibility for the loss of manuscripts though every care is taken of them.

Anonymous contributions of any nature will not be considered.

The Editor will also be pleased to receive books and pamphlets for review. Reprints, of which abstracts may interest the profession, will also be gratefully received.

All communications and packages intended for the Editor should be addressed to him by designation and not to any member of the Association by name.

BULLETIN, PUBLICITY SECTION,
SOUTH INDIAN MEDICAL UNION, MADRAS.

To the Owners of the BULLETIN,

THE MEMBERS OF THE

SOUTH INDIAN MEDICAL UNION.

You know that reciprocity encourages business, don't you? Outside of common decency, and leaving aside mere etiquette, it is good business to stick to your friends, isn't it? Now who is your friend—the smooth-tongued spiel-artist who swears undying love and admiration for you as long as he is in your hearing, and laughs behind your back at your ease, gullibility and willingness to do business with him at an expense to himself of nothing more than a few lungfuls of hot air? Or is your friend the fellow who thinks enough of you to support your efforts for betterment and puts up his fair share of cash for the promotion of straightforward business intercourse with you and for the stimulation of legitimate professional business and its accompanying trade? Now, the point is that the BULLETIN invites the support of good ethical advertisers, and if every doctor who is part owner of the Bulletin will pursue the above line of thought, speech and action, the effect would be magical. As long as these houses think that they can work us without advertising they will hold back. It is up to us, every one of us, to treat them as if they were from——, and show them. By doing this we are at the same time giving loyal support to those houses that are represented in our pages, which is only decent and proper. They are the ones to whom we should always give preference and we again urge all of our joint owners to follow up this principle and always to insist distinctly when buying supplies that you wish and will have our advertisers' products—there are none better.

This is practical, hard-sense talk, and we appeal to every individual member and reader for active intelligent co-operation.

Faithfully,

YOUR BULLETIN.

[*With apologies to an American Colleague*]

BULLETIN

OF THE

SOUTH INDIAN MEDICAL ASSOCIATION.

JANUARY 1934.

DEAR FRIEND,

The Bulletin is entering its sixth volume and has justified itself in being able to shape the policy of the authorities in their attitude towards the Independent Medical Profession. It has also been helpful in organizing the Independent Medical Profession. We find, as a result of this, a greater respect for the Independent practitioner from his Service colleague. We hope, with greater organisation and from this a greater solidarity, mutual respect and regard will result and that, it will not be before long we will be able in this Presidency to achieve a homogeneity in the profession.

We invite suggestions for improvement of the Bulletin. We want our Readers to make free use of it. Do write to us, if you have anything to say either to us, to the rest of the profession or to the public. Our columns are always open to the members of the medical profession.

T. Krishna Menon

For the Publicity Section.

1934.

In response to the general wish of our readers we would briefly review our doings during the year that is just past. We must confess that the year has been one of considerable difficulty to those who are responsible for the publication of the Bulletin. The general financial distress and the change in the personnel of the Publicity Board have together been mainly responsible for this. Further there was for some time during the last year a little misgiving in the minds of some members of the union whether the policy pursued by the Bulletin could not be changed to greater advantage. As a result of earnest consultation and discussion, the Union has affirmed its approval of the policy of the Bulletin and in view of the prevailing depression in the general trade, it has decided to relax slightly the policy in regard to the acceptance of advertisements of ethical products from reputed manufacturers. On the whole, so far as the Union is concerned we are glad that the year is past, and we are confident that the present year would tend to increase the power of the Union and the usefulness of the Bulletin.

When we look around us, the prospects of the profession seem to be anything but cheery. We had hopes in the early part of last year that with the formation of a Medical Council for All-India and the creation of a common register, earnest attempts would be made to level up the various grades of qualifications so that the profession might feel united. Fates have been against us. It looks as if the profession has to tarry awhile in the wilderness. We earnestly hope that a Moses would soon arrive to take it to the promised land of which a pessimist might say that not even a Pisgah view is available. We know that the powers of the new Indian Medical Council are very limited. But the profession would be greatly disappointed if the Council does not endeavour to bring about this greatly needed reform very early in its career.

The profession is still unorganized. In prosperous times, when practitioners are few and people are rich, there is work for everybody and one does not think of an organization. But the want of such an organization is increasingly felt when work and the little available wealth are monopolized by the few, and the rank and file of the profession have to be satisfied with less than the bare necessities of life. The thoughtless would at once lay the blame on the increasing number of men and women that comes out of the Medical Colleges and Schools year after year. But it is a well known fact that the country has not anything like the required number of medical personnel to attend to her needs.

What is required is a rational scheme by which the available medical talent could be distributed according to the needs of the various districts and taluk areas. Where the local authorities are unwilling to undertake the task, a well organized profession could easily bring it about on its own initiative. The absence of organization among the profession is again responsible for the continued existence of a set of practitioners who are generously subsidized by the government and who are freely allowed to compete with the "non-service" practitioners on very uneven terms. We hope to see such activities in the union and the profession at large in the current year that will render it impossible for the government any further to force the independent medical profession to run this handicap race.

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Indian Medical Problems.

Problems connected with medical administration in India formed the subject of important pronouncements by Dr. Ansari at the tenth annual session of the All-India Medical Conference and by Dr. B. C. Roy at the 26th session of the All-India Medical Licentiates' Conference, both held in Bombay early this week. To a large extent, both the addresses discussed, as was inevitable, subjects like the Medical Council Act, the position of licentiates, manufacture of drugs in India and the supply of a sufficient number of medical men for service in towns and rural areas. Dr Ansari, while recognising the changes made by the Select Committee in the Indian Medical Council Bill, stated that it was at best only a compromise; he stressed the importance of certain principles which should guide medical policy in India, such as the standard of education, and said that there should be no interference from outside in regard to the standard of education fixed for India, that India should be enabled without any condition to treat medical men of other countries in the same manner as those countries treat Indian medical men, and that there was urgent need for a better recognition of the status of the licentiates. Mr. Roy carried the matter a little further and it was his firm conviction that there should be a body of experts who must determine the minimum standard of qualifications for a practitioner in India and decide upon the courses of study so that there would be only one class of medical practitioners without distinction of race, creed or colour. In this connection, he pleaded for a larger proportion of licentiates being admitted to the provincial registers and held up the example of Bihar and Orissa where no distinction was observed between graduates and licentiates in the register. We would invite special attention to that portion of Dr. Ansari's address in which he has shown how the State has failed in its duty to provide the country with an efficient department of Public Health and to encourage the right kind of medical education and medical research and perputuated racial discrimination and reservations " involving terrible waste of a poor country's money on a top-heavy administration. " The unreasonable claims of the Indian Medical Service to dominate the profession and medical service in the country, the absurdity of the reasons advanced by the authorities for retaining such a disproportionately large European element on the civil side and the utterly unscrupulous attacks made against Indianisation of the service by certain witnesses who appeared before the Joint Select Committee have all been referred to by Dr. Ansari in terms which are as convincing as they are strong. Both Dr. Ansari and Dr. Roy have referred to the unreasonable delay which has occurred in the carrying out of the recommendations of the Drugs Committee and have called upon the authorities to embark upon a far sighted policy of encouraging the manufacture in the country of the necessary drugs and medicines. The utter inadequacy of medical help in India is notorious. But for various reasons, no adequate measures have been taken to finance a liberal scheme which would enable the poor even in the remotest parts of the country to secure timely medical assistance. The State's duty in this matter is plain enough and one can only hope that when Ministers find themselves free from the shackles which now prevent them from embarking upon well-considered plans, they would take up for solution this very urgent problem. There is also the responsibility of Indian medical practitioners to bring to bear upon their work a spirit of service and sacrifice. " If the Indian

medical profession," Dr. Ansari said, "is to vindicate its functions as the friend of the poor and suffering Indian people, it must cultivate the missionary spirit of renunciation and dedication. And if it is to constitute itself into a corps to fight successfully against death and disease, it must foster a genuine spirit of brotherly co-operation among its members." The suggestion made by both the Presidents for welding the profession into one whole and for laying down the necessary minimum standard of qualifications requires the earnest attention of the authorities and the public.

Hindu—Dec. 27, 1933.

Honorary System in Hospitals.

The average medical practitioner all the world over rightly avoids writing to the daily press for obvious reasons. But when one finds prejudices being paraded in the guise of well-meaning criticism one is compelled to come out of one's shell to expose them. "Independent Medical Practitioner's" letter on Honorary Medical Appointments is one such and no apology is needed for intruding on your valuable space to put before the public a clear idea of the honorary system as it obtains in England.

The writer is well acquainted with the system obtaining in the Moorfields Eye Hospital, London, and to a limited extent with that in the Royal Infirmary at Edinburgh. But he believes that the same or some modified form it prevails is most, if not in all, hospitals in England.

The House Surgeons and Physicians are the persons in the lowest rungs of the ladder and constitute almost wholly the paid medical staff of hospitals. They are newly passed out graduates and licentiates appointed to reside in the hospitals and help the honorary medical staff and attend to emergencies. They are taken on six to twelve months' contracts on a salary and are provided in most cases with boarding and lodging at the hospital and in some a laundry allowance as well. After a few years' service in these ranks in various hospitals some drift into general practice. Others keep in touch with these institutions as assistants in pathological and bacteriological laboratories, as curators of museums, tutors, etc. During the same period they put in post-graduate study and pass higher examinations. Then when a vacancy arises, they apply for appointment as Honorary Assistant Surgeon or Physician. After a certain number of years (five in Moorfields) in this capacity they are automatically promoted surgeons or physicians. They serve in this rank up to a certain age limit prescribed by the management of the hospital and then retire and are placed on the list of Honorary Consultants. By this means the men really in the forefront of the profession man the institutions. (What one finds here is the reverse of this, the salaried men being at the top and the House appointees mostly being unpaid).

The honorary staff give their services free to the hospital, and the hospital authorities in return see that none but the deserving poor gain admission into the hospitals. The rich and the persons from non-approved bodies are excluded from the privilege of obtaining medical aid at the hospitals. It is within the personal knowledge of the writer that an Indian student was refused treatment at a London hospital on the ground that if he could pay for his education in a far-off land he could very well afford to pay for his treatment. When they do any teaching work they are paid for it by the hour and when they hold collateral posts in the Universities and colleges they are paid for them.

If we are to have a healthy system of honorary medical service we should have these ideals before us and strive for them. Our country cannot much longer afford to have a costly paid service and to be stable the honorary system should develop along the lines mentioned above. These views have been submitted to the Committee now sitting for their consideration.

Having outlined the general scheme thus far some of the points raised by the "Independent Medical Practitioner" may now be taken up. To take his last point first one would like to ask where his independence exists if he requires of the Government all the items he has enumerated towards the end of his letter? And why does he want free, or any at all periodic post-graduate training if he possessed all the attributes scheduled from 1 to 4 in his letter? Here one may mention, in passing, that post-graduate instruction is always paid for in England and other countries.

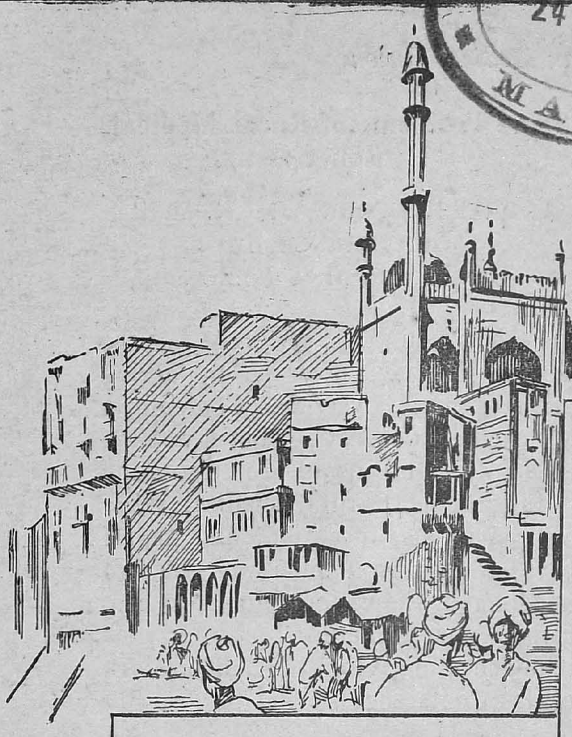
Again he says honorary service should be "untainted by any kind of monetary remuneration—either in the shape of conveyance charges, teaching allowances, etc., etc." One may not quarrel about the conveyance charges, though even in this there is no reason why an honorary officer should not be paid this, particularly if, in a large city, if his sphere of practice is at an inconvenient distance from the hospital to which he is attached. But why should an honorary officer teach honorarily when his salaried colleague gets a "teaching allowance" in a "teaching" post and when the institution he teaches in levies fee from the pupils? Is it on the principle "He that hath shall have more given unto him and he that hath not shall have what he hath taken away?"

Turning to the point regarding the financial stability of a person seeking an honorary post what, in reason, is the justification for this demands? Is it in the nature of a "security" against possible acceptance of fees from hospital patients? If such a security expected from a stipendiary officer? Has a substantial salary invariably proved an adequate safeguard against this in the case of service men? If men in salaried service have, since the inception of the service, gone on making practice inside and outside the hospitals, honourable exceptions, of course admitted, why should such a thing be considered a sin in the case of the honorary man or woman? The evil of it lies not in the acceptance by an officer, honorary or salaried, of fees for service rendered in the precincts of the institutions but in the system which admits of the prince and the pauper to obtain medical aid at the hospitals. Whatever the justification for this there may have been in times long gone by there is none now when all the district headquarters and almost all the taluk headquarters have a respectable number of private practitioners.

This leads one to the question of private practice of paid men in service. Here again when there were only a few medical men in the whole country it had its justification. But not so now. The question of putting the existing men on the same scales of pay as Deputy Collectors, District Munsifs, etc., should be considered and given effect to and they should be prohibited from having any private practice except in a purely consultant capacity in the case of persons of more than 20 years' service.

One need not go into the "Independent Medical Practitioner's" demand for scrutiny into the records of the numbers and variety of cases, etc., as they are too ludicrous to merit serious consideration. Nor need one consider seriously the solicitude expressed by

Two Problems of both town and countryside



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him of the possible insufficiency of honorary service in times of war, etc. If the euphemistically called "civil reserve" of the I. M. S. (a service maintained exclusively for military purposes) fell miserably short of the requirements of the late war why blame the honoraries even afore the fact? This point and the one about the benefits derived from the periodical transfers of stipendiaries really leads one to suspect the 'bona fides' of the "Independent Medical Practitioner."

Lastly where is the necessity for a time bar in the case of the honorary any more than in the case of salaried man? If anything it should be in the latter as then there would be a saving pay and pension. But a time bar on the honorary except a superannuation limit will defeat the object we have in view. Very few would be inclined to come in if such a condition were imposed.

The reforms that are required may be summarised thus:—

1. Stoppage of recruitment to the service altogether.

2. Employment of House Surgeons and Physicians to all the State hospitals from amongst the newly qualified persons on half-yearly and yearly contracts on a salary basis.

3. There is gradual promotion into the rank of Honorary Assistant Surgeons and Physicians and then Surgeons and Physicians.

4. Revision of the rules relating to the admission of the "paying class" of persons into hospitals, whether as in or out patients, and

5. Withdrawal of the privilege of private practice allowed to the stipendiaries now in service except in purely consultant capacity in the case of men of more than 20 years' service.

C. V. KRISHNASWAMI, F.R.C.S.

Some Problems of Rural Medical Relief.

ADDRESS BEFORE THE R. M. P. CONFERENCE BY
Dr. T. KRISHNA MENON.

I thank you most sincerely for the honour you have done me by asking me to preside over this Conference. My excuse for accepting your invitation is simply that I have been interested in the scheme of rural medical relief ever since its inception, and that I have, in my own humble way, tried to understand the various problems concerning your welfare. I pray for your indulgence in giving the deliberations of this Conference.

The scheme of rural medical relief has been in force for nearly a decade now. It was, as you all know, initiated with the two-fold object of rendering medical relief to people in the countryside and to attract medical men to settle down in villages. It need hardly be said that, so far as the numerous villages in our province are concerned, facilities for medical relief are extremely inadequate. For the most part Government hospitals and dispensaries are situated in urban areas, and few people from the villages have the facilities to resort to them. Consequently the majority of the rural population have to be content with what relief is available at the hands of vaidyans and hakims in their midst. I do not, for one moment, contend that it is only what is popularly known as the allopathic system of medicine that offers relief to the afflicted; but I do maintain, from close study and observation, that most of the so-called vaidyans and hakims are ill-versed in their own systems of medicine and hence incapable of doing service up to their pretensions. Besides, there is not that appreciation of scientific medicine amongst our people which is found among their confreres elsewhere. It

is, therefore, something in the nature of pioneering work that the rural medical practitioners have to do, and the work of a pioneer, out to explore new fields or to popularise new causes, is to be assisted in every possible manner so that it may eventuate in success.

Another important point to be remembered is that the scheme of rural medical relief should not be looked upon as a mere outlet for the unemployed medical graduates or licentiates. The primary object should be to provide medical relief in rural areas and not to provide employment to the unemployed or the unemployable. To a considerable extent there has been a confusion of ideas in this respect, and I am not sure that this confusion is not responsible, to some extent at any rate, for the inadequate success of the scheme hitherto. Men who are imbued with a sense of duty and filled with the missionary spirit of disinterested service are the men who ought to be recruited to the scheme ; and it is a mistake to suppose that the scheme can make good in the absence of due insistence on this factor. As it is, it seems to mean that more frequently than not, emphasis is placed on the quantitative, and not the qualitative aspect of the scheme.

It must be recognised at the same time that in a vast country like ours and with limited resources at the disposal of the Government, it will not be possible for them for a long time to come to provide the rural areas with the necessary number of efficient medical relief centres. In the circumstances the project of encouraging medical men to settle down in villages and offer gratuitous treatment to the necessitous poor is one that deserves the generous support of the Government and the public alike. But, however sound and worthy of support the scheme may be, its success will depend upon various other factors as well ; and it is when considering this aspect of the question that we have to lament the lack of certain essentials in order to make the scheme as great a success as it deserves to be.

In the first place, the financial encouragement offered to medical men in charge of rural dispensaries is nothing much to speak of. It is not always safe to count upon one's patriotism and love of fellow-men to operate as inducements enough for shouldering onerous responsibilities. Man, it is true, does not live by bread alone, none-the-less, bread is an essential requisite for man's existence. The meagre subsidy now offered would of course have had some little justification if the villagers were rich enough as a class to pay for medical attention ; but the vast majority of the rural folk live from hand-to-mouth from day to day. And, even if they are so inclined, they have not the means at their command to remunerate the services of these medical men.

To make matters worse, there are several wanton obstacles thrown in the way of the rural practitioner at present. Contentment in a service, both with its financial rewards and prospects, as well and with the environmental circumstances is a necessary element in contributing to its efficiency. Can it be said of the rural medical relief scheme that this condition is being fulfilled? I have already pointed out that on the financial side the rural medical practitioner has grievances, and grievances of a legitimate character, crying for relief.

As regards terms and conditions, of service, they, too, are not happy. Even a casual perusal of the proceedings of earlier conference of your association is sufficient to indicate that yours is not a very happy body. You have various pin-pricks to put up with,

and you have also some very great difficulties to contend against in your career. In matters like leave, travelling allowance, etc., the existing rules are only on the side of harshness. I do not desire to go into details, but I hold the view that in these respects your position ought to be improved considerably.

Again, on several occasions I have heard it from my friends who are in charge of rural dispensaries that they do not get the treatment they deserve, as independent medical men, at the hands of the local bodies under whom they serve. Presidents and members of Local Boards often interfere with your work to your disadvantage, and sometimes in a manner prejudicial to your self-respect. Instances can be quoted in plenty of the denial of even the common courtesy of being heard before being condemned. It also seems to me that on some occasions the presidents put on the air of autocrats and behave towards the rural practitioners as though they are no better than the menials in their employ. This may be due to the fact, in some cases at any rate, of the inadequate knowledge on the part of the president of the significance and implications of the scheme and the place the rural practitioner occupies in it. But I am convinced that in some other instances the presidents misbehave simply because they have some axe of their own to grind, in either case it is the rural medical practitioner who pays the penalty and bears the brunt. This ought not to be. Any effort made by this Conference in order to ensure to the rural practitioners a status and position consistent with their self-respect and personal dignity, will, I am sure, have the hearty support of the disinterested public throughout the province.

Gentlemen, I should like to make one more observation before I close Several rural medical practitioners are living under the apprehension that under the plea of financial stringency their services are likely to be dispensed with at an early date. I do not know what warrant there is for this apprehension, but of one thing I am sure. Certainty of tenure is essential not only for the success of the scheme but also to induce more men to take kindly to it. It should be the duty of the authorities concerned, therefore, to try their utmost to retain to the advantage of the scheme all those who have been enlisted already, and to this end even a little sacrifice of the taxpayers' money will not be grudged in any quarter. And if the worst comes to the worst the authorities should see that when recruitment is started afresh to the service, these men who have sweated and slaved for long must be given preference over all newcomers.

I do not pretend or profess to be conversant with all the problems relating to the scheme of Rural Medical Relief ; I expect, on the other hand, to be enlightened and edified by your deliberations. All that I have to do is to place before you certain observations on a subject of immense interest to the community at large. One thing, I might tell you, " that you cannot achieve the position in the sphere of your activities that you are entitled to, except by organised agitation and you cannot do better than strengthen your association and thereby the hands of your indefatigable secretary". I venture to suggest, however, that a scheme which owes its inception to that great friend of the masses, the late Raja of Panagal, deserves and has a right to all the support and assistance that is possible for the Government and the public to give The national struggle for political freedom, even if it succeeds within the short time visualised by the leaders, will have been undertaken in vain, if at the end of it we see a nation in the grip of

forces that make it afflicted, diseased and distressed. "Sound in body and sound in mind" is a saying applicable not merely to individuals but to nations as well. It behoves us all, therefore, to concentrate attention on and press forward schemes that have for their object the improved health of the people and the greater strength of the nation, and to attain this the first measure ought to be to strengthen the hands of the rural practitioners to whose charge fall the medical care of the masses.

Gentlemen, I thank you once again for having given me the privilege of coming in contact with you all and the opportunity for getting acquainted with your varied and various problems.

Welcome Address.

Dr. Ramasubbu, L.M. & S.,
Secretary, Rural Medical Practitioners Association.

With the greatest pleasure I welcome you to this gathering and thank you most sincerely for your willing and ready response to my invitation I see among you many practitioners of experience, ability and enthusiasm, and with the wise counsel and capable direction of our President of to-day I do hope that ere we leave this hall we should have enough cause to feel immensely satisfied for having met here.

2. Some of you, gentlemen, here and elsewhere, might perhaps be curious to know as to why we had not met earlier, I mean last year or the year before. Let me at once assure you that there has been no wanton lull on the part of any. Our last conference was held on 31st December 1930 three years to the date, the deputation we had then requested for came off on 4th April 1932 and the Government orders thereon were received only about July of the year. We could have met last Christmas, but then it was felt to be too early to assess the actual working and policy of the new taluk boards. I would assure you once again, that we have met at the earliest time possible consistent with events and I would now exhort you to make up for this unavoidable quiesence in our activities by continuous and concerted action on our part in future.

3. Meeting here as we do, after so long a time, *I deem it my duty to tell you* of some of our achievements. As a result of the deputation which was so ably led by our friend Dr. V. Rama Kamath, and at which our resolutions were discussed threadbare Government were pleased to accept our resolutions regarding the choice of the place and person for subsidizing and that with regard to epidemic and festival duties. The maximum limit of 10 days' casual leave at a time has been extended to 15 days; though I am afraid that the conditions for availing of it have been made harsher, while the maximum limit of long leave with a lien on one day's holding has also been clearly deprived. But by far the most important concession to us is the provision in the new agreement that before a President terminates the agreement of a Practitioner, he shall obtain the concurrence of the District Medical Officer or the Principal, Government School of Indian Medicine as the case may be.

This means that the President, Taluk Board, is no more the sole arbiter of our doings, and is in effect a partial compliance with the principle contained in resolution B. III of our first conference. I for one would, however, still urge for the acceptance of the entire resolution, as I feel firmly that the President, Taluk Board, and the District Medical Officer are too near us, to be dispassionate in their decisions. Our thanks, however, are due to Government for these, and I take this

opportunity of publicly thanking them on your behalf.

4. I do not, however, wish you to go away with the impression that all is well with us. The scheme we have the honour to work was well conceived, but after a period of full nine years, it strikes me that we are fast losing ground. We are gradually moving from the position of an *independent* practitioner to that of an *indentured* individual bound to acquiesce in any restraint placed on us or do any duty assigned to us and one cannot say what exactly our future would be. The independent individual in us is ignored and prominence is given to an institution which for the most part is non-existent and which if ever it exists, does so in the majority of cases only in our premises, and disappears when we are away. The terms "rural medical practitioner" and "rural dispensary" are misnomers; we are not more rural than those in charge of some of the regular Local Fund dispensaries in the interior of districts G O. No. 1522, P.H., dated 22nd October 1924, inaugurating the scheme clearly defined the objectives of the Government as the "encouragement by the grant of money subsidies, and supply of medicines from public funds." Our position was thus meant to be more or less analogous to owners, or managers of the educational institutions of a similar category. But if you would just remember that we are not to be addressed as private practitioners, nor allowed to name our dispensary as we like, nor purchase our requirements from the place we choose, to equip ourselves in the manner we like, nor allowed the power of appointing our assistants and servants, in cases where the taluk boards defray the cost thereof—you will realise how vastly different our position is from them. The withdrawal from us of the power of appointing the midwife is our serious loss in principle. It is anomalous that without giving us such power, Government should direct us to provide the midwife with her requirement—except her outfit—for use outside our residences, from the stock of medicines supplied to us by the taluk board for use at our residences, rather than make her requisites a separate charge on the fianaces of the board. We are also saddled with the supervision of her work, and scrutiny of her pay-bills. On the principle that as independent practitioners, we should have complete liberty in the equipment and internal administration of our dispensaries we should either request for the restoration of the power, or be relieved from the responsibility of supplying her requisites, supervising her work, or scrutinising her pay-bill.

5. Some of you would probably feel inclined to think there is nothing very much in a name, and that we need not clamour for power over any individual. I would fain agree with you provided our other privileges as private practitioners are vouchsafed unto us You need no telling that in the matter of the hours of the work, freedom of locomotion for private practice, supply of drugs, conditions for availing of casual leave, and assignments of duties for us we fare no better than medical men in service and probably worse. We are not full-timed servants, and yet we are told that we should not ordinarily leave our dispensaries during the usual working hours; that we can do so, however, when called to attend on emergent cases provided we record in writing the nature of the case we are called on to treat, the hour of departure and hour of return. The Surgeon-General requires that even small absences from our headquarters, say for half a dozen hours in the afternoons of a day, for the purpose of attending magisterial court as witness, should be reported to the President, Taluk Board, and

District Medical Officer though we are assured that such absence would not count as casual leave. Some District Medical Officers I am told, requires the subsidized practitioners in their area to attend to the poor in the mornings as well as in the evenings. We are not living in urban areas, with automobiles and jutkas—not to speak of aeroplanes—that would take us to the residences of our patients and drop us back at our doors, all within a couple of hours. Rickety roads, airy cart-tracks, and bottomless bandies are our portions in life and it can be imagined what time and scope we will have for private practice amid such restrictions, and yet Government say that our subsidy has been fixed purposely low, so low as to induce us to exert ourselves to the utmost to earn a decent income from private practice.

6. Again, the rules regarding the supply of drugs and instruments are not very advantageous to us. We are only assured a supply of drugs to a value of not less than Rs. 360 a year but Government would not accept our request that drugs should be supplied to us proportionate to the attendance which exceeds 50 a day. They hope, however, that the taluk boards would do so without any direction from them. I should say that a good many of the taluk boards do supply drugs proportionate to the increased attendance but my quarrel is with those who do not or would not. The same is the case with regard to the supply of instruments. No extra provision is made for the purchase of new instruments or replacement of old and worn out ones. We are however told that there is no objection to the inclusion in the indent of instruments or drugs other than those mentioned in G. O. No. 761, P H., dated 7th April 1925, which in the opinion of the District Medical Officer are quite necessary and provided the total cost of the indent for the year does not exceed Rs. 360. Words 'does not exceed' here and compare them with 'not less than' in clause 7 of the agreement, Imagine the position of a practitioner ill-equipped and supplied with insufficient medicines, obliged to refuse treatment to the poor for such reasons. He will not only be dubbed as inefficient, discourteous and negligent but will also be guilty of technical breach of clause 3 of the agreement though happily the latter accusation cannot stand in view of the insertion at my request in clause of the saving phrase 'from the stock of medicines supplied to him at the cost of taluk board.' The medicines supplied to us are said to be our property, but yet we are obliged to maintain accounts of their supply and issue. As regards the possession by us, of morphia and other excepted drugs, we are deprived of the privilege of stocking by an order of the Commissioner of Excise in common with another private practitioners such drugs without a license in the minimum quantities admissible other than those supplied to us at public cost, though we derive no benefit from the possession of the latter, and which are not even sufficient in many cases to satisfy the needs of the necessitous poor.

7. Some other restrictions are also sought to be imposed on us. Presidents of some Tuluk Boards prohibit the practitioners from granting certificates of ill-health to taluk-board employees except on a requisition, while some District Medical Officers restrain the practitioners that they should not ordinarily detain police constables for treatment for more than a week nor recommend them leave. There will be indigent as well as non-indigent among them, and treatment of the latter, as well as certificate private practice are outside the purview of our board. I do however concede that the police are semi-military people and might perhaps require some such restriction, but that object may be

achieved by restraining the police from going over to us rather than fattering us. There won't be too much of a loss to us because of this restraint, but my objection to it is on principle as it is an encroachment into our rights of private practice.

8. In the matter of our responsibilities during epidemics and festivals I would like you to note the gradual transition in our position. In October 1927 Government laid down that cholera or plague inoculation work is not part of the ordinary duties of the rural practitioner. This led to G.O. No. 1688, P.H. of 1929, laying down that a subsidized practitioner cannot be compelled to do the work but that his services can be utilised if he is willing on a daily remuneration of Rs. 5. But in 1932, the question of our co-operation in the matter with the Health Department has become a question of must. Nobody should or would refuse his services in such cases and as such I suggested to Government that we might be allowed to take the initiative during epidemics provided Government assured us the remuneration. This was not accepted. Government would have our service only at the bidding of their officer.

9. I now come to a more important subject—to wit treatment of cases of leprosy. I welcome and I daresay all of you will welcome as members of a noble fraternity how to alleviate suffering the intensive complaint against the scourge. I am proud to tell you that in Salem District, one of our subsidised practitioners is attracting an attendance of as many as 250 leprous patients per treatment day, the record maximum in the district at any one clinic, while many of us deal with 30 to 40 while Government expect that each one of us would have to treat about 50 non-leprous patients every day; while many of us are treating daily twice and even thrice that number, the leprosy work is being felt as too much of a strain especially by those who do not have an intelligent assistant. On this subject I had an interview with the Surgeon-General on 1st November 1932 and wrote to him in April 1933. His view is that if facilities by way of medicines and equipment, a shed for leprosy patients and contingent expenses are provided for treatment of cases of leprosy at the rural dispensary by the Presidents of the Taluk Boards concerned, the subsidized medical practitioners of rural dispensaries should treat patients suffering from leprosy also. The question of appointment of menial staff to assist the subsidized medical practitioners in leprosy work can be considered only when the number of cases of leprosy for treatment at the leprosy clinic attached to rural dispensaries reaches such a stage that the subsidized rural medical practitioners cannot manage the work themselves.

As regards remuneration, the subsidized rural practitioner cannot claim it as a matter of right, but the taluk boards may consider the desirability of sanctioning some remuneration on the lines and at the rates sanctioned by the Salem District Board. No exception can be taken to this view save as to remuneration. It would be alright if we are to treat a handful of leprosy cases on odd days in the year, but to be asked to deal with a crowd of 30 or 40 not to speak of 250 I referred to 8 times a month and to be told that remuneration cannot be claimed as a matter of right just smacks of the pound of flesh theory. We should however be thankful to the Surgeon-General for his countenancing the payment of and to the Salem District Board, and the District Council for Leper Relief Work, South Arcot, for their paying to subsidized practitioners an extra remuneration *albiet* it is small

WHAT OTHERS THINK.

Effective organisation alone can enable a profession to make its voice felt, and we are glad that the non-service medical men of South India are fully aware of it.

We hope that ere long EVERY private Medical Practitioner will join the ranks of the Union, and make it the efficient and effective organisation it ought to be.

Modern Weekly, Madras.

Herein the Surgeon-General has really made a distinction between us and medical men in service, as he has definitely refused the payment of an extra remuneration to the latter. But in the matter of charging fees from non-indigent persons suffering from leprosy Surgeon-General has been rather hard on us and placed us on a par with service men. In his letter to the District Medical Officer, Salem, the Surgeon-General says that until patients come forward readily for treatment at leprosy clinics non-indigent patients attending a leprosy clinic attached to a Government, Municipal, or Local Fund medical institution (including subsidized rural dispensaries) need not be charged for treatment at leprosy clinics should and treatment be given free to all patients irrespective of the fact whether they are rich or poor. This is clearly against clause 3 of the agreement, and it behoves us to request for its immediate withdrawal.

10. But by far the most unkindest cut to us is in the matter of leave rules in vogue at present. In 1925, we were told that we were neither Government nor Local Fund servants and that we may avail of casual leave for sufficient reasons, provided we intimate to the President, Taluk Board, or District Medical Officer both before proceeding on and after return from leave. But now simply because a few practitioners here or there were negligent in their duties or did not observe the rules closely, Government have chosen to penalize the whole lot of us by making it incumbent upon us to obtain the previous permission of the President, Taluk Board, before proceeding on leave. The position has thus entirely changed and we are now at the mercy of the President, Taluk Board. The new rules are not only subversive of our status, but are difficult to follow rigidly. If a practitioner does not want to lose any portion of his subsidy, he will have to limit his stay from headquarters to the 15 day allotted and so utilise it only for essential and emergent occasions and even if he does, and sends in his leave report well in advance, experience has shown that one does not get the reply in time, and so another letter intimating the fact of proceeding from headquarters in anticipation of permission is invariably necessary and the fact reported to the District Medical Officer. The reason is obvious. The President, Taluk Board, is a non-official with diverse interests to look after and one not attending office daily. The leave report along with his other tapals is sent to his place with some delay and the same delay occurs to his reply—I must also tell you that some Presidents refuse part or whole of the leave asked for, an action in excess of their powers. Termination of the practitioners agreement is not an improbable contingency, on the ground of alleged failure on the part of the practitioners to observe the leave rules or disobedience of orders in cases where the President, Taluk Board, is one not favourably disposed towards the individual. I wrote to the Surgeon-General about this, suggesting the desirability of applying the old rules to all, and imposing restrictions on errant and negligent practitioners. But this was not accepted.

11. Gentlemen, these are some of the points I wish to draw your attention to. The policy and attitude of the authorities is gradually changing. In fact a high government official once said that we have come to be regarded as the fifth service of the department. Time was when we had to complain against the local authorities for non-adherence or non-observance of the rules,—but now, the authorities more highly placed seem to go back on the rules promulgated by them. The position looks like this whenever we want to be shown any privileges or rights as pertaining to an independent practitioner we are told

by the authorities ' Look here, you are not quite independent as you seem to think; your position in the villages you owe largely to us and so you should not ask for these, but submit yourselves to any restrictions we place upon you, and do any duty assigned.' But if we ask for any of the amenities enjoyed by men in service the answer is equally prompt and pointed, ' you have been assigned an independent status and can't justifiably ask for them.'

12. Gentlemen, I have almost finished. But, before resuming my seat I wish to turn the mirror towards us for a minute just to show you wherein we are at fault, what we are lacking in, and what we ought to do. I have been the Secretary for well nigh 7 years and I know more about us than many of you. Believe me when I say, that there is a lot of loose thinking and confusion on the part of many of us about our rights, responsibilities, privileges and duties, while some of us are indifferent, irresponsible and negligent, many seem to think that we would have gained all if we got a few rupees, chairs and stools, an attender or thotti at taluk board cost. Please do not misconstrue me, as being against getting these, but my concern is that they may be had without compromise of principles or position, we should be treated as pucca private practitioners. No restrictions, or additional duties improsed upon us, and every freedom should be given to us in the equipment and internal management of our dispensaries. I should also plead for some more co-operation amongst ourselves and the immediate formation of a district and taluk association in every district. They are long overdue.

13. Gentlemen, I am however, not desperate or diffident. I am an optimist of the robust type firmly believing in persuasion and action of a concerted type with faith in God, self-realisation, and self-reliance. And so I will invite you to put your heart to the task and do what is just and necessary. Trust in God and do the right should be our motto and may God grant that with the able guidance of our revered President; we pass suitable resolutions and that our efforts are crowned with success. Once again, I thank you gentlemen, for your kindness in coming over here, and listening to me patiently.

CONFERENCES.

Rural Medical Practitioners.

The Fourth Provincial Conference of the Subsidized Medical Practitioners of the Madras Presidency was held on 31st December 1933 at 11 a.m. at the "Gana Mandir," No. 10, Thambu Chetty Street, G. T., Madras. A number of subsidized practitioners including L.I.Ms., subsidized under the scheme, were present. Among the distinguished visitors, were Drs. U. Rama Rao and V. Rama Kamath. After the reading of the Welcome Address by Dr. Ramasubbu, L.M. & S., the Provincial Secretary of the Madras Provincial Subsidized (Rural) Medical Practitioners' Association, Dr. U. Rama Rau proposed Dr. T. Krishna Menon, M.B.C.M., M.R.C.S., L.R.C.P., Hony. Physician, General Hospital, Madras, and Member, Madras Medical Council, to the chair. This was seconded by Dr. Ramasubbu and approved by all present. Dr. Krishna Menon occupied the chair and delivered his presidential address. The house then formed a Subjects Committee to discuss the resolutions given notice of. After the Subjects Committee meeting, the Conference resumed its deliberations and passed the following resolutions. The conference ended with a vote of thanks to the President and others.

Resolutions passed at the Fourth Provincial Conference of the Subsidized Medical Practitioners of the Madras Presidency held at Madras on 31st December 1933.

1. This conference reiterates its request to the Government that the working of the scheme for the subsidized rural medical relief be transferred to a District Medical Council as suggested in Resolution No. 3 of the third conference. Proposed by Dr. Ramasubbu of Viraganur (Salem District), seconded by Dr. R. Viswanathan of Koradacherry (Tanjore District) and carried unanimously.

2. This conference respectfully requests the Government to direct that the terms "subsidized rural medical practitioner" and "rural dispensary" be deleted from all public records and that the practitioner be permitted to name his place of work in any suitable way not inconsistent with the scheme, mention being made in the sign board that the necessitous poor will be treated free, and to amend clause 4 of G. O. No. 37, P. H., dated 5th January 1933, consistent with this request. Proposed by Dr. Rangaswamy of Avalurpet (South Arcot District), seconded by Dr. Rama Rau of Gollapalle (Kistna District) and carried unanimously.

3. This conference requests the Government that the words "after obtaining the previous permission of the Government" be inserted after the words "financial stringency" in clause 11 of G. O. No. 37, P. H., dated 5th January 1933. Proposed by Dr. Krishnaswamy of Vilakudi (Tanjore District), seconded by Dr. Lourdes of Kunnathur (Chingleput District) and carried unanimously.

4. (*a*) This conference requests the Government to amend clause 7 of G. O. No. 37, P. H., dated 5th January 1933, by adding after the words "not less than" the words "and that in cases where the practitioner treats on an average of more than 30 patients a day the Board shall also supply him the medicines proportionate to the extra attendance."

(*b*) This conference also requests that the practitioner be not required to maintain the register showing the supply and issue of the drugs supplied. Proposed by Dr. C. S. Ananthakrishnan of Pennagaram (Salem District), seconded by Dr. K. Vittal Doss Pai of Pallavaram (Chingleput District) and carried unanimously.

5. This conference requests the Government to delete the words "for such period as may be agreed upon between the parties hereto which the practitioner has agreed to do" occurring in the preamble to the agreement after the words "date of his arrival there and thereafter." Proposed by Dr. Venugopal Naidu of Velanganni (Tanjore District), seconded by Dr. Krishnaswamy of Vilakudi (Tanjore District) and carried unanimously.

6. This conference reiterates its request that the power of appointing and controlling the duties of the midwife be restored to the practitioner. Proposed by Dr. V. Seshagiri Rau of Kadaladi (North Arcot District), seconded by Dr. Ramanathan of Kaveripakkam (North Arcot District) and carried unanimously.

7. This conference requests the Government that except in cases where there is a Sub-Treasury at the place of a practitioner the Government subsidy be drawn by the District Medical Officer from the District Treasury and remitted to the practitioner at Government's cost. Proposed by Dr. B. K. Shenoy of Acharapakkam (Chingleput District), seconded by Dr. Vital Doss Pai of Pallavaram and carried unanimously.

8. This conference requests the Government to provide in the agreement that the practitioner shall ordinarily be in his place of work to attend to the necessitous poor only in the mornings. Proposed by Dr. K Vittal Doss Pai of Pallavaram (Chingleput District), seconded by Dr. B. K. Shenoy of Acharapakkam and carried unanimously.

9. (*a*) This conference requests the Government to permit a practitioner to absent himself without loss of subsidy from his village for an aggregate of 30 days in the year inclusive of Sundays and recognised holidays either at one single time or on a number of occasions according to his requirements, that the previous permission of the President, Taluk Board, be not insisted upon and that the procedure laid down in G.O. No. 1701, P.H. of 1925, shall generally be observed by the practitioner to such absence.

(*b*) This conference also requests that where a practitioner is obliged to be absent from his station for a total period of more than 30 days in a calendar year, deduction of subsidy shall be made only for days over and above the 30 days irrespective of the fact whether such absence was at one single time or on many occasions. Proposed by Dr. Ramasubbu of Viraganur (Salem District), seconded by Dr. K. N. Rathnam of Karvetnagar (Chittoor District) and carried unanimously.

10. (*a*) This conference requests the Government to direct that a practitioner required to treat cases of leprosy be given a separate minimum remuneration of Rs. 10 every month and an additional remuneration of as. 4 per average patient treated during the month over and above 20 in addition to separate accommodation, necessary medicines, equipment, and contingent charges.

(*b*) and that pending the provision of separate accommodation the treatment of cases of leprosy be not made upon the practitioner obligatory. Proposed by Dr. Vittal Doss Pai of Pallavaram (Chingleput District), seconded by Dr. P. Lourdes of Kunnathur (Chingleput District) and carried unanimously.

11. This conference respectfully submits that the Circular of the Surgeon-General to the District Medical Officer, Salem, regarding the charging of fees by subsidized practitioners for the treatment of non-indigent patients suffering from leprosy is against clause 3 of the agreement and therefore requests the Surgeon-General to withdraw the Circular. Proposed by Dr. Ramasubbu of Viraganur (Salem District), seconded by Dr. Anantha Krishnan of Pennagaram (Salem District) and carried unanimously.

12. This conference reiterates its request that a practitioner be allowed a batta of Re. 1 per day and an allowance of as. 4 per mile for journey by road and second class fare by train while attending Courts as witness or travelling on other official duties. Proposed by Dr. K. N. Rathnam of Karvetnagar (Chittoor District), seconded by Dr. Ramanathan of Kaveripakkam (North Arcot District) and carried unanimously.

13. This conference requests the Government that absence of the practitioner from his station on Court or other official duties be considered as absence on duty. Proposed by Dr. Seshagiri Rao of Kadaladi (North Arcot District), seconded by Dr. Rathnam of Karvetnagar (Chittoor District) and carried unanimously.

14. (*a*) This conference request the Government to remove the maximum limit of daily remuneration admissible

to a practitioner for inoculation work and make it depend upon the number inoculated in a day.

(*b*) And also to raise the minimum daily remuneration therefor from Re. 1 to Rs. 2. Proposed by Dr. Venugopal Naidu of Velanganni (Tanjore District) and seconded by Dr. Rangaswamy of Avalurpet (South Arcot District).

15. This conference represents to the Government that on account of the present economic condition not only has the subsidized practitioners, income from private practice gone down, but also the extra subsidy paid to him from Taluk Board funds in many cases has either been curtailed or completely withheld and therefore requests the Government to kindly enhance the practitioners' subsidy from Provincial funds. Proposed by Dr. Ramasubbu of Viraganur (Salem District), seconded by Dr. Visvanathan of Koradacherry and carried unanimously.

16. This conference once again requests the Government to appoint a Committee as suggested in resolution 1 of the third conference to reorganise the subsidized rural medical relief scheme. Proposed by Dr. Ramasubbu of Viraganur (Salem District), seconded by Dr. B. K. Shenoy of Acharapakkam and carried unanimously.

All-India Medical Conference.

The All-India Medical Conference opened its tenth annual session at Parel, on the afternoon of 26th December under the presidentship of Dr. Ansari. Over 150 delegates have gathered to participate in the deliberations.

Dr. Deshmukh, Chairman of the Reception Committee, in his welcome address, referring to the Indian Medical Council Bill, said that it was passed in a hurry by an Assembly ignorant of medical matters. As regards the Indian Medical Service Dr. Deshmukh observed " It is a very old service ; but here is another institution with a senile outlook, which refuses to acknowledge the birthright of modern medical India. Although started as a military service, it must grab and keep hold of as many civil appointments as it can in this country, in spite of the growth of a competent medical profession."

Regarding the high standard of the present medical education in the country, he thought it was entirely due to the independent medical profession. In conclusion, he observed, " The responsibility for improving the condition of our people rests with us. May our self-reliance ever grow, and the strength of our unity be utilised in the cause of our motherland."

Several resolutions touching the medical profession were adopted.

The Conference resolved that a scheme of National Health Insurance on lines similar to that in the West be drawn up.

The Conference urged the authorities controlling hospitals in India to alter the existing system, with a view to securing free treatment only for the poor and the levy of charges on those who are able to pay.

The Conference condemned the Indian Medical Council Act, 1933, as it does not satisfy the demands of the profession, and stressed that unless the Act is radically altered, it would remain unacceptable to the profession.

By another resolution an increase in the number of elected members, both graduates and licentiates, on the Provincial Medical Councils, was demanded.

The next resolution demanded that no members of the Indian Medical Service, a purely military service, should be employed on the civil side.

The views expressed in the memorandum of the British Medical Association and in the evidence before the Joint Parliamentary Committee by members of the Indian Medical Service were condemned by the Conference as "misleading, unwarranted by facts, dictated by self-interest and prompted by a narrow racial bias."

The sixth resolution recommended that open competitive examinations for recruitment to the Indian Medical Service, should be immediately resumed, and held only in India.

The next resolution approved of the main recommendations of the Drugs Enquiry Committee in regard to the establishment of schools of pharmacy in every province in India.

The last resolution approved of birth-control, and the education of the public in the interest of the health of the women of India.

MEDICAL EXHIBITION.

A Medical and Scientific Exhibition organised under the joint auspices of the All-India Medical Conference and the All-India Medical Licentiates Conference, was opened by Dr. Javle, Mayor of Bombay.

Dr. Javle, in a short speech, regretted that the Government were neglecting Medical Education. He appealed to the audience to encourage pharmacuetical work in India.

The visitors display a keen interest in the exhibits.

Medical Licentiates' Conference.

The Twenty-sixth Conference of the All-India Medical Licentiates' Association opened its session on the 24th December at Parel.

Dr. B. C. Roy arrived in Bombay this morning, and was accorded a warm welcome by the Reception Committee. Delegates from all parts of India gathered to participate in the deliberations of the Conference.

Dr. Narayan Rao, Chairman of the Reception Committee, in his welcome address stressed the necessity for concerted action on the part of Medical licentiates to have their grievances redressed.

Dr. Roy, in his presidential address, appealed for the establishment of a medical brotherhood in the country. He said that India needed a larger supply of fully trained doctors, so that medical aid might be available to the poorer people in the villages. Deprecating the present tendency to congregate in the urban areas, he suggested that a board of experts should determine the minimum standard of qualifications of a practitioner who could be entrusted with Indian lives.

Referring to the All-India Medical Council Act, Dr. Roy deplored that under this Act the medical licentiates did not receive full recognition. The terms of the Act were vague, and the scheme of reciprocity adumbrated in it was unsatisfactory. He pleaded for increased representation of the licentiates on the Provincial Medical Councils.

Dr. Roy pointed out the urgent need of training Indian women as nurses and thought that immediate steps must be taken for establishment of schools for Indian nurses.

In conclusion, the President said that for the purpose of abolishing the existing watertight compartments in the profession, all Medical Associations should either amalgamate or work in complete harmony and understanding.

RESOLUTIONS PASSED.

The twenty-sixth session of the All-India Medical Licentiates' Conference which commenced on Saturday, came to a close to-day, after adopting a number of resolutions.

A resolution regretted that licentiates had not yet been recognised by the Indian Medical Council and requested the latter to accord them its recognition at an early date.

The Conference further resolved that representation of licentiates on the Provincial Medical Councils should be increased and that election to the different Provincial Councils should be run on the basis of joint electorates.

The Conference requested the Standing Committee of the All-India Medical Licentiates' Association to explore all means of presenting a united front by identifying that body with the Indian Medical Association, while maintaining the integrity of the Licentiates' organisation at the same time.

The Conference requested the Government to open institutions for training Indian nurses and compounders.

The Ophthalmological Conference.

RESOLUTIONS PASSED.

Resolutions urging the Universities and Medical faculities issuing degrees and displomas in Medicine and Surgery to make rules for compulsory training in ophthalmology, with a separate examination in the M. B. Examination and also make compulsory questions in Ophthalmology in the examination paper on Surgery for Licentiate examinations and suggesting to the Government to make rules prescribing compulsory examination of eyes and the production of certificate of good vision before licences are issued to drivers of public motor vehicles, were adopted at the concluding session of the All-India Ophthalmological Conference at Calcutta, Lt.-Col. J. N. Duggan presiding.

Third L. I. M. Conference.

The General Secretary, Third L.I.M. Conference, Madras, writes :—

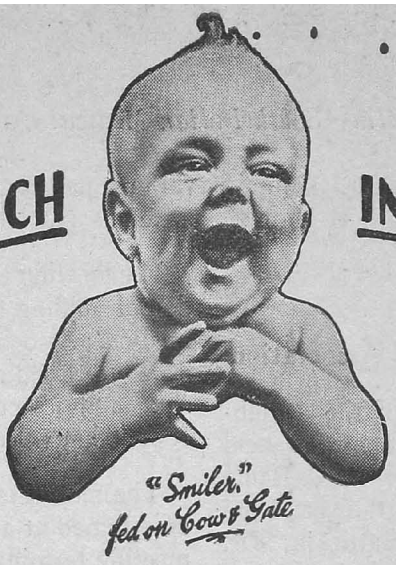
The Third L. I. M. Conference and exhibition will be opened on 29th December 1933 by Sir C. P. Ramaswami Aiyar, K.C.I.E. The Conference will be presided over by Dr. Syed Tajudin Sahib Bahadur, M. L. C. L. I. Ms. are requested to attend the conference in large numbers. In the session of the conference there will be a discussion on the second day on the subject of the Registration of Indian Medical Practitioners (G. O. No. 231 P.H., dated February 1, 1933). During this discussion opportunity will be given also to practitioners of indigenous systems of medicine other than L.I.Ms. to represent their viewpoint on the matter. They are therefore invited to attend the conference and take part in the discussion. They will however be treated as non-delegates.

ASSOCIATIONS.

Salem District Medical Association.

A meeting of the Salem District Medical Association was held in the premises of the Government Headquarter Hospital, when Lt.-Col. N. K. Bal, District Medical Officer, presided. A large number of members were present both from the town and the taluks. Dr. P. S. Ramaswami Aiyer, Medical Practitioner, Salem, spoke upon "Electricty in Therapeutics with special reference to the treatment of Gonococcal infection by Diathermy."

NATURALLY RICH IN VITAMIN "D"



"Smiler" fed on Cow & Gate

TUBERCULOSIS IN CHILDHOOD

" Abdominal tuberculosis is one of the commonest forms of tubercular infection in children . . . . The infection is generally bovine through contaminated milk . . . ." (" The Antiseptic," October, 1929.)

" Examination of carcasses of animals slaughtered in certain places, e.g. Ferozepur and Lahore, has revealed the existence of tuberculous lesions in 16 and 16 per cent. of animals examined—an incidence much higher than what has hitherto been found . . . . and it is probable that a systematic and a thorough examination may reveal a still higher incidence of infection." (Soparker " Indian Journal of Medical Research," October, 1929.)

The danger of tuberculous milk to young children cannot be overstated, and this high percentage of infection amongst cattle in India definitely places milk beyond the pale of safety.

Processes such as pasteurization, sterilisation and evaporation give a certain degree of safety but have their limitations so far as the feeding of Infants is concerned, particularly in view of their disturbing influence on the mineral and vitamin content of milk.

The bacteriological sterilisation of Milk is assured by the Cow & Gate Improved Roller Process, which also combines a maximum preservation of the vitamin with a minimum disturbance of the mineral salts.

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Dr. S. Ramaswami Nadar, Municipal Health Officer, was 'At Home' to the members.

Rajahmundry Medical Association.

The annual meeting of the Rajahmundry Medical Association was held in the dispensary of Dr. S. V. Rama Rao. Office-bearers for the year 1934 were elected. Dr. C. Sattiraju, Dr. Brahmanandam and Dr. P. Gurumurti were elected President, Secretary and Treasurer of the Association, respectively.

Godavari Medical Association.

The monthly session of the Godavari District Medical Association was held at Ramachandrapuram in the premises of the National High School on the 9th December commencing at 4 p.m. Fifty-two members representing various centres in the district attended the meeting. In the unavoidable absence of Major T. S. Sastri, I. M. S., District Medical Officer, permanent President of the Association, Dr. S. L. Somayazulu, L. M. S., Civil Assistant Surgeon, Ramachandrapuram, presided. The moffusil members of the Ramachandrapuram Taluk were 'at home' to the members of the Association before the meeting began.

Dr. T. Kanakaraju, L. M. S., of Ramachandrapuram, exhibited a suspected case of gigantism in a child of ten months due to pituatory disease. He also exhibited two cases of spinal anaesthesia. Dr. V. C. Kamaraju, L.M.S., of Cocanada then addressed the meeting about a case of groin focul fistula as the result of a cancer in the bowel. Next Dr. S. L. Somayazulu read a paper on "sinuses and their treatment" and Dr. T. Chelapathi Rao followed with a paper on "Midwifery Forceps." There was a lively discussion on the various paper in which a number of members participated.

The meeting then discussed the question of holding the anniversary of the Medical Association and decided to have it at Cocanada on 6th January next and a tentative programme in connection with the same was drafted.

The members of Association were entertained at a dinner after which the meeting terminated.

A BENEFIT PERFORMANCE.

In aid of the District Board Club to be inaugurated at Cocanada, the Andhra Seva Sangham Dramatic Troupe, Cocanada, put on board the drama of "Khilji Rajya Pathanamu" or the "Fall of the Khilji Dynasty" in the Ramachandrapuram Cinema hall on 9th instant. There was a large attendance and all the actors acquitted themselves very creditably.

South Kanara District Medical Association.

The South Kanara District Medical Association met in the Wenlock Hospital with Dr. M. Shiva Rao, its President, in the chair. Dr. K. G. T Menon, the District Medical Officer, demonstrated some seven cases of disease and their treatment. At the end of the demonstrations there was a discussion and the members took part, and each gave his experiences of interesting cases. The meeting came to a close with a vote of thanks by Dr. K. R. Kini, the Secretary, to the lecturer and the President.

Students' Association, Rayapuram Medical School.

The inaugural meeting of the Rayapuram Medical School Union for the current academic year was held on

Monday, the 13th November 1933 in the Bryson School, Government Rayapuram Hospital, Dr. T. Krishna Menon presiding. Dr. H. Parameswaran, delivered the inaugural address on " X-Rays and their application."

In the course of his lecture Dr. Parameswaran dwelt upon the factors which brought about the discovery and development of the Rœntgen rays, and the contribution of X-Rays to science. With the aid of numerous lantern slides, the lecturer pointed out the various uses of X-Rays, especially as applied to medicine and allied subjects. He explained how in Chemistry these rays helped to precisely fix the nature of the structure of the atom; in Osteology the defects in bones; in military surgery, the nature of the embeded sharpnel pieces and bullets and other foreign bodies in the human system; in surgery the location of the foreign bodies; and in medicine, the nature of disease in the stomach and intestines revealed by a bismuth meal and the diagnosis of the early changes in the tuberculosis of the lungs and joints. Other aspects of interest were how the customs authorities found X-Rays a useful adjunct in the detection of smuggling; how the authorities detected fatal flaws in the construction of aeroplanes and allied military products; how commercially it had made possible the detection of genuine and false precious stones, and the detection of inferiorly finished products from superiorly finished products like golf balls, boiled plates, wire cables, etc.

The chairman in a few sentences dwelt upon the close relationship that existed between the development of X-Rays and the progress of the medical science.

With a vote of thanks to the lecturer, the Chairman and the President, he meeting came to a close.

Medical Association, Coimbatore.

The annual dinner of the Coimbatore Medical Association was held in the premises of the New Block of the Moses Gnanabharanam Eye Hospital at 8 p. m. on Thursday the 4th December 1933. After Dinner, Dr. Sangameswara Iyer was proposed to the chair and the report for the concluding year was read by the Secretary Dr. S. Gurupatham and adopted. New officers for the coming year were elected.

President.

Dr. C. N. Anantaranga Rao.

Vice-President.

Dr. N. Pratap.

Secretary.

Dr. Gurupatham (re-elected).

Assistant Secretary.

Dr. N. Velappan.

Management: Committee Members.

Dr. L. Seshadrinathan.

„ R. Sundararajan.

„ Sangameswaran.

„ K. Narayanan.

The newly-elected President Dr. Anantaranga Rao thanked the members for the honour done to him and discoursed on his long experience with the medical profession and gave a few words of advice to the young members.

Dr. Sundararajan then put forth a few suggestions for the better working of the Association in the coming years.

A sum of Rs. 55 was subscribed by the members to Mahatma Gandhi's Anti-untouchability Fund to be presented to him on the occasion of his visit to Coimbatore in January next.

After the vote of thanks being proposed by the Secretary, there was light music by Dr. Sundararajan and the gathering dispersed at 10 p m. after a pleasant evening.

GOVERNMENT ORDERS.

G. O. No. 2156, P. H.

No. 1322.

The Surgeon-General reports that the use of the term 'allopathic' to distinguish institutions of Western Medicine (*i. e.*, Modern medicine) is objectionable and inappropriate. The Government have therefore decided that the term should not be used in the above sense in official correspondence.

2. The terms 'hospitals' and 'dispensaries' when used without any qualifying epithet indicating the system of medicine in vogue should be taken to refer only to institutions of Western Medicine. If institutions of any other system of medicine are to be referred to, the necessary qualifying words should be used, *e. g.*, Ayurvedic hospitals or dispensaries, Siddha hospitals or dispensaries, Homeopathic hospitals, etc.

3. The term 'rural dispensaries' as used at present in official correspondence refers only to the dispensaries started under the scheme sanctioned in G. O. No. 1522, P. H, dated the 22nd October 1924. The Government have decided that the term should continue to be used in the above sense. The term when used without any qualifying epithets such as Ayurveda or Siddha will refer only to Institutions of Western Medicine. If institutions of any other system of medicine are to be referred to, the necessary qualifying words will be used, *e.g.*, rural Ayurvedic dispensaries, rural Siddha dispensaries, etc. If such institutions (whether of Western Medicine or Indian Medicine) are subsidized by the Government, they should be referred to as 'subsidized rural dispensaries' and the words Ayurvedic, Unani, etc., as the case may be should be added if the institutions are not of Western Medicine. If the word 'subsidized' is not used the institution should be regarded as one, the cost of which is entirely met from local funds.

4. A regular dispensary is one in which a whole-time medical officer is employed. The term 'dispensary' when used without the addition of the word 'rural' will mean only a regular dispensary.

5. The term 'rural dispensaries' is used in Schedule V to the Madras Local Boards Act, 1920, to refer to dispensaries opened and maintained by Panchayat Boards. The Government consider that such dispensaries should properly be described as Panchayat dispensaries in view of the orders in paragraph 3 above. Steps will be taken to amend Schedule V to the Act suitably in this regard.

Practitioners of Indian medicine.

QUALIFICATION FOR APPOINTMENT IN GOVERNMENT INSTITUTIONS.

Government have passed orders directing that in future, except with the special sanction of the Government, no one other than a practitioner of Indian medicine whose qualifications denote at least a minimum standard of professional training for undertaking medical, surgical (including obstetrical) and medico-legal work, shall be competent to hold any appointment in any institutions of Indian medicine maintained or aided by the Government or a local body or both.

BULLETIN
OF THE
SOUTH INDIAN MEDICAL ASSOCIATION.

JANUARY 1934.

Post Operative Pulmonary Complications.*

By M. Krishnamurthi, M.B. B.S.,
Hony. Anaesthetist, Government Royapuram Hospital, Madras.

Pulmonary complications following surgical procedures are of great interest to surgeons and anaesthetists alike as they have always existed as a very real problem in the post operative management of the surgical patient. The incidence of these complications has been reported variously by different observers. Eliason and McLaughlin found pulmonary complications in 1·5 to 3·5 per cent. of all post operative cases with a resultant general mortality of 0·4 to 0·7 per cent. Mary Lyons mentions that of 6,619 operations performed in the Presbyterian Hospital, Chicago, during a period of 10 years 63 developed respiratory complications of whom 32 died. This gives a mortality of 0·48 per cent. and a morbidity of 0·95 per cent. Armstrong reports an incidence of 2·2 per cent. after 2,500 major operations. Whipple (3,719 operations) gives a morbidity of 2·6 per cent. and a mortality of 0·67 per cent. McKesson (39,438 operations) 3·03 and 1·06 per cent. The most alarming figures are Featherstone's report of a morbidity of 10·8 per cent. after 222 consecutive gastric operations. Though these figures are somewhat divergent one point stands out in bold relief and that is the high ratio varying between 25 to 40 per cent. or higher of the mortality to the morbidity, showing, that pulmonary complications occurring in the post operative period have a very high mortality indeed. The problem have also been viewed from another angle, namely, the importance of pulmonary complications as a cause of post operative death and here again it is found that fully 2·5 per cent. of all post operative deaths from all causes are due to pulmonary complications. When it is realised, therefore, that taken altogether approximately 1 in every 200 of patients submitted to surgery will succumb directly as a result of the pulmonary complications it is clear that lung complications can be a serious menace to a patient who has undergone a successful surgical operation. As Whipple put it, to have a patient in the prime of life and in fair health come to us for an operation of choice and die of post operative pneumonia is not a calamity likely to be easily forgotten by the patient's relatives or for that matter by ourselves —and one that would certainly justify the dread of the man in the street for matters surgical.

I propose in this paper to review the nature and course of the pulmonary complications that have been met with, the various factors to which they have been attributed and the accepted methods of prophylaxis.

Course and Varieties.—The onset of symptoms is rarely earlier than 24 hours or later than 5 days after operation. If more than one week has elapsed, lung complications are usually due to progressive failure of the vital forces and both anaesthetic and operation may be justly exonerated.

Two main types of pulmonary complications have been recognised. The first which corresponds to the 'pneumonitis' of Whipple is the abortive type and is never fatal by itself. The onset is marked by a sudden sharp rise of temperature without rigor or chill, moderate cough, sometimes sudden initial dyspnoea resembling pulmonary

* A paper read before the South Indian Medical Union.

embolism and some pleuritic pain. The affected side of the chest moves little with respiration and is dull on percussion. At first, breath sounds may be entirely absent but later typical bronchial breathing and whispering pectoriloquy is heard. Radiography shows a shadow in the lung usually in the lower lobes, rusty sputum is not seen but only yellow mucus which perhaps may show group IV pneumococcus. Temperature falls by lysis after about 48 hours. This is the condition of pulmonary atelectasis or the massive collapse of Pasteur, who however recognises a latent type with complete absence of all symptoms but with well marked physical signs. These latter cases undoubtedly escape recognition altogether or are dismissed under the casual term 'post operative reaction.' Pasteur gives displacement of the heart as the pathognomonic sign of the condition.

The second variety is far more grave. The patient is usually a middle aged man who though in fair general health as somewhat poorly nourished as a result of a gastric or duodenal ulcer. This patient returned to bed after a severe operation lasting perhaps over an hour recovers consciousness uneventfully though somewhat pale and weak. The second or third day after operation the pulse and temperature rise, the patient becomes cyanosed, the lung shows areas of consolidation and areas of collapse and not infrequently death ensues on the fifth or sixth day of operation.

In addition to the foregoing main variety a terminal broncho pneumonia occurs in cachetic subjects while suppurative embolic pneumonia in severe sepsis and aspiration pneumonia following severe operations on the tongue and jaw also occur.

Aetiology.—I will now proceed to discuss the various factors that may conceivably have a causal relationship to post operative pulmonary complications.

I. *The anaesthetic agent and its mode of administration.*—When the administration of inhalational anaesthesia became a routine and common practice it was not long before pulmonary complications were promptly attributed to the anaesthetic and such expressions as 'ether pheumonia' became current. Early in the study of the causation of post operative pulmonary complications and with the wide variety of anaesthetics used, it was found that lung trouble occurred regardless of the type of the anaesthetic used. Lawen and Miculitz drew attention to the fact that pulmonary complications occurred, if anything with greater frequency, under local and spinal analgesia in abdominal operations.

Of the inhalational anaesthetics commonly used, Ether is no doubt a fairly powerful irritant to the mucous membrane of the upper respiratory passages. This is especially true of impure Ether and the use of such Ether containing highly irritant substances has been known to cause an outbreak of pneumonia. Also when administered in too high concentration it causes petechial haemorrhages in the lung. There is no doubt also that the evaporation of large quantities of Ether causes great loss of heat. Prolonged administration of Ether distinctly exhausts the patient whilst it has also been noted that Ether checks the phagocytosis in the body. Apart from these facts the concensus of opinion is that Ether anaestheisa with a uniform moderate concentration of vapour with a good airway and free respiration causes no irritation of lung tissue and when this is combined with 1-100th of a grain of atropine given ½ an hour before the operation, to inhibit excessive salivation, there is

no increased tendency for post operative pulmonary complications after Ether. The administration of warm Ether vapour by the Shipway apparatus is a distinct advantage while the administration of intratracheal Ether for operations of the tongue and jaw has if anything reduced the risk of aspiration pneumonia.

Chloroform on the other hand though certainly less irritant to the upper respiratory passages has been shown to have a destructive action on the lung epithelium. Pneumonia deaths occur after chloroform anaesthesia. For the purpose of this paper mixtures of Chloroform and Ether act practically like chloroform. It has therefore to be concluded that pure Ether administered properly is not an important cause of post operative pneumonia while the routine use of chloroform would not rid us of this grave complication.

Of the other common generally anaesthetic N_2O O_2, I have not much personal experience. But most authorities are agreed that Nitrous Oxide is the least irritant to the respiratory system, most harmless when absorbed and causes very little shock. It would therefore be an ideal anaesthetic to be employed. It is unfortunate however that gas-oxygen alone would not produce adequate relaxation, the *sine quo non* for abdominal operations.

As I have said before spinal anaesthesia is followed by pulmonary complications and it has been taught that the paralysis of the intercostal muscles such as would especially occur in high spinal anaesthesia may be a factor in the production of the disorder of the lung.

II. *The Operation.*—The attitude of the patient on the table does not appear to be an important factor, except that in the Trendelenburg position the risk of aspiration pneumonia is somewhat less. The interference with respiration with this position causes by the pressure of the viscera on the diaphragm does not appear to be of importance.

With regard to the operation itself, all observers are agreed that laporotomy is commonest followed by lung trouble and that operations on the upper abdomen are more likely to be followed by lung complications than pelvic surgery. This uniformity of opinion on the relationship of abdominal section to pulmonary complications lead Patey to study the effect of abdominal operation on the respiratory mechanism. His observations may be summarised:

(1) Both the vital capacity and the tidal air are diminished after abdominal operations.

(2) The respiratory excursions of the diaphragm as noted by X-Rays are markedly diminished after abdominal section.

(3) The normal variations of intra-abdominal pressure with respiration become irregular and diminished after abdominal section. These normal variations aid the return of the blood from the I. V. C. to the right heart, the positive pressure in the abdomen aiding the aspiratory effect of the negative intrathoracic pressure during inspiration. If, as is seen, abdominal section disorganises this abdominas pump mechanism there is post operative venous stasis and tendency to thrombul formation.

(4) Any influence that interference with respiration has with reference to post operative pulmonary complication is of a predisposing nature only.

The mechanism by which laparotomy predisposes to lung complications will be alluded to later.

Excessive injury to any tissue in the body causes shock, particularly to those such as the stomach which is richly supplied with nerves and blood vessels. If to this shock is added the deleterious effects of loss of blood and the chilling from a prolonged operation, marked lowering of resistance to infections such as pneumonia is quite conceivable. Lord Moynihan emphasized the importance of the gentle handling of tissues if lung complications are to be avoided. The reduction of the anaesthetic period to the shortest possible time is also of importance. It is also necessary to keep the patient warm on the operating table, while the chilling of the unconscious patient, perhaps covered with sweat and with the skin capillaries dilated, by cold draughts of air during the transit from the table, to the bed has to be carefully avoided. It has also been contended that patients returned to bed with a low blood pressure especially develop lung complications. Though low blood pressure *per se* does not appear to be responsible, it is obvious that it can be a contributory factor since a low blood pressure is a concomitant of both shock and loss of blood.

III. *The condition of the patient.*— The *age* of the patient does not appear to be an important factor though it has been noticed that post operative pneumonia is commonest in the later half of life. The hypostatic pneumonia of old subjects and the greater severity of operations performed on those in late middle life, account for this relative higher incidence.

The Sex. All observers are agreed that post operative lung complications occur more frequently in the ratio of 3 to 1 in males. This is in accordance with the incidence of pneumonia in medical practice. The greater frequency of gastric and duodenal lesions in the male is no doubt responsible to a certain extent for this incidence. As has been said, an abdominal operation limits the excursions of the diaphragm, while the tension caused in the abdominal wound, limits abdominal movements. It is therefore reasonable to suggest, that respiration which is mainly abdominal or diaphragmatic in type in men is impaired whilst the costal or thoracic type of breathing in women is not affected. This would certainly predispose to pulmonary complications.

Of the general systemic disorders, mention should be made that undernutrition, anæmia and cachexia all predispose to post operative lung trouble. Chronic alcoholism interfering as it does with the defensive force of the body against any infection also predisposes. It is within the experience of every anaesthetist that these subjects require large amounts of anaesthetic agents, they are usually very exhausted after the operation and very liable to develop post operative lung trouble and in them the mortality rate is high.

IV. *Recent or existing respiratory infections* are also known to have a definite influence in determining post operative lung trouble. It is an acknowledged fact that pneumonia may attack the same patient more than once and one attack perhaps actually predisposes. Patients who have had pneumonia during the year or two prior to operation are especially liable to post operative lung troubles.

It is also an admitted fact that patients having or just recovering from colds are particularly prone to post operative lung troubles. All operations of election are best postponed for a period of at least two weeks in such subjects.

V. *A seasonable increase* in incidence during the winter months has been noticed by many observers while an increased incidence has also been

observed during epidemics of coughs, colds and influenza. Medical men in busy practice handling wide spread catarrhal troubles, influenza and pneumonia would perhaps be well advised to postpone operation wherever possible. This is in accordance with the admitted fact that there is an increased virulence of the infective organisms during these periods.

VI. *Massive collapse of the lung.*—To Pasteur is due the credit of the pioneer work on this subject. He maintained that collapse of the lung plays an all important part in the causation of post operative pulmonary complications. He pointed out that deflation of the lung predisposed to inflammation. He further maintained that the diaphragm is the direct expander of the lower lobes and that abdominal section caused reflex paresis or inhibition of the diaphragm which resulted in the collapse of the affected lobe.

Another view is that bronchial obstruction is the prime factor in the causation of pulmonary collapse and this view has many adherents, who have advanced both clinical and experimental evidence of bronchial obstruction producing pulmonary collapse. Elliott and Dingley were the first to formulate this view and they noted a viscid mucopurulent expectoration, quite different from pneumonic sputum, in all their cases. Experimentally laminaria plugs have been introduced into the bronchi of rabbits and as the plug lodged in one of the main bronchi and gardually became swollen and obstructed the tube, collapse of the corresponding lobe of the lung occurred. More convincing evidence has been obtained bronchoscopically in Jackson's clinic, when obstructing tenacious sputum has been found in cases of pulmonary collapse and the removal of these plugs has been promptly followed by reinflation of the lung and disappearance of symptoms. It must be however mentioned that quite competent observers have failed to find any obstruction in proven cases of atelectasis. Only one other theory of the causation of pulmonary atelectasis needs mention. This theory also postulates obstruction of the bronchi, the obstruction being due to a vesomotor reflex causing swelling and oedema of the lining membrane of the bronchi, while a super-added spasm completes the obstruction. It might be asked how bronchial obstruction produces atelectasis. The explanation offered is that the imprisoned air is gradually absorbed by the blood stream while perhaps in some instances the plugs act as ball-valves allowing egress and preventing ingress and thus gradually depleting the lobe of its air content.

The question may be asked how collapse being merely airlessness of the lungs can predispose to pneumonia. The explanation of Featherstone which appears to meet all observed facts is that massive collapse is not a purely mechanical phenomenon. Following abdominal section the instinctive dread of pain leads to protective reflex inhibition of the diaphragm and a rigid abdominal wall, causing defective expansion of the bases of the lung. Into this motionless and airless area which is vascular, infective material arrives. These patients cannot cough freely and thus effectually clear their lungs. The result is congestion, oedema and choking of the bronchioles already swollen by the irritating anaesthetic agent. Closure of the bronchioles causes the absorption of air and the result is massive collapse or the 'pneumonitis' of Whipple. When the infection is virulent and the patient's resisting power low true broncho-pneumonia is the sequel. Thus post operative bronchitis, atelectasis and broncho-pneumonia and perhaps abscess are essentially different stages of the same process.

The process by which infective material arrives into the lung remains to be considered. Here we have two main schools of thought, one school who attribute the pulmonary lesion to emboli and infarction due to trauma at the operative site and the second who attribute it to aspirated infective material.

The arguments advanced by the aspiration school are :

(1) Clinically, material from the mouth and throat has been found to gain access to the trachea and lung during anaesthesia especially during operations on the tongue and jaw and this has been confirmed by experiment.

(2) The pneumococcus type IV is the usual organism found in post operative lung trouble and it is well known, that it is the common inhabitant of the upper air passages.

(3) The Trendelenburg position which lessens the risk of aspiration is associated with a lessened incidence of post operative pulmonary complications.

(4) The beneficial results of dental and oral hygiene and pre-operative atropine medication.

(5) The known frequency of lung complications on the right side which can be explained by the right bronchus being more in direct continuation of the trachea.

(6) Those who have made use of the pharyngoscope when tracheal intubation has been difficult have frequently observed an accumulation of mucus in the posterior part of the pharynx and with each inspiration this mass is drawn towards the trachea which must undoubtedly be frequently aspirated.

The supporters of the embolic view lead by Cutler argue:

(1) That lung complications occur after spinal and local analgesia.

(2) That lung complications occur quite frequently in the hands of skilled anaesthetists.

(3) That complications are infrequent after ether.

(4) That the sudden onset suggests an embolic spread.

(5) That emboli are frequently found post mortem plugging the branches of the pulmonary arteries.

(6) That lymphatic and vascular channels offer an ideal route for the emboli to travel.

Mention should be made in this connection that it has been pointed out that no direct venous communication exists between the lungs and the abdominal viscera, due to the intervention of the portal circulation. If emboli are carried from the field of operation one would expect infarcts in the liver, a condition rarely seen. Besides if embolism or infarction were to be the cause, lung trouble should be as frequent after pelvic as after gastro-duodenal surgery which it certainly is not.

On the other hand some observers have stressed the importance of the spread of infection via the lymphatics. Lymphatic drainage from the peritoneal cavity though the right half of the diaphragm to the right pleura and lung exists, while there is no direct passage of lymph through the left half of the diaphragm. This would appear to account for the greater frequency of right sided complications. Others have gone further and suggested an infection of the chyle with visceral contents when these are opened such as for example during gastro-jejunostomy. Featherstone however thinks that lymph infection from the abdomen is more likely to cause pleurisy, while

it is a fairly well known fact that the contents of the stomach and the jejunum are comparatively sterile.

Prophylaxis.—Though the divergence of opinion in regard to the causation of post operative pulmonary complications is somewhat bewildering, views regarding the prophylaxis of the condition may be said to be tolerably crystallised. These preventive measures can be divided into pre-operative, post-operative, and measures taken during the operation itself.

I. *Pre-operative measures* are of course eminently of value in operations of election.

(*a*) Dental and tonsillar sepsis should in all cases be corrected before major surgery is undertaken.

(*b*) The presence of a rhino-pharyngitis or a cold or a recent attack is a definite indication for the postponement of the operation. Impatience in this respect on the part of the patient or his relatives has too often been the cause of post operative pulmonary trouble. The advisibility of postponing operations during wide spread epidemics of catarrhal infections has already been mentioned.

(*c*) Atropine medication by preventing excess of secretion of mucus is of benefit.

(*d*) Systematic gastric lavage in cases of pyloric obstruction by getting rid of the fermenting gastric contents reduces the risk of its aspiration during and subsequent to the anaesthetic period.

II. Of the *measures to be taken during the operation itself.*

(1) *The choice of the anaesthetic* is of some moment though as has already been said respiratory troubles occur after all varieties of anaesthesia. Considered from the respiratory viewpoint alone it is well to remember that the short thickset type of patient, with the plethoric 'ready to burst' sort of facies and a thick neck does not take ether or mixtures well. Also alcoholic subjects and especially muscular and well built subjects require large doses of anaesthetic agents especially when abdominal relaxation is required. In all these, should the surgical procedure admit it local or spinal analgesia, would be the method of choice and failing this, except perhaps in alcoholic subjects, pure chloroform.

Ether and mixtures are also contra-indicated in patients with history of recent respiratory inflammation, in whom local or spinal analgesia should be considered or chloroform.

Anaemic, cachectic subjects, subjects with low blood pressure and patients who are the subject of shock or weak from loss of blood, do not tolerate chloroform well and gas-oxygen with perhaps a little ether added would suit them.

So many factors enter into the choice of the anaesthetic that it is not possible to lay down any hard and fast rule. Every patient has to be individualised and the anaesthetic selected that is safest from every point of view.

(1) Care is also necessary that anaesthetic apparatus is sterilised after use every day, so that infection is not carried from person to person. It is important to use the best ether, chloroform and dry N_2O gas. Ether and chloroform in bottles which have been open more than 2-3 days should be discarded.

(2) The importance of gentle manipulation, hænostasis and quickness consistent with efficiency have already been mentioned. As has been well said 'speed without the sacrifice of accuracy and gentleness are two surgical attributes of inestimable value.

(3) The use of the pharygeal suction apparatus in operations on the tongue, jaw, etc.

Some would go further and suggest continuous aspiration of stomach contents during and for the 24 hours after the operation by an in-dwelling stomach tube. This would not only prevent aspiration of regurgilated stomach content, but also by keeping the organ always empty, prevent acute gastric dilatation.

(4) A moderate Tendelenburg position.

III. *Post-operative measures.*— 1. Carbon-dioxide administered in suitable concentrations acts as a powerful respiratory stimulant leading to increased depth of respiration and full aeration of the lungs. As is well known CO_2 in the blood is the normal stimulus to the respiratory centre and excessive artificial respiration, voluntary forced breathing or the excessive respiration that is sometimes seen during the induction of anaesthesia wash out the CO_2 in the blood leading to feeble respiration, a condition known as 'acapnoea'. This pushed further may lead to complete apnoea.

As has been, pulmonary hypo-ventilation, whatever the mechanita of its production, is the starting point in the chain of events leading to post operative lung complications.

The value of CO_2 in the prevention of post operative pulmonary hypo-ventilation and collapse is therefore obvious and is now well-recognised.

The usual method of administration is to let it bubble through the Wolff bottle at the rate of roughly one or two bubbles to the second for a few minutes at the end of the operation until the breathing becomes deep and regular. This may well start when the skin stitches commence so that by the time the operation is finished, the sterile liver is removed and the bandages are in position the patient has had the gas for some time, is breathing regularly and deeply and is well oxygenated.

CO_2 can also be given along with O_2 in a concentration of 10 per cent. The increased depth of respiration has the additional advantage of the rapid elimination of the anaesthetic, thus hastening the recovery of the patient from the anaesthetic and perhaps diminishing to chance of aspiration during the stage of recovery. Some authors have reported beneficial results following the administration of CO_2 at frequent intervals during the 3-4 days following operation while CO_2 inhalations have been used for the treatment of pulmonary atelectasis which has already declared itself. On theoretical grounds this would appear to be the ideal treatment.

2. Mention has already been made of the importance of the prevention of the chilling of the patient by cold draughts of air during his transit to the bed and while he is coming out of the anaesthetic.

3. It is now generally agreed that the post operative position of the patient, by its interference or otherwise with the freedom of respiratory movements, is a factor in the production of atelectasis and that the interference is the least with the patient in the Fowler position. As a point of fact there is a consensus of opinion that the Fowler position after abdominal section has been a great factor in the reduction of the incidence of post operative lung trouble. In the absence of a definite centra-indication all patients who have undergone abdominal operations should be placed in this position. In patients who have had a general anaesthetic this may be done

as soon as the patient has recovered. After spinal analgesia however it is more advantageous to keep the head low for about six hours as this diminishes the incidence of headaches after spinal analgesia and combats the fall of blood pressure. Thereafter the patient is put up in the Fowler position It is important to stress here that it is necessary to take care that the patient does not slip down in the bed when placed in this position, a circumstance which leads to great embarrassment of respiration and from which more harm than good may result. In addition it is found to be of advantage to change position of the patient and turn him from side to side at frequent intervals. This of course is done by the nursing staff.

5. A tight upper abdominal binder can alone reduce the vital capacity by 30 per cent. and very tight upper abdominal dressings are to be avoided. Some have gone further and suggested the total discarding of the usual many-tailed bandage and the use of adhesive straps to keep the dressings in position.

6. Acute dilatation of the stomach and bowel distension have a marked limiting effect on the respiration and the prevention of post operative abdominal distension or its prompt treatment are of importance in the prophylaxis of lung troubles.

7. All patients are instructed to take deep breathing exercises as soon as they are conscious. Gentle and slow inspiration followed by brisk expiration causes little pain while it forces up the mucus to a position from which the cough reflex gets rid of it. The patient should be re-assured that there is little fear of the rupture of the wound by these measures. Some would go so far as to suggest that the patients should be encouraged to make efforts to expectorate any matter, at the same time when the abdominal wound is firmly supported by the palm and fingers of the hand.

8. The immediate post operative use of oxygen, except of course where there is definite anoxaemia as evidenced by cyanosis, has produced inconclusive results.

9. The importance of the replacement of the fluids lost by perspiration, vomiting and catharsis and haemorrhage has been stressed by some.

10. Last of all some observers speak very highly of the bronchoscopic aspiration of plugs of viscid and tenacious sputum in the prophylaxis and treatment of pulmonary atelectasis.

It will therefore be seen, gentlemen, that numerous factors are involved in the production of lung lesions after operation, the anaesthesia itself being only one of the factors concerned only by close eo-operation between surgeon and anaesthetist and scrupulous attention to detail, can, any measure of success be expected to attend prophylactic measures. Here perhaps, as in many other ways can, the casual anaesthetist be, ' the nightmare of the patient and the surgeon's purgatory '.

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(7) *Patey*—Br. J. of Surgery, January 1930.

(8) *Balfour and Gray*—Practitioner, June 1933.

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Discussion : "Sacral anæsthesia".*

Dr. P. Rama Rau suggested that in fat people where there might be difficulty in locating the anatomical position of the hiatus, if one could mark a spot with barium on the skin and take a lateral view with the X-Ray, it will be very useful as a guidance to put in the needle.

Dr. Mohanarangam said that spinal anæesthesia should not be condemned in preference to sacral anæsthesia. He thought that the former was better than sacral where large quantities of novocaine had to be employed as far as his experience was concerned. As regards retention of urine, etc., he thought that it was of reflex origin and not due to the spinal anæsthesia. In the case of sacral anæsthesia the patient had to wait a long time after the injection, at least 20 minutes. Extensive gynæcological operations could be better done under spinal anæsthesia than under sacral. Spinal anæsthesia can be used with less fear than sacral anæsthesia and he does not see any reason why sacral anæsthesia should give place to spinal.

Dr. K. Rama Menon suggested that it would be worth while to note the blood pressure in a series of consecutive cases under sacral anæsthesia. He had no personal experience of sacral anæsthesia, but he considered that the method was worth a trial.

Dr. Krishnamurthi maintained that spinal anæsthesia was very efficacious as against the limited efficacy of sacral anæsthesia. He has induced spinal anæsthesia in many cases without accident. The anæsthesia by the sacral route was very limited and apt to be patchy. Its introduction was followed in the early days by its being used for cases of Lumbago, Sciatica, Sexual Neurosis, etc. Opinion against spinal anæsthesia was due only to bad cases having been selected for its employment whereas if a fair chance was given he thought that it would give as good results as a general anæsthesia. Premedication with morphia and atropine masks to some extent the efficacy of the method employed. He would, therefore, like the effect of the anæsthesia to be noted without premedication. One has to be very careful about the asepsis and should have a good knowledge of the anatomy of the part. He considered that a specialist alone ought to do spinal anæsthesia. As regards failures in sacral anæsthesia one observer had noted as much as 45 per cent. of failure whereas it was underestimated by the lecturer. He mentioned that high sacral anæsthesia is to be condemned by everybody as it is condemned in every book.

Dr. P. Natesan said that spinal anæsthesia is not such a complicated affair and that it does not require a specialist. He said that in his experience it was an easy procedure. He also said that in the moffusil where his friends have just started practice they were doing minor operations under spinal anæsthesia very successfully.

Dr. P. Govinda Rao said that as the sacral hiatus could be easily made out even in fat people, the aid of X-Rays was not necessary. In reply to Dr. Rama Menon he said he would take the blood pressure and see how much fall there is in a series of cases hereafter. But he thought that as the solution was injected only extradurally and not intradurally it is not likely to have so much influence as in spinal anæsthesia. He also said that he did not actually bring the sacral anæsthesia as a rival to the spinal. But he thought that for a general practitioner without much experience it would be very easy to do operations such as piles, fistula-in-ano, fissure anus, and dilatation of strictures without any extra assistance or the

*Continuation of 'Sacral Anæsthesia,' Bulletin —Dec. '33.

necessity for any general anæsthesia. In his series of cases there was no retention of urine after sacral as after the spinal anæsthesia. In spinal anæsthesia sometimes we get serious complications as meningitis, delirium (in one case he had come across) and rarely a needle might get broken in the spine whereas with the sacral there was very little chance of such things occurring. If at all, there would be only some sweating as it happened in one case when the injection of the fluid should be stopped for some short time and resumed again. Sacral anæsthesia is not useful for major cases but only for small regional operations about the rectum and anus. A safe dosage for Novocaine was 9 to 10 gr. and in sacral anæsthesia as long as they did not exceed this amount of Novocaine there was no danger at all, whatever the amount of fluid was used. As regards failures of sacral anæsthesia the lecturer's experience has been that though he was not a professional anæsthetist and he had started without any expert to help him, he had much less than 5 per cent. failures and he should think that a reasonable knowledge of anatomy and a little practice ought to be enough for everybody to practise sacral anæsthesia successfully. There was no necessity for any premedication with morphine or scopolamine before sacral anæsthesia. And he stressed that sacral anæsthesia was specially for use wherever operations on the rectum and anus had to be performed, the ease and the safety of it was such that it could be used by the general practitioner any time.

In the statistics of selected surgical operations one is surprised to find that operations on the skull and brain from a very negligible part. It should be a matter for serious consideration whether the considerable skill and energy that is now being lavished on the doubtful surgical relief of dyspepsies could not more usefully be employed in doing a little more of the surgery of the brain and skull.

Regarding the warning issued about the severe reactions noticed after the use of Sulphostab, Batches 353 A to 353 E, Messrs. Boots Pure Drug Co. writes to us that the batches referred to could not be applied to Sulphostab, batches of which are numbered in an entirely different manner.