MEDICO-SURGICAL SUGGESTIONS

Vol. V. FEBRUARY 1936 No. 2.

MEDICO-SURGICAL SUGGESTIONS

A MONTHLY JOURNAL OF PRACTICAL MEDICINE & SURGERY

VOL. V FEBRUARY 1936 NO. 2

CONTENTS

Annual Subscription : Rs. 5 ; foreign : 10 sh. Single Copy : As. 8.

Sample Copy for 4 As. Stamps.

Office of the Editor & Publisher : 246, Thambu Chetty St., Madras, India.

NOTICE

Original articles, case reports, and other topics of medical interest are cordially invited, and are accepted only with the distinct understanding that they are contributed exclusively to *Medico-Surgical Suggestions*. Manuscripts should be type-written, with double spacing. All communications in regard to editorial business, books and journals for review and exchange, samples of drugs and instruments, etc., should be addressed to the Editor. Authors desiring reprints of their articles published in the Journal should specify the same at the time of forwarding them. The Editor accepts no responsibility for views expressed by contributors.

All business communications relating to subscriptions, scale of charges for advertisements, orders for copies of the Journal, etc. should be addressed to the Manager, *Medico-Surgical Suggestions*. Only approved advertisements will be admitted, and the Manager reserves the right to exclude any advertisement which is against medical ethics.

MEDICO-SURGICAL SUGGESTIONS

VOL. V FEBRUARY 1936 NO. 2

Leading Articles

AFFECTIONS OF THE LUNGS AND PLEURA

BY DR. SANKARA RAMAN, M.B., B.S.
Cuddalore.

(*Continued from the January issue*)

ABSCESS OF THE LUNG.

This results from lobar or lobular pneumonia, inhaled foreign body, infection of lung tissue from adjacent disease or from penetrating wounds, or may de pyaemic in origin.

Symptoms: The patient has fever of a septic type, with rigors, sweats, cough with muco-purulent expectoration, dyspnoea. There is leucocytosis. The lung is dull over the area of the abscess. Breath sounds are weak before rupture ; after rupture into a bronchus signs of excavation are present.

Treatment: Always give a chance for medical treatment, since spontaneous cure is very common. Postural drainage must be attempted only if drainage will be thorough, for which an X-ray examination with lipiodol injection will be useful in determining the exact site of the abscess. Steam inhalations of menthol and Friar's balsam, intra-tracheal injections of menthol, guiacol and olive oil, or alcohol, are useful adjuncts. Vaccines are useless. The cough must be relieved since it tires the patient, and also spreads the contents of the abscess into other parts of the lung. Syrup Codeine Phos. is very useful. If medical measures do not produce a spontaneous cure of the abscess, bronchoscopy must be done to promote free drainage by relieving the oedema of the bronchus or removing the granulations there by cautery. Short wave diathermy has got its strong advocates, as also early operation. Some operate only if all the above measures fail ; but there are others who are in favour of an early operation.

The operation consists in resection of a considerable portion of two ribs so as to completely open up the abscess cavity, the layers of the pleura are stitched together and the abscess opened and all bleeding points stopped.

PNEUMONOKONIOSIS.

This is more important in more highly industrial countries than in India, where legal actions for compensation are taken. Anthracosis, siderosis, silicosis, byssinosis, etc. are recognised conditions. The oft debated question is how far pneumonokoniosis favours the onset of pulmonary tuberculosis. Though pneumonokoniosis is non-tuberculous in origin and may remain so throughout life, yet certain forms undoubtedly favour the onest of tuberculosis. Coal miners do not get it, while gold miners are liable to it. Limestone workers do not develop it while freestone workers get it. The presence of silica is the most important factor determining the onset of pulmonary tuberculosis. Professor Haldane suggests that whereas particles of coal absorbed by the dust cells are thrown out in the black sputum, the silica so absorbed remains in situ, since there is no stimulus for the dust cells to work out the contents. It acts like the Trojan horse.

BRONCHIECTASIS.

This condition is due to

(1) Bronchial conditions.
- (*a*) Pressure from within, as F. B., Stenosis from Carcinoma.
- (*b*) Pressure from without, as by an aneurysm.

(2) Pleural Conditions.
- (*a*) Pleural adhesions.
- (*b*) Empyæma leading to prolonged or permanent collapse of the lung.

(3) Lung Conditions, as unresolved Pneumonia, Broncho-pneumonia, Collapse of the lung, Tuberculosis and Syphilis.

The diagnosis of bronchiectasis in advanced cases presents little difficulty. The prolonged history of cough accompanied by offensive sputum especially profuse in the morning and its characteristic sputum which on standing in a glass vessel settles in three layers, (1) the surface scum of light frothy mucus, (2) an intermediate stratum of thin turbid fluid and (3) the deep layer of brownish muco-pus, presents an unmistakable picture. Among the symptoms, early hæmoptysis occurs in many cases and may lead to a mistaken diagnosis of pulmonary tuberculosis. Chest radiography, plain and with lipiodol are helpful. Clubbing of fingers, pulmonary osteo-arthropathy involving many joints, flattened and retracted chest wall with the cardiac impulse displaced towards the affected side are present. Auscultatory signs depend on many factors but the most characteristic ones are those of cavitation—i.e. bronchial or cavernous breathing, with crackling rales and whispering pectoriloquy, and bronchophony. If the cavity is full, there is dullness, diminished vocal fremitus and weak or absent breath sounds. Differentiation from chronic bronchitis is easy, by noting the paroxysmal cough

and the characteristic physical signs, but the differentiation of an apical bronchiectatic cavity from a tubercular one presents great difficulties. Repeated examinations of the sputum and an accurate history coupled with radiology with lipiodol are aids but the two conditions may co-exist.

Treatment. Medical measures: (1) Promote expectoration. (2) Prevent fœtor. (3) Improve general health.

Ammonium Carb. gr. V, Amm. Chl. gr. X., Pot. Iodide gr. V., Ext. Glyc. Liq. m. XX, aqua ad. oz. 1 t. d. s. is a useful prescription. Sedative expectorants must be avoided, since they tend to stop the cough and retain the secretion and so damage the bronchial walls still further. Steam inhalations with Friar's balsam or Ol. Eucalypti are useful. A teaspoonful of it with a pint of boiling water in a basin must be inhaled for five minutes with a blanket over the head and shoulders.

Postural drainage is important but must be used with humane considerations. Tipping the cavity in the early morning by posture is a method adopted by some. Creosote as Famel Syrup or Lacto Creosote Syrup prevents the fœtor of the sputum. Cod Liver Oil or Halibut Liver Oil, removal of septic teeth and nourishing diet improve the general health. If the patient continues to get worse in spite of treatment, surgical measures must be tried.

Surgical measures: Artificial pneumothorax has a limited application only in cases free from pleural adhesions. Phrenic avulsion and thorocoplasty are disappointing and drainage of the cavity by aspiration with a bronchoscope gives only a temporary relief. Hence, removal of the affected lobe or lobectomy is the operation of choice, but it can be done only if there is unilateral affection.

NEW GROWTHS OF THE LUNG.

Malignant new growths of the lung occupy a more conspicuous space in the current medical literature than a few years back, because our diagnostic facilities have increased to such an extent as to enable us to detect the tumour in almost every case.

The majority of tumours formed in the lung are carcinomata arising from the mucous membrane of the bronchi. The early diagnosis of a tumour is very difficult since there are no characteristic symptoms. In some, the onset is sudden, resembling influenza, pneumonia or pleurisy; in others, it develops insidiously with persistent cough, occasional pain in the chest, shortness of breath and blood-stained sputum called the 'currant-jelly' sputum. In some others, pressure symptoms on mediastinal structures as dyspnoea, dysphagia, voice changes, oedema of face and arms are the only conditions calling for investigation. In some others, the condition calling for attention may be a metastasis in other organs, as spastic paraplepia, obstructive jaundice, involvement of the liver and pancreas. I refer to the protean manifestations of the onset of pulmonary carcinoma only to

emphasise the fact that the symptoms do not point to any new growth in the lung until important structures are involved, by which time hope of a radical treatment had already passed away, and the condition must progress with relief of symptoms only.

The cough may stimulate the cough of many other conditions; for instance, pressure on the trachea causes the brassy cough, pressure on the recurrent laryngeal nerve causes a husky cough as in the paralysis of that nerve. Physical signs in the lung also vary. When the growth obstructs completely a bronchus the lung distal to it will collapse, giving diminished movement, dullness and weak breath sounds, and the heart deviates towards the affected side. When secondary suppurative changes take place, the signs may be those of consolidation or even of cavitation. When the pleura is involved, signs of pleural effusion are present.

Although these three types of cases with collapse, suppuration or effusion eventually lead us to the diagnosis of a tumour, yet there are cases of tumour presenting no symptoms practically, beyond leaving a suspicion in the mind of the practitioner that the disease is something more than a simple respiratory ailment. It is those cases that must be thoroughly investigated. Every case of haemoptysis and chronic cough and dyspnoea must be investigated into by (1) examination of the sputum ; (2) examining the blood for Wasserman ; (3) examine pleural fluid for Foulis cells ; (4) x-ray skiagram, plain and with lipiodol injections ; (5) Bronchoscopy ; (6) Thorocoscopy when there is pneumothorax also.

Secondary cancerous deposits are multiple and diffuse and are from the breast, stomach, intestines, prostate and liver.

Treatment : Now that lipiodol skiagraphy helps us to detect early cases without metastasis, prognosis is good. Surgical removal of the affected lobe, (lobectomy) is the operation of choice. In late cases, x-ray treatment can be done though much good need not be expected from it. Relief of urgent symptoms are effected by radium applied to the growth either through the chest walls or by a bronchoscope. Dyspnoea due to pleural effusion can be relieved by tapping, pain by morphia, and the severity of the cough lessened by sedatives.

(To be continued.)

PRESIDENTIAL ADDRESS

AT THE TWELFTH ALL-INDIA MEDICAL CONFERENCE, NAGPUR.

BY DR. U. RAMA RAO, *Madras.*

There is no subject more engrossing the attention of the medical profession in India at the present time than the Indian Medical Council. A Medical Council for India has no doubt been established at long last and its work is now in full swing. But this is not the Council you and I have had in view. This Council is only an apology for a Council—a grand appendage to the Government of India and a tiny plaything of the British Medical Council. It will be a twice told tale if I begin to narrate the history of the Council in detail. I therefore propose to give a resume of it here, just to enable you to refresh your memories.

The history of the Indian Medical Council is the history of a long drawn struggle between the British Medical Council on the one hand and the Indian Universities on the other, culminating in the signal success of the former and the abject surrender of the latter. Before the introduction of the Montford Reforms in 1921, the B. M. C. was fully satisfied with our University training and teaching, not because they were faultless to the core and perfect in everything but because they were under the control of the I.M.S., whose sins of omission and commission, the B.M.C. wilfully winked at or ignored. Soon after the introduction of the reforms in 1921, the B.M.C., suddenly 'discovered a discrepancy between the regulation and practice of midwifery instruction in 1920' and addressed a letter of enquiry to the Indian Universities, threatening them at the same time with withdrawal of recognition of their medical qualifications, if a satisfactory explanation was not forthcoming. The Universities naturally became perturbed and in order to placate the Council, requested it to nominate one of its members as a visitor so that he may see and judge things for himself. Sir Norman Walker was accordingly sent. He submitted an adverse report. At the same time, he successfully persuaded the Government of India to accede to the appointment of an officer as Special Inspector of the Universities. Next time, Col. Needham was sent as Inspector, but the Calcutta University shut it doors against him. The B. M. C., enraged at this, at once withdrew the recognition of the medical qualifications of that University and gave only temporary recognition for one year to the other Universities such as Bombay and Madras. This conditional recognition was continued from year to year on the report of an Inspector, so far as the latter Universities were concerned, while in regard to Calcutta, the recognition was restored, temporarily though, on its agreeing to appoint a Director of one of its local institute as a Local Inspector. This was a most unsatisfactory state of affairs and the only panacea for this evil lay in the

establishment of a Medical Council for All India, to which must be transferred the entire control of medical education in this country. The creation of such a Council was not possible without the initiative of the Government of India and the consent of the various Provincial Governments. The Government of India demurred to undertake legislation lest it should tread on the sacred rights of the Provincial Governments and nearly five years had elapsed without any permanent settlement of the question being arrived at.

In the year 1926, my friend, the late lamented Dr. Lohokare of Poona—may his soul rest in peace!—entered the Legislative Assembly and I myself was elected to the Council of State. We both were anxious to do our little bit for the medical profession and if possible to ease the situation created by the British Medical Council by the establishment of a General Medical Council for All India, on the model of the Canadian Medical Council. We both put our heads together, and prepared a draft bill and introduced it simultaneously in the Legislative Assembly and in the Council of State in Feb. 1926. With the death of Dr. Lohokare, soon after, died also his Bill in the Assembly and was buried in the archives of the Secretariat. My Bill in the Council of State shared a better fate. It reached the circulation stage and a mass of opinions, good, bad and indifferent, was collected. Thereafter, I had to encounter stern opposition and resistance from the Government. The Government objected to the Bill on the score (1) that the Sub-Assistant Surgeon class ought not to find a place in the All-India Register and (2) that such of those Allopathic doctors as are teachers in indigenous schools of medicine should also be excluded from the pale of the Council. I met the Hon'ble Member in-charge of the Health Portfolio half-way and agreed to give up the Indigenous Practitioners but refused to yield with regard to the exclusion of Licentiates. Sir Muhamad Habibullah, the then Government Member, than whom no more ardent well-wisher and sincere sympathiser of the medical profession in India could be found, was not for smiting a fatal blow on my Bill. He proposed to recast the Bill in the light of the opinions received and introduce it as a Government measure in which case there was a greater chance of success and dissuaded me from moving further in the matter. On that assurance, I withdrew my Bill. Thus ended our first attempt for the establishment of an All India Medical Council. Between 1926 and 1929, there were negotiations going on between the B. M. C. and the Government of India on the subject, and seeing there was no immediate prospect of the Government coming out with a Bill of their own, I introduced a fresh Bill in 1930. All the objectionable features of the first Bill were removed with the clause relating to Licentiates alone being retained. Even the *Indian Medical Gazette* of Calcutta showered its blessings on it. This is what it observed in its editorial of March 1930 issue :—"On a study of

Dr. U. Rama Rau's Bill, our opinion is that it appears to meet the present conditions admirably. It meets the Indian demand for self-government in medical affairs by the creation of an All-India body of democratic constitution to whom the General Medical Council of Great Britain may be expected to entrust the duties of the supervision of medical education and inspection of examinations ; whilst it does away with the necessity for an official Commissioner of Medical Education appointed *ad hoc* without consulting general medical professional opinion in India.....In brief, the Bill attempts a sort of federal solution of the present problem which would leave the power of existing provincial councils untouched but yet introduce a central and co-ordinating mechanism which would give India combined representation with regard to world problems of medical education and registration." Unfortunately, this Bill too had an abortive career, as I had to resign my seat in the Council of State, soon after, in obedience to the Congress mandate. Here the curtain falls over the first scene of this drama in which non-official members of the medical profession in the Legislatures played their part and failed under circumstances beyond their control.

The climax was reached in Feb. 1930 when the British Medical Council resolved to withdraw even the temporary recognition of the Medical degrees of the Indian Universities and thus sever all connections with India for the nonce. All avenues of an honourable compromise with the British Medical Council having thus been closed up, there was only one course left for the Government and that was the establishment of a Medical Council for All India. A draft Bill was drawn up and it must be said in fairness to the Government of India, that it was a comprehensive and liberal measure, though defective only in respect of the exclusion of the Licentiates. This Bill did not find favour with the Provincial Governments, our own Ministers siding with the I.M.S. and betraying our interests. There was one other alternative suggestion which the British Medical Council made and was approved of by the Ministers. That was the appointment of a permanent Commissioner of Medical Examinations. The Government of India meekly submitted to the proposal and Col. Needham was appointed Commissioner in due course. Col. Needham was ready to sail. But the Legislative Assembly turned down the proposal on financial grounds. Col. Needham had to stay away much to his own chagrin and that of the British Medical Council. Thus ended the second stage in the drama of the 'Indian Medical Council.'

The creation of an Indian Medical Council was then the one and only solution for the problem. A fresh bill was drafted and placed before the Assembly in 1933. This bill was altogether different from the previous one and was really intended to placate the British Medical Council and to provide an intermediary in the shape of a Medical Council in India to act between it and the various Universities

of India and satisfy the requirements of that body with regard to recognition of graduate qualifications. By legislating for higher grade qualifications only, the Government of India have estranged the feelings of more than 25,000 Licentiates practising in this country and have sought to perpetuate caste distinction among the medical profession more acutely than before. The composition of the Council was such that the officials preponderated in it and the democratic element was reduced to the lowest possible minimum. Things quite unexpected, however, had happened in the Select Committee of the Assembly. The Select Committee were evidently as insistent on the inclusion of the Licentiates in the Medical Register as the Government were for their exclusion and an ugly compromise was effected by which the Government agreed to abandon the Register altogether while the opponents on their part gave their tacit consent to the denationalisation of the Council. Thus, the Council was reduced to the status of an advisory body of officials picked up from the various provinces and consisting mostly of I. M. S. men and their subordinates. Such a council will certainly dance to the tune of the British Medical Council of Great Britain and cannot be expected to act independently in the best interests of India, as later events have amply demonstrated, such for instance as the appointment of Dr. McRae, the nominee of the British Medical Council, as secretary to the Council.

The closing scene of this farcical drama was enacted in the Legislative Assembly, shortly after. The Bill as emerged from the Select Committee was unanimously passed, not a syllable, not even a comma having undergone alterations. What was it that made the House give its unanimous support to the Bill withdrawing all the amendments at the last moment? It was the bogey of the Secretary of State's interference on the ground of its being a piece of discriminatory legislation and therefore opposed to para 123 of the White Paper that was responsible for this eleventh hour unity in the House. The Secretary of State had not quite approved of the Bill, especially the clause relating to reciprocity. If only recognition had been given automatically to British and Colonial qualifications in India, irrespective of whether Indian qualifications were recognized in those countries or not as the original Bill did, the Secretary of State would certainly have kept silent in the matter. But public opinion in India was tremendously opposed to such automatic recognition and the Select Committee who were eager to please the public, especially on the eve of elections, devised a *via media* by which statutory recognition was given to medical degrees of those countries for the first four years only, prescribing at the same time that any qualification that was not covered by any scheme of approved reciprocity should automatically disappear from the schedule. This was not entirely to Government taste and to placate the Government a

safeguard had been provided by which the Governor-General in Council was empowered to grant reciprocity in case the Indian Medical Council refused to do so. That was enough to hush the B. M. C. and Sir Samuel Hoare—the father of safeguards in the Indian Constitutional Bill!

The emotional speech of Sir Fazl-i-Hussain, the Member in-charge of the Bill, at the Assembly, that he had made several surrenders from point to point in the Select Committee to reach an agreement, helped to cow down all the members and give their unanimous support to the Bill. Whatever points Sir Fazl-i-Hussain may have surrendered, I think he has scored the vital point, that is, he got established in India a Medical Council, which by reason of its composition, will play second fiddle to the General Medical Council of Great Britain, a Council where the large and important body of medical men, the Licentiates, who are very often put in charge of small hospitals and dispensaries, who are made to conduct medico-legal examinations and on whose evidence probably human beings are hanged, have no place and a Council whose decision in the matter of reciprocity can be over-riden by the Governor-General in Council. This, according to Sir Fazi-i-Hussain, is "Efficiency at home and Honour abroad". The present Indian Medical Council, therefore, is not what the nation wants. It requires radical reform and nothing but a repeal of the Act and re-enactment on democratic lines will satisfy us. I am afraid the present Assembly may not be able to help us, for, though we have a steam road roller now in place of the old, lifeless, soulless, stone roller, possessing some strength and power, it has not got sufficient steam yet to successfully effect radical reforms. At best, it can only attempt some patch-work. We must, therefore, await better times. Meanwhile, I urge on our medical brethern in the Legislative Assembly to introduce an amending Bill, in its winter session next month, just to feel its pulse. The amending Bill must provide for (1) the deletion of the word 'higher' in the preamble occurring in 'higher qualification', (2) the election of one member from each province from among the Licentiates and (3) to include the qualification of those Licentiates who have undergone a course of 5 years training in any recognized institution, as is now being given in the Stanley Medical School in Madras, in the schedule of registerable qualifications. The maintenance of the register and disciplinary control may be left to the Provincial Medical Councils as at present, to avoid unnecessary duplication of functions. The strength of the Council would then be about 36, certainly not an unduly large number for a vast sub-continent like India. I wonder how the inclusion of Licentiates in the Council can at all affect the prestige of the British Medical Council. If only the British Medical Council should peep into the past history of its own Council, and read and re-read the provisions of the Act governing its own institution,

it will find how wide and how all-embracing they were. Their council was open to all classes, even Apothecaries. Then, why put a ban on the Licentiates? Their qualifications are not a whit behind those of the Licentiates of the Royal Colleges of Physicians and Surgeons. I think the time has gone for the British Medical Council to play the role of a Dictator. Much water has flown down the rivers between 1933 and 1935. We have been given Swaraj for India, that is, at least, what the Britisher now boasts of. Then why should he object to our having Swaraj in Medicine? Whether the British Medical Council likes it or not, our aim ought to be 'to establish a uniform minimum standard of qualifications in medicine for all provinces such that persons attaining thereto, shall be acceptable as medical practitioners throughout India,' and this we must strive to attain at any cost.

MEDICAL EDUCATION.

Medical education in India is in a most unsatisfactory state calling for thorough overhauling and immediate reform. There are two standards of qualifications, one, a University degree and the other a license or diploma. The holders of the University degrees who have been placed under ban for over five years, have now begun to bask again in the sunshine of the B.M.C. The University degrees of Bombay, Madras, Calcutta and Lucknow have since been recognized and it is hoped that with the good offices and kind intervention of the Indian Medical Council, the other University degrees also will come to be recognized in due course. The plight of the Licentiates, however, is beyond description. At present, there is no provision for higher education for L. M. P's in this country and those who aspire to higher qualifications are compelled to proceed to England to take up a continuous course for at least two years. So long as they remain in India, it is impossible for them to obtain a qualification which is registerable in the United Kingdom unless they are prepared to go through a University course from the very beginning. In Madras, some sort of solution was found for these problems. The L. M. P. course has been extended to five years in the Stanley Medical School and the percentage of marks obtainable by the final year L. M. P. students has also been raised to 50 per cent. Some difficulty is experienced only with regard to preliminary educational qualifications. Graduates in Arts and Intermediates come pouring in for admission into the school but still the Government persist in admitting S. S. L. C. students and declaring at the same time that the Licentiates cannot claim equality with the University graduates, that their qualifications are not registerable and that they must remain Licentiates for ever. This is indeed deplorable. Yet another sop was thrown to the L. M. P's in Madras. Dr. M. R. Guruswami Mudaliar brought forward a resolution before the Academic Council of the University of Madras on 14th March 1931, providing

for L. M. P. diploma holders to qualify themselves for M.B., B.S., degree under certain conditions. While it aims at levelling the existing inequalities in the medical profession, there is no denying the fact that the obstacles thrown in the way of the L. M. P's. gaining their end have been rendered too formidable to be easily overcome. One of those obstacles is the condition requiring the L. M. P. of 5 years standing in the profession to pass the Intermediate examination in Arts of Madras or any other recognised University or the Cambridge Local with credit in three subjects. The Syndicate would have acted wisely if they had only ruled that L. M. P's desirous of studying for the M.B., B.S, course should sit for the English paper alone in the Intermediate examination exempting them from the rest. But that was not to be. So, Madras is no whit better than other Presidencies and Provinces where these privileges do not exist.

Now, there is only one course open for us, if we should aim at the ideal of a uniform high standard of training with a single high minimum standard of qualification and that is this:—The minimum preliminary educational qualification must be Intermediate Examination in Arts with Science optional or an Entrance examination in English, Physics, Chemistry and Biology of the Intermediate grade, conducted by a Board of Examiners appointed by the Government. The selection of students should be made on merit and not on communal basis. A statutory body like the Royal College of Physicians and Surgeons in England should be established in the capital of each province and the course should be of five years duration, the curriculum, instruction and examination being the same as for the University graduates. There are enough facilities for clinical studies in capital cities and there are any number of men with British qualifications who can be appointed as Honorary Physicians and Surgeons in Hospitals attached to teaching institutions and as teachers in Colleges on a modest honorarium. The College of Physicians and Surgeons should consist of about 30 members chosen from the pick of the medical profession in each Province, the non-official element preponderating. The colleges will conduct examinations and award diplomas. There may be three diplomas, the Fellowship (F.C.P.S.). Membership (M. C. P. S.) and Licentiateship (L.C.P. & S.). Graduates of the medical colleges should be allowed to appear for the F. C. P. S. examination, the highest qualification of the College of Physicians and Surgeons. This will level up the distinction between the two classes. This qualification should be made registerable both in India and England. The holders of the diploma, possessing as they do the minimum educational qualification which is prescribed for admission to the medical colleges, should be eligible for recruitment to Government Service on competetive basis on the same terms as the University Graduates. This was the gist of the scheme that I proposed to the

Madras Government in 1932 and the then Hon'ble Minister, the late Mr. B. Munuswami Naidu regretted he was unable to consider the scheme on financial grounds. With the existing allotment for medical schools and with the collaboration of independent medical men as honorary workers both as teachers and as hospital staff, no great financial strain need be felt. At the next elections to the Legislatures under the new constitution which are not far off, medical men must see that only those men who give an undertaking to level up the existing inequalities and remove the existing anomalies in the medical profession in India are returned.

Ladies and Gentlemen, you hold the key-position, you have vast influence with the people, and if you are so inclined you can use it for the uplift of your less fortunate brethren and the amelioration of their unhappy lot.

MEDICAL RESEARCH.

Closely allied to medical education is Medical research. Unfortunately in India, research work is not encouraged to the same extent as its importance demands. Medical Research here is often associated with the I. M. S. fat salaries, high altitude, quiet solitude, cool and breezy climate and very little result. The right place for medical research is Calcutta, Bombay or Madras and not Kausali, Dehra Dun, or Coonoor. Nor can researches done in London be imported to Delhi. Our medical problems are different and require hard work under the tropical sun amidst the sick and suffering. It was in the small laboratory, 70 yards to the south east of the Presidency General Hospital, Calcutta that the late Sir Ronald Ross discovered the manner in which malaria is conveyed to mosquitoes. The trying conditions under which he conducted his experiments in a small hot dark room in his hospital have been vividly described by Sir Ronald Ross himself, thus :—" I did not allow the punka to be used, because it flew about the dissected mosquitoes. The result was that swarms of flies and 'Eye flies' tormented me at their pleasure while an occasional stegomyia revenged herself on me for the death of her friends. The screws of my microscope were rusted with sweat from my forehead and hands and its last remaining eye-piece was cracked". Such must be the spirit of sacrifice in research work. No facilities whatever exist for research and post-graduate study in any of the University Centres. If medical research has not advanced to an appreciable extent in India, the fault rests entirely with the Government. The best Indian medical talents are allowed to rot in Government Hospitals or eke out a scanty living by private practice. We, Indians are generally accused of being mere imitators and that we have no aptitude for original research. It is a fallacy. Given the opportunity, India can compete successfully with other nations of the world. Research is no monopoly of the West. Science knows no barriers of caste, colour, creed or territory. As

living examples, we can mention Sir J. C. Bose, Sir P. C. Ray, and Sir C. V. Raman who had made India famous for scientific research. The name of that mathematical genius, Ramanujam, has recently been added to the scroll of the illustrious dead In the Calcutta School of Tropical Medicine, many Indians have earned a reputation for scholarship and original research. More opportunities should, therefore, be given for Indian talent and the Indian Universities must provide more scholarships for research. The Universities being mostly Indian in character and composition, it is not difficult to achieve this end.

MEDICAL SERVICE.

1. THE I.M.S.

The Indian Medical Service has a long and interesting history behind it. For the last 175 years or more, this grand service, it must be admitted, had held aloft the torch of medical lore and had helped a great deal in shedding the lustre of Western Medical Science in India. Though the Indian Medical Service is a purely military service, it has practically remained a Civil medical one all these years. Between 400 and 500 officers are lent by the Military Department to the Civil side, for whom nearly 278 Civil posts are reserved. These posts include administrative posts under the Government of India and the various Provincial Governments for medical relief; sanitation, education and research work in the country. Other executive appointments are also held by them, such as Superintendents of jails and mental hospitals. Such a combination of civil and military duties, which subordinates the needs of the civil population to the requirements of the military, saddling the country with enormous expenditure, is unheard of in any other civilized country in the world.

Various have been the attempts made to separate the Civil medical service from the Military and the grotesqueness of a doctor going to see a patient with a sword in one hand and a stethoscope on the other, had attracted the attention of the Government of India, as far back as the year 1879. Between 1879 and 1911 no tangible result came out of these efforts, for the military had always the upper hand. From 1911 onwards, the number of Indians entering the Indian Medical Service was materially increasing. This alarmed the Army Department and they proposed to make the Indian Medical Service a purely Civil Service and to organize the Royal Army Corps in such a manner as to enable it to fulfil all the military requirements. This attempt too proved futile. The Public Service Commission, which was appointed shortly after, recommended the absorption of the I.M.S. into the R.A.M.C. and the formation of a separate Civil Medical cadre for each province, with some reservations such as the provision of European medical attendance for European civil employees and the like. This recommendation of

the authoritative and costly Royal Commission was brushed aside by the Government of India and the Secretary of State. Meanwhile vested interests in England were busy agitating over the question of recruitment to the Indian Medical Service, even for military requirements as they thought that such a pressure would retard the rapid Indianization of the medical services aimed at by the ministers in the Provinces and help them in the restoration of their pristine power and prestige. Concessions after concessions were offered to them and the two most important of them were (1) the abolition of the system of recruitment on the basis of a competitive examination and (2) the fixation of a definite ratio of two Europeans to one Indian, recruited for the service.

In 1930, Mr. Jayakar moved a resolution in the Legislative Assembly to this effect: "This Assembly recommends to the Governor-General in Council that he be pleased to revive the competitive examination for recruitment to the Indian Medical Service which has been held in abeyance for the last 14 years and hold it annually at a convenient centre in India and make it obligatory for the entrants to the examination to hold a medical qualification registerable in India ".

This resolution was clear and self-contained and was a great advance over the unsatisfactory system of recruitment by selection, in which only 18 per cent of Indians had succeeded as against 50 per cent when the competitive examination system was in vogue. It also insisted on a medical qualification registerable in India in the same way as a registerable qualification in Great Britain was urged for Indian candidates sitting for examination. But, this was not to the Government taste and that of the European group in the Assembly. An amendment was moved by Sir D'Arcy Lindsay which urged the Government "to revive the competitive examination for recruitment to the Indian Medical Service which had been held in abeyance for 14 years and hold it annually simultaneously in India and England and make it obligatory for the entrants to the examination in India to hold a medical qualification registerable in India " and this amended resolution was unanimously accepted. But this resolution remains a dead letter even unto the present day and "so long as the vicious water-tight division of the service into Indian and European holds and Indians cannot hope for more than a third of the total number of posts, however strong they may be in number and qualifications, this injustice of the domination of a particular race in key service will continue".

This anomaly has not been removed even in the new Indian constitution and the domination of the Indian Medical Service has been perpetuated. The Indian Medical Service has come to stay with us permanently until at least another stage in the advancement of self-government has been reached. God knows when this is

going to be. So, we must make the best of a bad bargain. Our friends in the Assembly must bring forward a resolution on the lines of Mr. Jayakar's again and carry it through. The Indian Medical Council too must urge, after four years, for a registerable qualification in India for entrants to the Indian Medical Service. This qualification must include proficiency in Tropical Medicine. So long as we pay handsomely to the piper, we are entitled to ask for the best tune.

My friend and predecessor in office, Col. Bhola Nath, who knows more about his own flock, has given us an exhaustive and interesting account of them in his address last year and it will be highly presumptuous on my part to attempt to enlarge upon it. So, let me stop with the dictum, "what cannot be cured must be endured".

2. Women's Medical Service.

Women of India have now come to the forefront in all walks of life. They find the medical field no less alluring and attractive than the educational, which they first entered. A number of women graduates and licentiates in Medicine are being turned out by Medical Colleges and Schools in every province, year after year. They too suffer like their brethren in the struggle for existence. The Government of India have recently organized the Women Medical Service. This service is recruited in India. It consists of 40 members for All-India. Of them 50 per cent are Indian For a vast sub-continent like India, this number is too poor. More women, specially Indian, must be recruited for this service.

Nearly four lakhs of rupees are paid every year to the Women's Medical Service from public revenues. So, the appointment should be made by an independent body like the Public Service Commission. The proposed contract that members of the Women's Medical Service reserve, proceeding to England for their study should resign the service and pay back the Rs. 10,000 if they marry within 4 years after returning from England should be abolished. It affects a number of Indian candidates, as few Indian ladies would be prepared to bind themselves against marriage.

3. Provincial Medical Service.

There are three grades of medical men serving under Government, the Civil Surgeons, the Asst. Surgeons and the Sub-Asst. Surgeons. The Civil Surgeons are promoted from among the ranks of Asst. Surgeons who are seniors. These men though given independent charge of hospitals are given subordinate position when an I. M. S. officer is posted to the hospital, though he happens to be the latest recruit. The other two grades are kept separate and water-tight and whatever the length of service and whatever the reputation of the Sub-Asst. Surgeon, he cannot enter the Asst. Surgeon's cadre, except in rare cases where he happens to be in the good books of the head of the Medical Department. In the Revenue Department

of Government a Tahsildar, who rose from the ranks could be eligible for appointment as Deputy Collector, though he is not a Provincial Civil Service man. While so, I fail to see why this distinction is maintained in the medical department alone. I would therefore suggest that a provincial civil medical cadre be formed and that promotions from Sub-Asst. Surgeon cadre be made to the Asst. Surgeon's cadre, on grounds of merit and efficiency, until both these classes get merged up. I would even go to the length of suggesting that a competitive examination be held to which Licentiates and Graduates be admitted, to fill up vacancies in Asst. Surgeons grade and those who come out successful be promoted to that grade, not as a matter of grace but as a matter of right. The old time-worn slogan, "once a licentiate, ever a licentiate ", must be scrapped out and equal opportunities should be afforded for all grades of medical men in service. If necessary, a certain proportion may be fixed for direct recruitment and for recruitment from the Sub. Asst. Surgeon's cadre.

INDEPENDENT MEDICAL PRACTITIONERS.

Most of us here belong to this category. The Independent Medical Practitioners depend entirely on private medical practice for their livelihood and they have to carry on this against what may be called 'State Aided Competition'. It is really hard for a Private Medical Practitioner to compete with medical men subsidised by Government. The independent medical practitioner has another more formidable opponent in the person of the *Hakim* or *Vaidyan*. The profession is overcrowded and acute unemployment is now staring them in their faces. In this connection, I am tempted to give a few of words of advice to the budding practitioners who may be here. First of all, you must know the masses are generally poor and are still steeped in ignorance, prejudice and superstition, which will have to be overcome in order to achieve success in your profession. The patient who seeks your aid does not care about the invidious distinctions that exist between the graduate and the licentiate. He wants the best service and the fittest alone can survive in these days of keen competition. If, therefore, only a few among the private practitioners have roaring practice, you must remember that it has been built up after years of struggle and hard and honest work. Industry and integrity must be your watch-words. You must read books and journals and keep yourselves up-to date and abreast of the times. Courtesy and patience you must possess in an abundant measure. You must put on a cheerful look always. You must try to cheer up your patients and put up with their whims and fancies and their idiosyncrasies. These qualities will pay you in the long run.

1. HONORARY PHYSICIANS AND SURGEONS

The honorary scheme was first introduced in Madras in the year 1920 and was given up as a failure, not because capable men were

wanting but because the conditions imposed by Government were such that men of self-respect refused to serve as Honorary Officers. The scheme was revived in 1923 as a result of my agitation in the local Legislative Council and was again condemned on the following grounds: (1) that the appointments were unpopular, (2) that they were not conducive to the welfare of the patients, (3) that there was no economy in administration to Government as the employment of honorary staff had not permitted any retrenchment in the permanent staff and (4) that the teaching capacity of the Indian medicoes was low. After long and persistent struggle, a Commitee was appointed by Government to consider the further extension of the scheme and orders on their report have recently been issued. This order again is lacking in sympathy and straight forwardness. The vested interests wish to safeguard and secure their position. Let me quote two instances here. The order says that Honorary Medical Officers may generally be appointed to hospitals and dispensaries where the daily average attendance of patients exceeds 100, provided that such officers are agreeable to attend the institutions at out-patient hours. The out-patient hours are generally between 7 to 10 in the mornings and this is the time when the independent medical practitioner can expect some patients for private treatment. So, the whole thing reduces itself to this, that he must either accept honorary post and starve or give it up and thereby keep the wolf away from the door. The instinct of self-preservation will only induce him to adopt the latter course. Then again, there was a suggestion made that small hospitals or dispensaries might be placed in the entire charge of honorary medical officers. On this point the order says, "The Government consider that the time is not yet ripe for placing hospitals and dispensaries in the entire charge of honorary medical officers. They agree with the Committee that the development of this scheme should be gradual and that it should be introduced only as suitable officers become available". What a sad commentary these afford on the biassed mentality of official medical men and those in power!

2. RURAL MEDICAL PRACTITIONERS.

The Rural Medical Practitioners are quasi-independent medical men who now flourish in the Madras Presidency. If the honorary scheme was intended to relieve intellectual bankruptcy among the profession, the rural scheme was intended to relieve financial bankruptcy. The rural scheme was suggested by me in my journal *The Anteseptic* in the year 1925, in order to relieve the growing unemployment and consequent distress among medical men in our Province. I was a member of the Madras Legislative Council then and I discussed my scheme with the Chief Minister, the late Raja of Panagal, who, it must be said in fairness to him, was an out and out nationalist, so far as the medical

department was concerned. There was no good, I told him, in asking these unemployed medical men who are crowding themselves in cities and towns and actually starving 'to go to villages.' as some of the politicians advise them to do, without providing for their subsistence. He took the clue and at once launched this scheme. Under this, the medical practitioners are given an annual subsidy of Rs. 600, half of which will have to be expended on rent, ward-boy, sweeper and the like, and Rs. 400 for medicines, which is no doubt inadequate. They must locate their practice in village parts, treat the necessitous poor free and receive fees from the rich. A midwife is also attached to these rural dispensaries. Unfortunately, these rural practitioners have been placed under the control of Local Boards. In course of time, they got themselves mixed up in local politics and were perforce obliged to take sides in local board elections and the like with the result that they had become the victims of persecution by one party or the other. But these men are made of sterner stuff. They formed themselves into an Association, held annual conferences, waited on deputations to the Minister and the Surgeon-General, got their grievances redressed and thus firmly secured their positions. They are better off now. This rural scheme has recently been introduced in Canada in 1930 and the rural practitioners there are called community doctors. These men are handsomely paid, about Rs. 4,500 per annum as subsidy. I quote below the relevant portion of that scheme :—"Of the 866,700 people who live in Saskatchewan, Canada, over three quarters reside in rural districts. Many of these are sparsely settled and in these thinly populated areas, it is often impracticable for a doctor to establish himself. To cope with this condition, the Provincial legislature during the session of 1928-29 passed two measures which constitute something new in Government administration. The first measure provides that the Council of every Municipality shall be empowered to make a grant to a medical practitioner to induce him to reside and practise his profession in that Municipality and in consideration of such residence and practice a grant of money up to 1,500 dollars (£ 300) shall be paid to him." I wish this scheme is extended to other parts of India and modified according to provincial needs.

3. MEDICAL INSPECTORS OF SCHOOLS.

This is another avenue open for independent medical practitioners. The scheme of medical inspection of schools was tried haphazardly in Madras for a few years and was given up on grounds of economy. This must be revived not only in cities and towns but also in rural parts and the independent medical practitioners must be provided with these jobs.

With the extension of the honorary scheme which will release a large amount now being expended on staff in hospitals and the expansion of rural medical scheme from out of the savings such

effected, at the rate of one medical practitioner for a unit of, say, 20 villages in each taluq or as many villages as may be comprised within a radius of 5 miles and the prohibition of private practice by I.M.S. men and other medical officers and subordinates in Government employ, except as consultants in the case of specialists, are in my opinion the only means of solving the present acute unemployment problem among medical men and providing efficient medical relief to the masses.

THE INDIGENOUS SYSTEMS OF MEDICINE.

There is no country in the world where medical relief is so poor as in India. It is a well-known fact that the Aryans of ancient India exhibited their skill and genius in all the departments of medicine and although the vicissitudes of foreign conquest and a number of other factors coupled with the withdrawal of state aid, interfered to break the continuity and turn the scale of progress back, records still exist in plenty to demonstrate that the Hindus of old possessed a good knowledge of the human frame, of the ills that the flesh is heir to and the methods to be adopted to remove them. The Aryan system of medicine is known as the Ayurvedic. After the Muslim conquest of India, the Unani system began to flourish in this country and had the support of the State. There is also another system named the Siddha system which is the Tamil system and which is largely in vogue in South India. These three systems though greatly deteriorated, had and still have large public support. They cater to the needs of nine-tenths of the population of this country. It was thought highly desirable in the interest of the people that these systems should be placed on a scientific basis. The Madras Legislative Council began to put pressure on the Government. A Committee was appointed of which I was a member, to investigate and submit a report. As a result, the Government Indian Medical School was established in Madras in 1925 with a big hospital attached to it. Similar agitation was also set up in other parts of India. I understand two Ayurvedic Colleges and an Unani College have also been established in Northern India. The Indian Medical School in Madras is being well conducted and instruction is imparted in all the three systems, Ayurvedic, Siddha and Unani. As many as 310 students have completed their course and passed out of the school during the period of 9 years. Of this number, 11 are in Government employ, 87 are working in rural dispensaries, 36 in Local Fund Dispensaries, 15 in Municipal Dispensaries and 171 are having private practice. That the hospital is popular can be gauged from the fact that the total number of in and out patients treated during the year 1934 came to 1897 and 2,85,939 respectively. I allude to these figures merely to point out that we can no longer ignore or brush aside these systems as empirical. The duration of the course is 5 academical years. There are three classes (1) the L.I.M., or Licentiate in Indian Medicine, (2)

the A.I.M., or Associate in Indian Medicine, and (3) A.L.I.M., Associate Licentiate in Indian Medicine. Let me take the first two qualifications alone for consideration here. There are two defects in the L. I. M. Course. (1) The preliminary educational qualification is too low. It must be raised to the standard set up for allopathic practitioners; (2) the subjects are too many and over crowded and the students have to learn both the western and eastern systems within the same period of five years, which it is not possible to do. The course must therefore be extended to another two years, if it should stand on a par with the A. I. M. Course.

The A. I. M. Course is intended for qualified practitioners of allopathic medicine to obtain special courses of instruction in the three branches of Indian Medicine, viz, Ayurveda, Sidda and Unani, and extends over 2 years. This will form the basis for the formation of a separate Indian Medicine for the future, which will be a happy blending of both the Allopathic and Indigenuous systems of medicine, suited to our soil.

DRUGS AND MEDICINES.

India's position is unique in this regard. Instead of utilizing the drugs found within her own borders, she has got to depend on countries thousands of miles away, to fill the empty bottles of her Pharmacies. Taking the figures for 20 years between 1909 to 1929, we find the value of drugs and medicines imported to India, excluding chemicals and narcotics, increased from 73 lakhs in 1909 to 202.12 lakhs in 1929, while the value of raw drugs exported from India also increased from 15.5 lakhs to 41.6 lakhs during the same period. Thus the trade balance in favour of importing countries at the end of 1929 was 161.6 lakhs. On the basis of the average struck out from the above figures, the trade balance at the end of 1934 can be put down at 200 lakhs. Thus India is the loser by Rs. 2 crores annually in the drug trade. There is no gainsaying the fact that some of the imported drugs and medicines get deteriorated in strength due to climatic, storage and other conditions and that is an additional loss to the country, apart from their being a positive harm to the patients, should they find a way into their medicine bottles by unscrupulous dispensers. The Government of India ought to have long ago established Chemical Laboratories in important centres in this country, where the tinctures and other medicines can be prepared out of the drugs collected first-hand in this country and their supineness has drained the public exchequer to the extent of nearly 200 lakhs of rupees annually. Nor is this all; the *costliness of the Allopathic medicines* due to the circuitous route which our own drugs take to a reach us in medicinal form, to duty and freight charges is also responsible for the treatment not being availed of largely Chemical Laboratories and herbariums in each of the several provinces of India are therefore dire and prime necessities and it is an

economic folly of the highest magnitude to allow things to drift eternally like this and make India dependent on Europe and America for drugs to save her suffering millions. Patriotic spirit, however, is not wanting among Indians, and men of means and scientific aptitude have tried in the past to surmount all difficulties and obstacles and successfully establish chemical laboratories in this country to prepare tinctures, sera, vaccines etc. and supply them at comparatively less cost. The Bengal Chemical and Pharmaceutical Works, the Bengal Immunity Co., Alembic Chemical Works, Smith Stanistreet & Co., Powell & Co., the Calcutta Chemical Co., are a few of the leading and enterprising firms of Calcutta and Bombay that are at present engaged in the manufacture of medicines under expert scientific guidance and their medicines have been tested and found not wanting. They are in no way inferior to the British products. After all, these firms only touch the fringe of the problem.

In the year 1927, the Council of State passed a resolution in the following terms:—"This Council recommends to the Governor-General in Council to urge all Provincial Governments to take such steps as may be possible to control the indiscriminate use of medicinal drugs and to legislate for the standardization of the preparation and for the sale of such drugs". To give effect to this resolution, the Government of India appointed a Committee with Lt. Col. Chopra as Chairman. But the terms of reference precluded the Committee from dealing with the economic aspect of the question. The masterly report of Col. Chopra was practically shelved until recently it was unearthed by the Council of State by another resolution. The Government of India have now come forward with their proposal to establish a Bio-Chemical Laboratory at Calcutta and have asked the Provincial Governments to follow suit. A laboratory in every Province is absolutely necessary to test the purity of drugs and no time should be lost to set them up.

There is again another economic aspect which the Government have failed to consider. That is the dumping of patent medicines and secret remedies, which have spelt economic ruin on our land and have caused indescribable harm to the people. The British Government in their own country have imposed a stamp duty on the secret remedies and are having an annual income of £ 4 to 5 millions. The U. S. A. are also imposing a duty on secret remedies and patent medicines, with this difference that while the Government of U. S. A. insist on the component parts of medicine being inserted on the label in each packet, the British Government do not so insist and this is a great disadvantage to India. This enormous drain of India's wealth should instantly cease and there ought to be legislative control over these patent medicines. There are also patent remedies and secret remedies of indigenous origin which play similar havoc, though to a lesser extent. In the case of the indigenous

practitioners, who refuse to disclose their formula, the Taxation Enquiry Committee have suggested a tax of four annas in the rupee. They have also suggested an increase in the tariff rate of imported patent medicines to 50 per cent. The Government of India have not moved in the matter because it affects vested interests. The import of these patent medicines should be stopped and no medicine should be allowed to be imported which does not disclose its formula on the label. We medical men should refuse to prescribe patent medicines whose formula has not been disclosed. A great deal of propaganda is necessary to impress on the people the harm in taking patent medicines advertised in papers as specifics for diseases. Mahatmaji's Village Industries Improvement Association might profitably include this item in their programme and dissuade people from using patent and proprietary medicines and foods and thereby stop the flight of nearly half a crore of rupees annually from our land.

Even in the matter of supply of drugs and medicines, there is the military domination over the civil. The Medical Stores are military stores; they get the supplies from England and distribute them to Civil Hospitals. They charge 20 per cent extra as departmental charges. But when the supplies are made to Local Boards and Municipalities, a further levy of 20 per cent is made. Thus, when the medicine reaches the rural population, its original cost is raised by 40 per cent. I raised the question in the Council of State in 1927 and pressed for freedom for Provincial Governments and Local Boards to purchase their stores direct from any approved vendor. Though the Government promised to do something in the matter, I understand the same old system still continues. We must agitate and see that this military control over medicines and drugs ceases and that the civil government get their supplies at the cheapest rates from the open markets.

INDIAN PHARMACOPOEIA.

The compilation of an Indian pharmacopoeia is a great desideratum, and the time has now arrived for taking up this question in right earnest. The various formulae given in the British, U.S.A., and other pharmacopoeias, may, after sufficient laboratory test and trial in our own country, be adopted with advantage and included in the Indian Pharmacopœa. The indigenous system of medicine may also be standardized and such of the therapeutic agents as are really efficacious may be brought within its fold. Let me repeat here my old 'obiter dictum. "If in the wake of the great enterprise of the study of Tropical Medicines, the examinations for the Indian Medical service are held only in India, for the study of which candidates come here from the West and if the Pharmacopœa of India be more Indian than at present, will that be an era in the history of medical science in India"?

DENTISTRY

This is a much neglected subject. The care of the teeth has dropped down with the advance of civilization. We, Indians, who used to take scrupulous care of our teeth have greatly deteriorated. We must have qualified dentists to mend our teeth. Dentistry should be taught in all Medical Colleges and Schools. If it is not feasible, a College should be established at a central place were up-to-date instruction should be imparted in Dentistry. A separate Register should be maintained to discriminate qualified men from quacks. The Indian Medical Association, I notice, has also passed resolutions on the subject. We may pass any number of resolutions, we may cry hoarse but our cries have always been cries in the wilderness.

PUBLIC HEALTH AND SOCIAL SERVICES.

We, medical men, have got to shoulder greater responsibility in promoting public health and social well-being than we have hitherto done. In private practice, we must not fail to impress on the patients the benefits of fresh air, pure water, nutritious food, good exercise, sound sleep and a host of other things which are indispensable, not only to cure them of their maladies but also to prevent them from contracting fresh ailments. That way lies our success in our profession. We must undertake health propaganda work and do our little bit towards prevention of diseases. In rural parts, there is very great opportunity for social uplift. The Rural Medical Practitioner, if he is so minded, can keep the few villages under his control in a perfectly sanitary condition. The Public Health Department has got a very poor staff under its control. In the case of an outbreak of cholera or small-box they are obliged to requisition the services of the Rural Medical Practitioners. Recently, in some of districts of the Madras Presidency, where cholera was epidemic, the rural practitioners did all the inoculation work for a small remuneration and in that way the epidemic was kept under control. The Medical and Public Health Departments must work in a spirit of comraderie and given the rural practitioner a compounder, a vaccinator, and a midwife to assist him, he will be able not only to successfully ward off infectious diseases like cholera and small-pox but also lessen maternal and infantile mortality in the area under his charge.

CO-OPERATION AND PREVENTIVE MEDICINE.

The next thing that we would like to impress is the necessity for greater co-operation between the medical practitioner and the State. Medical men should enlarge the narrow purpose of directing their almost exclusive attention to morbid conditions and the remedy of such conditions by drugs to the preventive aspect of medicine. Every medical practitioner should carry with him a new practice of preventive medicine with his daily routine. Every practitioner

should be a missionary of health.....a teacher of his patients in the true sense. As Sir George Newman correctly puts it, "the medical practitioners ought to be the first effective teachers of hygiene to people, the principal interpreters of preventive medicine in the country, for, through their hands pass a greater proportion of the whole population".

Another free and effective means of preventive medicine is the institution of a National Health Insurance scheme. This is a co-operative organisation between insured persons, the friendly societies, the medical profession, and the Government, especially designed for "insurance against loss of health, and the prevention and cure of sickness." In England it is controlled by medical and lay co-operation. 16,000 doctors (very nearly 70 per cent of the medical practitioners in England and Wales) have agreed to accept their right, under the Act, to give preventive and curative advice and treatment to sixteen million insured people. The doctor is paid for each person on his panel, whether he becomes a patient or not; the patient has a free choice of his doctor, and may come at the very beginning of his sickness undeterred by any question of fee. The doctor's duty is to diagnose and treat the illness and to estimate the resultant incapacity. There is no doubt bound to be some complaint in such a vast scheme, but taken as a whole this scheme has provided medical relief and service for half the adult population of England.

MEDICAL PRACTITIONERS AS LEGISLATORS.

It is a pity that medical men are sparsely represented in the various councils of the Indian Empire. The old Legislative Councils in India inaugurated in 1892 had only a dash of representative element here and there. In those days, not even the Surgeon-General, the head of the Medical Department was a member of the Legislative Council—I am speaking only of Madras—while the Director of Public Instruction and the Inspector General of Registration had almost always been members of the Council. In 1909, when the Minto-Morley Reforms gave India enlarged Councils on an elective basis, no doctor stood for election. The late Dr. T. M. Nair, who was as much an esteemed politician as an esteemed Surgeon and Specialist in Eye, Ear, Nose and Throat Disease, entered the Council only through the door of nomination. He introduced the Medical Registration Bill for Madras as a private Bill, and got it passed into an Act. He may as well be called the father of the Medical Registration Act in Madras. Under the Montague-Chelmsford Reforms, there were at the beginning only about 4 doctors in the Madras Legislative Council in a total strength of about 120 and to-day there is only one. In the Legislative Assembly, during the Nehru period there were two doctors and in the Council of State, only one and that was myself. In the present Desai period, I believe there are four in the Assembly and none in the upper chamber.

These figures tell their own tale of apathy and disinterestedness on the part of the medical profession to enter the legislatures. You must remember that your problems are different and a land-lord and medical portfolio, or a lawyer and medical portfolio are incompatibles. A medical man becoming a Minister of Medicine and Public Health in a Province will be the greatest blessing to the people. So, you must not let slip the golden opportunity that is afforded to you under the Hoare-Willingdon Reforms. I dare say there is no dearth of able and eloquent politicians among the medical profession. Men with a long purse to successfully fight out the elections, men with the gift of the gab to vehemently plead the cause of the profession and men with ripe experience to skilfully tackle the intricacies of the medical problem are to be found among us in large numbers to-day and to such of them I would appeal to stand as candidates for the next elections. You must not forget also the Local Boards and Municipalities. Your presence in those bodies will make your path easy. By coming into closer contact with the people, you will be able to gain their good-will and win their confidence. That will prove a great asset to you. God helps only those that help themselves!

THE INDIAN MEDICAL ASSOCIATION.

A word about the Indian Medical Association and its activities and I have done. The Association has got, though short, yet, a creditable record behind it. It was started during those troublous times when the Indian Universities were treated with scant regard by the British Medical Council in the mater of recognition of their medical qualifications and the medical profession in India generally was intended to be kept always in the background as 'hewers of wood and drawers of water' in their own country. The objects of the Association are (1) to secure the promotion and advancement of Medicine and allied sciences, (2) maintain the honour, dignity and interests of the medical profession and (3) secure the co-operation between the members thereof. The first of these objects is being fulfilled by the publication of the monthly journal called "*The Journal of the Indian Medical Association*" and the reading of scientific papers and discussion of scientific topics in annual conferences such as this. The journal is reputed for its wealth of knowledge and erudite scholarship and it behoves every member of the Association, nay, every member of the medical profession, to subscribe for it and make it a success. The second object has been amply fulfiled by the noble and strenuous part the Association played in the battle with the British Medical Council and the ultimate establishment of the Indian Medical Council. If the Indian Medical Council is not to our liking, it is not the fault of the Association. "Even a worm can turn" is no idle saying and the Indian Medical Association has sufficiently demonstrated its truth to the British Medical Council. This is no

mean achievement. But the fight is not yet over. There are many more things to be done before we can maintain our honour and dignity and safeguard our interests. To attain this end, unity is essential. Every member of the medical profession in India should be a member of the Indian Medical Association. The Association has thrown open its doors even to Licentiates. It is high time therefore for the All-India Medical Licentiates' Association to be incorporated with the Indian Medical Association. A beginning may be made by holding the Annual Conferences of both the Associations at the same time and at the same place and having a common meeting for scientific discussions. We have been divided and sub-divided by the powers that be, to serve their own purpose. Our tussle with the British Medical Council must be considered as a blessing in disguise. We must learn a lesson from the British Medical Association and note how strong and united they are and how persistent in protecting the interests of their kith and kin in all parts of the world. We must see that we make our Indian Medical Association as strong as the British Medical Association and our Indian Medical Council as unyielding as the British Medical Council. This consummation can only be reached by the union and array of the whole profession, high or low, official or non-official, under a single banner, and hearty co operation among the members. In union lies our strength!

Extracts

CLINICAL NOTES ON THE RESULTS OF FEVER THERAPY IN DIFFERENT DISEASES.

(P. S. HENCH: *Proc. of Staff Meetings of Mayo Clinic.* 1935. x. 662).

Fever therapy is the newest form of physical therapy, and as yet, few charlatans have been able or have dared to invade the field. Differences of opinion exist as to its merits. On disease processes, fever therapy may have a direct influence through its bactericidal or bacteriostatic effect on certain organisms, or an indirect influence by vasodilation, by mobilization and augmentation of certain immune bodies, and by increasing metabolism. The most striking results are seen in those diseases caused by organisms on which fever exerts a direct effect, gonorrhœa and syphilis.

Gonorrhoea and its complications: The thermal death time of 130 strains of gonococci in vitro at 106 to 107 degrees F. is about 6 to 27 hours. A patient may be infected with more than one strain. The strain derived from a patient and that derived from his consort generally have the same thermal death time. When a patient exhibits strains of which the thermal death times differ markedly, he is probably affected with an old and with a new infection. Articular strains are sometimes less resistant to heat than are urethral

strains; therefore gonorrhœal arthritis may subside before an associated urethritis. In general, results of fever therapy for gonorrhœa in various anatomic sites have been excellent, and in most cases this treatment is the method of choice and almost specific, clinical and bacteriologic cures being obtained in 80 to 90 per cent of cases. The combination of fever and of Elliott treatments or pelvic diathermy for gonorrhœa of the female pelvis may be more effective than fever therapy alone. In gonorrhœal arthritis the results are much better in the acute than in the chronic forms.

Syphilis: The thermal death time of the Spirochæta pallida at about 103 to 106 degrees F. is about 3 to 5 hours. The clinical value of fever therapy in neurosyphilis is definitely established. It is the current belief that fever combined with chemotherapy is more effective than either alone. Some workers still consider malarial fever best; many are changing to artificial fever, as statistics indicate as good or better results therewith. In neurosyphilis, regardless of the thermogenic method used, clinical remissions should not be expected in more than 50 per cent of cases. Fever therapy and chemotherapy were advocated for the treatment of early syphilis by Simpson, who gave the drug for greater effectiveness in the course of vasodilation brought about by a session of fever.

Tuberculosis: Temperatures available in fever therapy have no bacteriolytic, but may exert a bacteriostatic, effect on the human strains. Experiences with 34 cases of pulmonary tuberculosis would indicate that fever therapy is of no value and sometimes harmful. Cavities remain unclosed and sputums remain positive. Fever stimulates metabolism and is the equivalent of strong physical exercise which is known to be harmful in tuberculosis. But two cases of unilateral tuberculous nephritis curiously became bacteriologically and pyelographically normal.

Chorea: The results in 28 cases have been excellent, and associated endocarditis was not a contra-indication.

Subacute bacterial endocarditis: Results reported indicate life may be prolonged, the patient made more comfortable (less fever and night sweats, gain in weight) but death is postponed only. Blood cultures remained positive, and alterations in urine, liver, and spleen did not return to normal. Fever therapy increases circulatory velocity and provides a danger from formation of emboli.

Non-specific arthritis: The results were in general disappointing but were better in acute cases.

Asthma: Fever therapy was used in the treatment of patients who had intractable asthma of the intrinsic or allergic type which had not been relieved by other measures. About 75 per cent received a notable remission for from 1 to 7 months.

Peripheral vascular diseases: In the treatment of these conditions one should be content to induce vasodilation and not try to kill

some unknown causal bacteria. Temperatures greater than 102 degrees F. may initiate severe burns if the circulation is poor.

Ocular lesions of gonorrhœa and syphilis were often notably affected. Optic atrophy is not a contra-indication.

Staphylococcal infections: Staphylococci survive over 100 hours of exposure to heat at 107 degrees F. and therefore seem impervious to fever therapy. However, in despair, fever therapy has been prescribed by Major and others for a diabetic patient who had apparently hopeless staphylococcal septicaemia, and for some reason the patient recovered from a disease which is practically always fatal.

Miscellaneous conditions: Rheumatic carditis, controlled diabetes and pregnancy in selected cases were no contra-indications to fever therapy. In cases of osteomyelitis in which there was free drainage, fever therapy may lessen the discharge and hasten recovery, but when infection is walled off, fever therapy may do harm. Simpson has collected 50 cases in which malignancy notably regressed after intercurrent fever, and others have suggested that fever therapy and roentgen treatments may do better than roentgen treatment alone, in a few cases of the observed cases of inoperable but proved malignancy.

Management. In the hands of skilled nurse-technicians the management of fever therapy is generally easy and safe. When circulatory collapse very occasionally impends, the use of injections of 50 per cent of glucose or of oxygen and carbon dioxide are indicated. Repeated applications of ammoniated mercury to the lips prevent herpes. Occasional serious reactions are probably inevitable as the administration of 5 to 8 hours of fever at 106 to 107 degrees F. puts some patients close to the borderline of disaster. Untoward reactions are, however, rare, and the patient need stay in the hospital only on the day of treatment.

COD LIVER OIL TREATMENT OF WOUNDS.

(STEEL: *Lancet.* 1935. ii. 290)

Following Willam Lohr of Magdeburg, the author tried cod liver oil in the treatment of burns and wounds. He first tried it with burns of a minor degree but heartened with the success he followed it up in those of a more serious nature. Lint heavily soaked in the crude cod liver oil is spread widely over the part to be treated, and covered with jaconite. After 24 hours the dressing is uncovered and resoaked with the oil. The lint is not taken from the skin surface until the end of 48 hours. The first application of cod liver oil has been easier than other dressings. When the cases have not reacted to the previous dressings, application of cod liver oil has hastened an indolent area into a healthy granulation one. It was also found that there was no scarring and even the brown pigmentation disappeared quickly.

The method was also tried in the treatment of wounds, particularly the slow healing ones. After the removal of pus and gangrenous patches of skin, oil applied in the above way has led to the rapid granulation of tissue that was previously indolent.

The only disadvantage of the method is the smell of the oil which may turn the patient off his food, and the soiling of the sheets, but the advantages are greater. Cod liver oil simulates liquid paraffin in not being a suitable medium for the growth of the organisms, but it seems that there is something more in the cod liver oil which has the effect of more rapid healing and the almost entire elimination of scar tissue.

OSTEOMA OF THE NASAL ACCESSORY SINUSES.

(T. E. CARMODY: *Annals of Otol. Rhinol. Lary.* 1935. x. liv. 626).

Osteoma of the nasal accessory sinuses are not common but the older authors writing on the subject agree that the sinus most commonly affected is the maxillary. The later writers give the frontal as the most frequent. The reason is that the frontal was rarely opened. Bony tumours of the sphenoid sinuses are very rare. Most authors say that the condition is more common in males than in females, and more common in young people. The mortality from attempted removal was very high until the advent of anaesthesia. Diagnosis by the x-ray has increased the number of successful results markedly, and it is of value in determining the extent of involvement and the probable outcome.

The etiology of the condition is truly controversial. Harris found that these tumours arise from the embryonic cartilage cells at the junction of the ethmoidal and frontal; from the periosteum of the sinus walls; from ossified polypi; from the diploe; syphilis (though the Wassermann was never positive); trauma, sinus inflammation; tuberculosis. Harris also found divergence as to the reports of the site of attachment. These tumours usually grow slowly, and there is a great divergence in size and involvement.

The symptoms are as follows: (1) external deformity, (2) headache, (3) cerebral paralysis, (4) discharge, (5) vertigo. All symptoms are dependent upon the amount and type of involvement. There does not seem to be any definition of the direction of possible extension. The external deformity may be in the form of a bulging process, and there may be proptosis of the eye.

Treatment is undoubtedly surgical, and the method must depend upon the particular case.

BANDL'S RING.

(E. H. WHITE: *J. of Arkansas Med. Soc.* 1935. xxxii. 109)

This condition gives trouble when least expected, and has to be remembered in the differential diagnosis of all cases of dystocia in

both normal and abnormal pelvises. In reading the literature on abnormal behaviour of the uterus during labour such terms as Bandl's ring, contraction ring, retraction ring, tetanus uteri, and hour-glass contraction are used.

Bandl, studying rupture of the uterus in 1875, came to the conclusion that the rupture occurred in the lower uterine segment. Bandl's ring is a constricting ring which runs transversely or obliquely across the uterus at a point of attachment of the deflected peritoneum and the crossing of the coronary vein, *i.e.*, where the peritoneum is reflected from the uterus to the bladder. The ring is often sufficiently definite for one to see a depression of the abdomen between the symphysis and umbilicus. Palpation of the active or upper segment will reveal tenderness and rigidity with practically no relaxation between pains. The two outstanding subjective symptoms are the presence of an increased pain varying in its site, but most usually described as being low in the back, with irregular, ineffectual contractions usually over a prolonged period. Bandl's ring occurs in both normal and contracted pelves.

Bandl's ring is easily differentiated from a contraction ring or so-called hour-glass contraction. The constriction may occur in the lower uterine segment, but it is most frequently seen in the active (upper) uterine segment. This ring is most often seen at the level of the umbilicus and above. The uterus is soft to palpation between contractions and not tender above the constriction ring. Probably the motivating causes starting up the tetanic contractions of the uterus are many, such as occiput posterior, large foetal head or other mal-position such as face and brow ; others are moderate contracted pelvis, tumour low down in the pelvis, rupture of the membranes before labour, too much activity of the obstetrician with forceps in an incomplete dilated cervix, or the use of pituitrin. Long labour and exhaustion play a part. Reinberger finds that the CO_2 quotient in these cases decreases much below normal, even as low as 12·5 per cent, with the development of acidosis ; he has shown that by the intravenous use of a one per cent sodium bicarbonate solution the CO_2 content may be raised to normal and that not more than 1000 cc. of solution are to be used at a time. Do not let your patients get exhausted, let them have liquid food, such as sweetened orange juice, milk, etc. The patient should be kept well alkalized during labour and quieted with morphine and some of the barbiturates at times.

Bandl's ring generally appears first at the lower pole of the active segment, or the junction of the lower and active segments. From inspection externally, the ring may appear to be found at various levels, even as high as the umbilicus of the mother.

Treatment : 1. Prophylactic :—rest for the patient in labour, some food, alkalization.

2. Medical :—Morphine, deep surgical ether anaesthesia for at least 20 minutes before one attempts to deliver, then forceps may be tried. If pelvis is normal, version may be tried. Other methods suggested are amyl nitrite and adrenalin, but not reliable.

3. Surgery : Caesarean section—low section with removal of the uterus, or extra-peritoneal section when the uterus is to remain.

Medical News and Notes

THE ALL-INDIA MEDICAL CONFERENCE. The twelfth session of the All-India Medical Conference was held at Nagpur on the 26th, 27th, and 28th December 1935. The medical profession was well represented in the conference, and members and delegates from all over India joined in the deliberations. Col. K. V. Kukday, C.I.E., I.M.S. (Retd.), Chairman of the Reception Committee, welcomed the delegates, and said that foreign medical councils will decline reciprocity if the medical lecentiates were included within the Indian Medical Council. He held that there should be only one medical service in this country and it should be considered primarily military, that it should be ready at all times for military, purposes, but employed for civil purposes in peace time. He also advocated the staffing of hospitals by honorary medical men, the creation of an Indian materia medica on modern lines, and more efficient training of Indian nurses. Dr. U. Rama Rau of Madras delivered the presidential address, surveying the whole field of current medical problems. Mr. M. Samiullah Khan, M.A., LL.B., President of the Nagpur Municipality opened the Medical and Scientific Exhibition and deplored the apathy of the Government in giving encouragement to Indian industries. The social side of the Conference consisted of excursions, an "at home" by the Bengal Chemical and Pharmaceutical Works, and a dinner by Col. Kukday. The Scientific session was also held and several interesting papers were read. Resolutions were passed in the open conference. The next session was decided to be held at Karachi.

THE INDIAN SCIENCE CONGRESS. The twenty-third session of the Indian Science Congress was held at Indore on the 2nd, 3rd and 4th January. The Maharaja Holkar of Indore inaugurated the session. Dr. P. Basu, Vice-Chancellor of the Agra University, welcomed the delegates, and gave a survey of the great scientific discoveries in various fields in recent years. The presidential address was delivered by Sir U. N. Brahmachari, M.A., M.D., Ph. D. of Calcutta, wherein he described "the role of science in the recent progress of Medicine." The section on Medicine and Veterinary Research was presided over by Lt. Col. H. E. Shortt, I.M.S., who spoke on "immunity in protozoal disease." The section on Physiology was presided over by Dr. W. Burridge, M.A., D.M., who spoke on "some future lines of advance in physiology and medicine." Other

sections were also held. An interesting discussion was held jointly by the Medical and Physiology sections on "the problem of nutrition in India," and an Indian Nutrition Committee was founded with the object of co-ordinating nutritional work carried on in different parts of India. Among the members of this Committee are Drs. B. B. Sarcar, S. N. Ray, W. R. Aykroyd, Rahman, Major Bhatia, and Dr. B. C. Guha (convener.) The 1937 session of the Congress will be held at Hyderabad (Dn.)

TUTICORIN MEDICAL UNION. A meeting of this Union was held on the 25th January with Dr. K. S. Iyengar, Civil Surgeon, in the chair. Dr. D. K. Viswanathan delivered a lecture on "recent advances in chemotherapy of malaria." A discussion ensued.

SALEM DISTRICT MEDICAL ASSOCIATION. A meeting of this association was held on the 26th January under the presidency of Lt. N. K. Bal, M.C., I.M.S., District Medical Officer. Dr. R. Kalameghan, B.A., M.B, B.S, of Trichy spoke on "compound fractures and osteomeylitis". Dr. K. Rajagopal Naidu was "at home" to the members.

MALABAR DISTRICT MEDICAL ASSOCIATION. This association met on the 16th February at the Hacket Wilkins Memorial Hall with Major J. F. Shepherd, I.M.S, District Medical Officer, in the chair. Dr. V. I. Raman delivered a lecture on "pyloric stenosis in infants". The meeting terminated after light refreshments.

OBITUARY. We regret to record the death of Col. Bholanath, C.I.E., I.M.S. (Retd.) Ex-President of the Indian Medical Association, on the 31st January, at the age of 70, from heart failure. It was during his recent whirlwind tour of Southern India that branches of this Association were formed in this part of the country. It was largely due to his propaganda and eloquence that the Madras branch of the Indian Medical Association was inaugurated, enabling the medical men and women of Southern India to gain their rightful place among their compeers from the rest of India. We offer our heartfelt condolences to the bereaved family.

THE SILVER JUBILEE OF SALVARSAN. It was twenty-five years ago, (in 1910) that Paul Ehrlich reported for the first time on his preparation "606" or 'Salvarsan' before the Congress of the Society of German Scientists and Physicians. He described the remarkable rapidity with which syphilitic manifestations disappeared after the intravenous injection of Salvarsan. Since then, Salvarsan and its derivatives have proved to be indispensable for the treatment of syphilis. Humanity owes a huge debt of gratitude to Ehrlich, whose discovery has helped to successfully combat the appalling ravages of syphilis throughout the world.

Edited & Published by
Dr. K. P. Rama Hebbar & Printed at the C.C.P. Works, Ltd., Madras.