

man must be dependent on the salary or fees which he receives." It is easy to suggest that selfish motives are predominant in this connexion; but "if a just conclusion is to be reached it must be remembered that the activities of the associations are restricted to raising the minimum remuneration to a certain level. To the public there is free choice of practitioner. It is merely sought to ensure that, when a practitioner is engaged to perform a particular service, he shall not be paid less than a certain amount." It may be argued that in some cases the minimum is set too high, but it is a legitimate claim and a useful thing to attempt to fix minimum terms, to do this by collective bargaining, and to enforce it by joint action through an organization. When a professional organization has reached a certain stage a further motive and object appears—namely, to see the profession fully and adequately used wherever it can be of service to the State or others. "The advancement of the status of the profession and the extension of the craft in the public interest do on the whole go together"; and "a further development takes place when the State turns to professional associations for advice and assistance." Professor Carr-Saunders goes on to examine the charges against professionalism, which amount to this—that "whatever may be the declared objects of professional associations, in actual practice conservatism of outlook as exemplified by animosity against new methods, selfishness as illustrated by exclusiveness and by interest in status and remuneration, and rigidity of practice as shown by professional etiquette are predominant." These, when investigated, are found to be based upon misunderstanding or upon a perverse insistence on some admitted defects. The nature of the defence has been indicated, and is further explored. Lastly, Professor Carr-Saunders considers the future of the professions, the propriety of any professional register, and the desirability or otherwise of complete or some degree of closure to unregistered persons. He concludes that, as properly defined, there must be an extension of professionalism for commercial and industrial purposes. "Professional associations have something to offer towards the solution of certain of the problems which face commercial corporations. Towards the solution of the problem of efficiency they offer the ideal of adequate qualifications being demanded of those who undertake specialized functions. . . . Taking all in all, the growth of professionalism is one of the hopeful features of the time. The approach to problems of social conduct and social policy under the guidance of a professional tradition raises the ethical standard and widens the social outlook."

EDUCATION COMMITTEES AND THE SALARIES OF MEDICAL OFFICERS.

It appears from the programme for the forthcoming annual meeting of the Association of Education Committees at Bath that a motion will be submitted on behalf of the executive committee in the following terms: "That this association protests against the action of the Ministry of Health in withholding Government grant from local authorities if the demands of the British Medical Association are not conceded. The association objects strongly to such a decision being arrived at without previous agreement with the local authorities concerned." It is no part of our business to defend the actions of the Ministry of Health, but this motion appears to indicate a wilful misunderstanding of the position. The adjective is justified by the fact that in the *Supplement* to our issue of January 28th last we published an article on the subject, in which it was explained that some scale of minimum commencing salaries was agreed by the Ministry of Health to be necessary, as both the Ministry and the British Medical Association, as well as local authorities, had found that the public

health service was not attracting medical practitioners of the right qualifications and status. It was explained further that the present scale does not represent the "demands of the British Medical Association," but is a modified scale (in many respects lower than that originally suggested, and leaving a good deal of latitude, within limits, to local authorities), arrived at after consultations between representatives of the Ministry of Health, of the Association of Municipal Corporations, of other associations of local government authorities, and representatives of the British Medical Association and of the Society of Medical Officers of Health. The scale received in general the support of the Ministry and of the Association of Municipal Corporations. Our article further set out that an offer of conference with the Association of Education Committees (*inter alios*) with a view to modifications of the scale then proposed had been refused by that association; and that an offer by the British Medical Association to agree to an appeal committee consisting of representatives of the medical profession and of local government authorities, with a representative of the Ministry of Health as chairman, with a determining voice, was turned down by the Association of Education Committees and by the County Councils Association. We have no knowledge as to whether the Ministry has actually withheld grant from any local authority on the ground that the scale has not been complied with; but it is true that the scale is now operating in more than 82 per cent. of the vacancies occurring in the public health service, and that among the remaining 18 per cent. there are a number of instances in which the local authority is carrying on its service by means of temporary expedients only. In these circumstances there would seem to be an element of perversity in the action of the executive committee of the Association of Education Committees, which might perform a more useful public service by frankly accepting the principle of a scale of minimum commencing salaries for public health medical officers, and either consenting to the establishment of a conciliation committee for cases referred to it on either side, or making practical suggestions for some reasonable modification of the details of an accepted scale. Such suggestions would certainly receive courteous consideration.

A TEST FOR PREGNANCY.

ALL will agree with Dr. A. C. Siddall¹ that a simple and satisfactory test for the presence or absence of pregnancy would be most valuable, not only to the obstetrician, but also to every general practitioner. He remarks that at present perhaps the best-known test for pregnancy is that of Abderhalden, but he agrees with Smith and Shipley, who tried to bring it within the realm of practicability, and concluded that it is of no value for the diagnosis of pregnancy. He mentions the verdict of De Lee that the epinephrine-glycosuria test, Kammtzer's phloridzin test, the dextrose test, and Fahraens's red blood cell precipitation test are merely of academic interest, and also the statement of Hunt and Long that no laboratory method has yet been devised which is absolutely and infallibly diagnostic of the presence or absence of pregnancy, with the exception of radiological examination in the later months. Experimental work in this field has been hitherto dominated by two ideas—namely, that pregnancy causes a specific protein (ferment) to appear in the maternal blood, and that during the early months of gestation there is a tendency to glycosuria. Siddall suggests a test, however, which is based on a different idea from these. Early in 1926 he advanced the hypothesis that if the enlargement of the uterus and breasts of a pregnant woman is due to the

¹ Siddall, A. C.: A Suggested Test for Pregnancy, based on the Action of Gravid Female Blood Serum on Mouse Uterus: Preliminary Report. *Journ. Amer. Med. Assoc.*, February 4th, 1928.

presence of a hormone in the circulation, then corresponding changes should occur in the uterus and breasts of a test animal which had received injections of blood from the pregnant female, whereas the blood from non-pregnant women should give negative results. Binz, in 1924, had observed that, after injecting female mice with the blood of pregnant women, a transverse enlargement of the mouse's uterus resulted, and this result was confirmed towards the end of 1926 by Trivino and Fels. Franck and his co-workers, in a series of papers dating from 1926, have also demonstrated the presence of the female sex hormone in the circulation, not only during pregnancy, but also during the menstrual periods. These results seem to indicate that the blood of non-pregnant females might also have some effect on the uterus of the test animals. Siddall's observations, however, show that this is so small as not to invalidate his method as a test for pregnancy. His test animals were immature non-castrated virgin female white mice of less than 20,000 mg. weight. One cubic centimetre of the patient's blood serum is injected subcutaneously into an immature virgin white mouse once daily for four or five days. On the sixth day the animal is killed, the weight of the mouse is divided by the weight of the uterus *plus* ovaries, and the resulting ratio provides the criterion for a positive or negative conclusion, a ratio below 400 being positive and a ratio above 400 being negative for pregnancy. Fifty-seven patients were submitted to this test; of twenty-six pregnant patients, twenty-five gave a positive mouse test, while of nineteen non-pregnant patients eighteen gave a negative mouse test, and twelve were incomplete cases. Such evidence requires confirmation in a larger series of patients with controls, and it is to be hoped that further information will be forthcoming.

CARDIAC MALFORMATIONS AND ENDOCARDITIS.

If malformations arise in the development of an organ, disease either in that part of the body or in closely related systems is a common sequel. Instances of this process are not far to seek. Congenital defects of the bowel or mesentery frequently conduce to acute abdominal conditions; a misplaced kidney or an aberrant artery of supply may be the first cause of hydronephrosis and ultimate destruction of the organ; and congenital stenosis of the pulmonary artery only too often results sooner or later in pulmonary tuberculosis. The recent work of Clerc and Lévy¹ has shown that congenital heart disease is responsible for many of the recorded cases of heart-block in young subjects, while French workers also have been the chief advocates of the view that pure mitral stenosis such as occurs mostly in women without any history of acute rheumatism is due to a congenital cardiac defect which has gradually increased. Although infection of the endocardium is generally regarded as a sequel of valvular deformities as distinct from other defects, it has been shown by Holder, who in 1909 described illustrative cases, that infective endocarditis may arise in conjunction with either a defective interventricular septum or a patent ductus arteriosus. The same writer, in his *Lumleian Lectures*² two years ago, directed attention to the minute structure of the cardiac valves, particularly of the aortic cusps, stressing the likelihood that slight congenital abnormalities might be important predisposing factors in infective endocarditis. Numerous observers over many years have remarked upon the increased incidence of this disease upon congenitally abnormal valves, but that this doctrine represented at best only a part of the truth became apparent in the years immediately following the war, when it was found that infective endocarditis in a subacute form was taking 80 per cent. of its victims from among the most robust

men who had served an average of three years in the most strenuous military occupations. Conversely, although this disease in civilian life was known to be preceded in perhaps half the cases by chronic simple endocarditis, few of the many soldiers at home or overseas presenting minor valvular lesions developed the so-called endocarditis lenta. With the aim of elucidating the part played by congenital abnormalities in the production of endocardial infection, Gladys Wauchop³ has collected from the London Hospital records fifty-two cases of bicuspid aortic valves and nine of pulmonary valve defects. The latter were found to be commonly combined with more severe congenital lesions, and did not in themselves conduce to endocarditis. Among the infections of the aortic group rheumatic endocarditis occurred five times, in each case affecting the abnormal valve, while the mitral was affected four times; in rheumatic endocarditis generally the incidence is greater on the mitral valve. Infective endocarditis was the cause of death in seven cases; except in one case, where the tricuspid valve only was involved, the abnormal aortic valve was the one attacked. These records brought to light, therefore, an incidence of 11.5 per cent., as contrasted with the estimate of 23 per cent. by Lewis and Grant. The latter figure is comparable, since additional predisposing factors were present in some of the cases. While interest centres principally upon the liability of bicuspid aortic valves to infective endocarditis, it is noteworthy that in the series under review rheumatic infection, fibrosis, atheroma, and calcification were found rather more often than in anatomically normal valves. Less than half of the patients lived more than forty years, but, on the other hand, the fifth decade showed a higher mortality than any other. The important deduction from these observations is that a bicuspid aortic valve does predispose to infective endocarditis, and the findings of earlier investigators go to show that other minor cardiac defects, congenital or acquired, are likewise etiological factors. Since physical strain is clearly at times an activating agent, its prevention would seem to be an important prophylactic measure in those whose hearts show signs of endocardial abnormality. Because it is obvious that some individuals with valvular defects are attacked while others remain immune, it would be a valuable advance in clinical medicine if a means of distinguishing the two groups could be found. Identical organisms may in some cases of infective endocarditis be isolated both from the blood and some source of sepsis in the body. The careful eradication of any possible focus is therefore an imperative prophylactic measure in those who possess congenital or acquired endocardial defects.

THE GENERAL MEDICAL COUNCIL'S SESSION.

THE General Medical Council completed its session by sacrificing the whole of Bank Holiday to the hearing of disciplinary inquiries. Our report of the proceedings is continued in this week's *Supplement*. Had the Council adjourned over Whitsuntide, as on a previous occasion, and assembled again at a later date, it would have incurred an expenditure of some hundreds of pounds for railway fares, and with a decrease of revenue from registration fees, and income tax to pay, the Council finds itself obliged to cultivate strict economy. The disciplinary inquiries were unusually numerous, but in the result only three practitioners had their names erased from the *Medical Register*—one for conviction for a felony, another for committing adultery with a married woman with whom he stood in professional relationship, and a third for maintaining, also during professional relationship, a friendship of an improper character with a married woman. In two other cases—one arising out of convictions for drunkenness and the

¹ *Bull. et Mém. Soc. Méd. des Hôp. de Paris*, March, 1928, p. 490.

² *British Medical Journal*, April 3rd, 10th, and 24th, 1926.

³ *Quart. Journ. Med.*, April, 1928, p. 383.