

A number of spindle-shaped cells could also be seen in most of the alveoli, mixed with the above types of cell. No fibrous tissue was observed between the cells which formed the clusters.

The blood vessels were rather scanty, ill formed and of a capillary type, and haemorrhages were present. The liver cells adjoining the margins of the tumour showed signs of degeneration. They stained badly, were granular, some were irregular and broken, and their nuclei were difficult to discern or altogether absent. Scattered among the liver cells in this region were numerous dark pigment granules and many well stained cells similar to those found in the tumour. These cells appeared to have advanced from the main growth along the blood channels; in fact, some of the vessels in cross section were seen to be packed with them.

The growth under consideration was undoubtedly malignant, and in view of the facts, first, that no evidence of a growth could be found, after a most careful search, in any of the other abdominal organs, and, secondly, of the enormous size of the growth in the liver, it may reasonably be inferred that the tumour was a *primary* growth in the liver. It is, of course, known that very large tumours in the liver may be secondary to quite small growths in other organs, but here, as already stated, no such growth could be found.

The determination of the precise nature of many malignant tumours of the liver is frequently difficult. In the present case, however, all who examined the sections of the growth were agreed that the microscopical characters were those of a mixed-cell sarcoma of an alveolar type.

Primary sarcoma of the liver is a decidedly rare growth, as the following brief summary of the literature shows. Hale-White, in 1890, recorded the fact that not a single case was met with at Guy's Hospital during the twenty years 1870-1889, both inclusive. Byrom Bramwell and Leith, in 1897, were only able to collect 25 cases, and they concluded that few of these could be regarded as true examples. Vecchi and Guerrini critically examined 45 published cases and accepted only 21 as being undoubtedly primary sarcoma of the liver. Pepere also tabulated a list of 45 cases, and Rolleston collected 32 cases in adults.

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THE OCCURRENCE OF CLUBBED FINGERS IN HEALTHY PERSONS AS A FAMILIAL PECULIARITY.

By F. PARKES WEBER, M.A., M.D., F.R.C.P.LOND.,
PRESIDENT OF THE ASSURANCE MEDICAL SOCIETY.

CLUBBING of the fingers is so well known as an acquired pathological condition, especially in connexion with disease of the thoracic viscera, that its occasional occurrence in healthy persons as a familial (and doubtless also congenital) peculiarity deserves some attention. I regard the following cases as having a peculiar interest from the life assurance aspect.

In the present year I had to examine two (twin) brothers, aged 25 years, for appointments and for life assurance. Both of them showed clubbing of the fingers in both hands. The toes were not affected in the same way. In one of them (A. M. K.) the thorax was not very well developed, but the peculiarity in the fingers was slightly less marked in him than in his rather better developed brother (W. H. K.). Both of them appeared free from any visceral disease. A. M. K. had been severely wounded in the left leg during the war, but had quite recovered (from the life assurance point of view). I regarded both lives as suitable for insurance at ordinary rates. An elder brother, aged 30 years, had the same peculiarity of the fingers I was informed, but I did not myself see him. They had no other brothers and no sisters. I am not aware if the father (who died at the age of about 56 years) had clubbing of the fingers, but the mother (still living) had not.

In November, 1918, I examined an apparently healthy young Irishman (M. J. R.), aged 25 years. The only special point to be noted in regard to his condition was that he had incurred nails, with clubbing of the *fingers and toes*, on both sides of the body. This he said he had

had ever since he could remember. It was an inherited peculiarity, not associated with any thoracic or other disease. His father and three of his brothers and one of his sisters were said all to show the same abnormality—at least as far as the fingers were concerned. It may be observed that Mr. M. J. R. had been accepted in 1909 and 1911 for life assurance at ordinary rates.

There is one published record of a familial peculiarity apparently of the same kind. Von Eiselsberg,¹ in 1911, described a congenital and familial condition of the terminal phalanges in a man aged 35 years, resembling clubbed fingers in appearance. One of his grandfathers, one uncle, and one sister were known to show the same condition, which von Eiselsberg suggested might be of "lymphangiomatous nature."

I would rather not use the term "lymphangiomatous" for such cases, but would suggest that some of the isolated cases of clubbing of fingers for which no cause can be ascertained may be of the same nature, even when a history of familial occurrence of the abnormality is not forthcoming. As far back as August, 1897, I met with a man, aged 46 years, who had had typical clubbing of all his fingers—not his toes—ever since he could remember. I found no cause for the clubbing. He had psoriasis, but it was of more recent date than the clubbing.² S. West³ mentioned the case of a woman, aged 50 years, who came under treatment because she had swallowed some ammonia by mistake. Both her fingers and toes were clubbed. No cause could be found for the clubbing, which was supposed to have commenced three to four weeks previously. If this really was so the case could hardly be placed under the present category. West likewise recorded clubbing of fingers and toes in an otherwise apparently healthy medical man aged 38 years. In a third case of clubbing he could also find no cause.

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Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

OSSIFYING SARCOMA OF VASTUS EXTERNUS.

A. W., aged 14, when first seen on March 9th, 1918, stated that for six weeks he had had stiffness and almost continuous pain in the right thigh. About a week later he noticed a small swelling just above the middle of the thigh on the outer side, which grew rapidly. There was no history of injury. He was a fine, well set-up lad; he walked with the aid of a stick, keeping the right knee slightly flexed and the heel off the ground. There was a pyriform swelling just above the middle of the thigh on its antero-lateral aspect. It was 4 in. or 5 in. long and nearly 3 in. across its upper pole, tapering downwards. The skin over the tumour was somewhat discoloured, but was not fixed at any part. The tumour itself could be moved freely on the bone. No fluctuation could be made out. There was no enlargement of the inguinal glands, and palpation of the abdomen did not reveal any swelling therein. The heart and lungs, and the urine were normal. A diagnosis of sarcoma of muscle was made. Dr. J. N. Collins operated on March 21st; a short incision was made over the tumour, and some muscle fibres had to be divided before the bony nature of the growth was disclosed. It was decided to amputate the limb. Disarticulation at the hip-joint by the anterior racket method was performed. There was little bleeding, and the patient stood the operation well. The recovery was uneventful. Three days after the operation injections of Coley's fluid were commenced and continued for six weeks; the patient then left the hospital in good condition and with the wound practically healed.

The tumour was situated in the vastus externus muscle, and appeared to be limited to it, there being a definite layer of degenerated muscle fibres over it. The deep surface was smooth and somewhat flattened. On sawing through the tumour longitudinally it was seen to be composed of cancellous bony substance, with a fairly definite outline except at its upper and lower poles, where it was

softer, and seemed to merge into the surrounding muscle tissue. The muscle fibres in these regions were swollen and had a hyaline appearance. In the substance of the tumour were numerous cavities of irregular shapes and varying size, the largest being in the centre. They contained thick, viscid, dark-red mucoid material, evidently altered blood.

Mr. Lawford Knaggs, F.R.C.S., who kindly examined a microscopic section prepared from a piece of the growth near its upper pole, states that it "shows that there has been a new formation of bone from a connective tissue matrix. The bone is not in lamellae. Much of the muscle tissue has been removed, and its place taken by organizing connective tissue going on to bone formation. The tumour has evidently undergone myxoematous degeneration, hence the ragged open spaces. There are occasional well-marked spindle cells to be seen containing large nuclei, also myeloplques, such as we see in bone marrow. The picture is that of an ossifying sarcoma."

I saw the patient last on June 7th, looking perfectly well. There have been no signs of recurrence.

I wish to express my thanks to Dr. Collins for allowing me to record the case.

Peterborough.

K. C. JAIDKA, M.R.C.S.

PRIMARY CARCINOMA OF THE OVARY AT THE AGE OF 11.

THE following case presents features so unusual that it seems worthy of record: In March, 1919, I was asked by Captain B. A. W. Stone, M.B., R.A.M.C.(T.F.), to see in consultation a girl, aged 11, on account of an abdominal tumour recently discovered. It seems that the child was noticed by its mother to be apparently putting on flesh and getting stouter; this was considered to be a good sign, as she had been always somewhat delicate, and quite by chance Captain Stone, who happened to be attending another member of the family, examined the child.

She was pale but not at all wasted, and the general condition was good. The greater portion of the abdomen was found to be occupied by a large, slightly irregular, but smooth solid tumour, freely movable, and apparently arising from the pelvis. The tumour reached from the margin of the ribs in the left hypochondrium to the pubes. It was not tender nor did it give rise to any discomfort. No free fluid was made out to be present in the abdomen. Examination under an anaesthetic confirmed these observations. The child is one of five children, all normal and healthy. There is no history of malignant disease in the family on either the father's or the mother's side. Twelve months previously, however, a sudden increase in size of the breasts was noticed; it persisted for a time, and the normal character was then resumed. Careful examination of the child's chest revealed no abnormality at this time.

A provisional diagnosis of a teratoma of the ovary was made and operation advised. A few days subsequently, and shortly before operation, the child had irregular temperature, reaching as high as 101° F. Examination of the urine showed nothing abnormal.

On March 18th (anaesthetic C.E. mixture) the abdomen was opened by long median incision; a large solid tumour, smooth and slightly irregular but of generally rounded contour with very vascular pedicle, was found to be occupying the position of the left ovary. No adhesions were present, and its removal was unattended with any difficulty. No other abnormal condition was found, and the right ovary and the uterus were normal. No enlarged lymphatic glands were noticed. On incising the tumour it was found to be an encapsuled soft solid, and the pathological report showed the presence of carcinoma cells in a scanty stroma. The tumour weighed 2 lb. 14 oz., and was about 8 inches in its long diameter. It was presented to the Museum of the Royal College of Surgeons and accepted by Professor S. G. Shattock, who has reported upon it in the following terms:

It is remarkably uniform in structure, and presents no evidence whatever of being of a mixed or teratomatous kind. It is a carcinoma of spheroidal cells, mostly vacuolated and of conspicuous size in consequence. The stroma is infiltrated with lymphocytes.

The after-progress of the patient was uneventful; a rise of temperature to 104° F. the night after the operation being the only unfavourable symptom. The child is in

good health six months after the operation, and there is no evidence of any further spread of the disease.

C. A. S. RIDOUT, M.S., F.R.C.S.,

Major R.A.M.C.(T.F.): Assistant Surgeon to the
Royal Portsmouth Hospital.

BILHARZIASIS IN NATAL.

THE value of rest in the treatment of cystitis has long been recognized, and many cases of bilharziasis in South Africa have seemed to respond to medical treatment only when the patients have been resting in bed. It is difficult to see what influence bodily rest can have on the bilharzia parasites themselves, but there is no doubt that the symptoms of the disease are aggravated by excessive exertion, and the inflammation of the bladder wall, with the associated bacilluria, are materially affected by complete rest in bed.

Recently fatal cases of bilharziasis have occurred in South Africa, where the patients have died from the accumulation of numerous spine-pointed ova in the lungs and brain. In one of the cases the patient was being treated for phthisis, and the expectoration of a large mass of ova just before death was the first indication of the real cause of his condition. Some recent experiments by the Japanese indicate that the ova have a definite tendency to escape from the body more than that of other foreign substances, and the expectoration of the mass of ova indicates Nature's effort to afford exit for the eggs in the sputum. These fatal cases show that these parasitic affections are more serious than is commonly supposed in affected areas, and emphasize the need of destroying the parasites in the blood stream as well as preventing the accumulation of the eggs in the kidney and other parts of the body. In some instances the subsidence of the associated inflammation, following rest and urinary sedatives, is accompanied by the passage of renal calculi.

It is not uncommon to hear of the disease disappearing during an attack of enteric, and a patient of mine has reported almost complete disappearance of haematuria and renal colic following an attack of influenza. Several recently reported cures have also taken place during an attack of influenza. It is probable that the enteric and influenza toxæmia are lethal to the bilharzia worm.

I have heard patients undergoing the tartar emetic treatment state that their urine has been free from blood for the first time for two years. A married man reports that his urine had "never been clear for a day since seven years old; but now clear of blood for four days." Such testimonies indicate the efficacy of intravenous treatment by tartar emetic. However, I have noticed that the haematuria recurs when only small doses have been given and the patient refuses further treatment.

In private practice I have given up other forms of intravenous treatment in favour of that recommended by Dr. Christopherson (see *BRITISH MEDICAL JOURNAL*, December 14th, 1918), and use only a small hypodermic syringe and needle, inserted twice if necessary, for the larger doses. The solution must be made up fresh before each injection and suitable aseptic precautions adopted. With the antimonium tartrate solution one is sure to come across a rather sore arm sooner or later, and I always advise a patient to keep the seat of injection cold and damp for the first twenty-four hours after injection. So far I have not encountered any general symptoms from intravenous injections up to 2 grains of tartar emetic. Intramuscular injection of colloidal antimonium, 1 c.cm. and 2 c.cm., cause little local reaction but a certain amount of general malaise lasting forty-eight hours, during which time the patients are best in bed.

Durban.

F. G. CAWSTON, M.D. Cantab.

DOUBLE DISLOCATION.

ON August 31st I was called to see a boy, aged 12, who had fallen from a swing. The seat of the swing was 4 ft. from the ground and a rope was hanging from the seat. On getting off the swing the boy caught his feet in this rope and fell on his hands and dislocated both his elbows backwards.

I am recording this as I believe it is a rare accident to get a double dislocation. I reduced the dislocations by putting a roller bandage in the bend of the elbow and bending the forearm on it.

Bishops Waltham.

P. VERNON DODD, M.A., M.D.

THE BRITISH ASSOCIATION MEETING AT BOURNEMOUTH.

THE annual meetings of the British Association for the Advancement of Science, interrupted for two years by the war, were resumed last week at Bournemouth. It is interesting to observe that the leading daily newspapers now devote considerable space to the reports of papers and discussions. The work done by scientists during the war and the promised revelation of their secret endeavours undoubtedly stimulated curiosity, but it is to be hoped that the interest excited will follow their work in times of peace. However catholic one's taste may be it is impossible to do more than select a paper here and there, as the time-table permits, and endeavour to follow the subjects. Few of the papers dealt with medical science.

Racial Types of Man.

On the first day of the congress Professor Arthur Keith, president of the Anthropological Section, delivered a most interesting address on the "Differentiation of mankind into racial types." Starting with a description of the racial characteristics of the Mongol, negro, and Caucasian or European, he unfolded the thesis that these differentiations depended on the functional development of the endocrine glands. Abnormality, tumour, or disordered action of the pituitary gland was associated with acromegaly, gigantism, eunuchoid condition of the body, or dwarfism. Physiologically the conclusion seemed justified that the pituitary was one of the main parts in the machinery of regulation of growth, and that it was directly concerned in determining stature, cast of features, texture of skin, and character of hair—all of which were marks of race. The Caucasian type showed the greatest predominance of the pituitary; the sharp face, strong superciliary ridges, prominent chin, bulk of body, and height of stature could best be explained in terms of hypophyseal function. The interstitial gland of the testicles evidently played a part in bringing about the robust manifestations of the male characters, and this sexual differentiation was more emphatic in the Caucasian than in the Mongol or negro types. The evidence of loss of suprarenal gland function, as shown in Addison's disease, led to the inference that at least part of the function of these glands was concerned with the clearing away of pigment, and to their action we might attribute the fairness of skin in the European. Again, malignant growth of the adrenals in children produced a premature sexual maturity with all its bodily characteristics, and a similar result followed disease of the pineal gland. The thyroid gland was perhaps the most important of all the organs of internal secretion from the anthropological point of view. Apart from its immediate function in manufacturing a substance which regulated the rate of combustion of the tissues, and which could be correlated with the selection and survival of human races, it had remoter morphogenetic effects on growth and the shaping of racial characters. Cretinism, myxoedema, achondroplasia, and mongolianism, were evidences of characters induced by the thyroid gland changes of disease, and the racial characteristics normally corresponding were dependent on the physiological action of thyroid secretion. The endocrine glands thus possessed a growth-controlling mechanism, and the respective parts played by each in their relation to the rest of the economy were dominated by hormones, which, according to the nature of the recipients on which they acted, brought about the endless variety in the relative development of racial and individual features.

Protein Metabolism.

The president of the Physiological Section, Professor D. Noël Paton, communicated a paper on "Protein metabolism," in which he traced the gradual development of our knowledge of the chemistry of the proteins, their part in the processes of growth and repair, and the specific action of their products of disintegration. Covering a wide field and compressing the many accounts of physiological and chemical observations to the utmost possible, the lecturer made his paper difficult of abstracting but did not rob it of its great interest. His pleasing introduction and still more eloquent peroration were a delight to all his listeners. In the same section, too, Dr. Waller gave a demonstration of an apparatus which

recorded the emotional responses to various stimuli; fear, happiness, even curiosity on the part of the subject produced their responses on the moving point of light of the apparatus.

In the Subsection of Psychology Dr. W. Brown spoke of his experiences of hypnosis and mental analysis in the treatment of shell shock and other nervous maladies in soldiers. The recovery of lost memory, of loss of speech or hearing, and the restoration of the normal state in cases of extreme nervousness and hysteria, were some of the successes of hypnotic treatment.

HONOURS.

A SPECIAL Supplement to the *London Gazette*, dated September 9th, contains a list of awards for services rendered in connexion with military operations. The following medical officers are included:

C.I.E.

Lieut.-Colonels: J. B. Jameson, I.M.S. (ret.), S. J. Rennie, R.A.M.C. (ret.), and J. W. Watson, I.M.S., Major Leonard Hirsch, I.M.S., and Captain J. B. Hanafin, I.M.S.

C.S.I.

Colonel A. E. Tate, C.M.G., A.M.S.

C.B.E. (Military Division).

Major and Brevet Lieut.-Colonel (temporary Colonel) F. A. Fleming, C.I.E., I.M.S.

O.B.E. (Military Division).

Lieut.-Colonels: P. St. Clair More, I.M.S., J. J. Whitworth Prescott, D.S.O., R.A.M.C.
Major (temporary Lieut.-Colonel) J. K. S. Fleming, I.M.S.
Majors: G. D. Franklin, I.M.S., A. T. Frost, R.A.M.C., D. P. Johnstone, R.A.M.C., T. W. Minty, I.M.S., R. B. Nicholson, M.C., I.M.S., H. W. Pierpoint, I.M.S.
Captains (temporary Majors): A. F. Babonau, I.M.S., F. R. Coppinger, R.A.M.C., J. R. D. Webb, I.M.S.
Captains: W. A. Frost, R.A.M.C., T. B. Heaton, R.A.M.C. (S.R.), C. H. Smith, I.M.S.
Temporary Captains: James Cairns, R.A.M.C.(T.F.), S. K. Engineer, I.M.S.

M.B.E. (Military Division).

Lieutenant (temporary Captain) P. X. Godinho, I.M.S.

Military Cross.

Captain R. R. M. Porter and temporary Lieutenant Mahomed Nawaz, I.M.S.

To be Brevet Lieutenant-Colonel.

Major N. W. Mackworth, I.M.S.

To be Brevet Major.

Captain (temporary Lieutenant-Colonel) J. V. Macdonald, M.C., I.M.S.
Captains (temporary Majors) E. E. Doyle and M. A. Rahman, I.M.S., C. Ryles, R.A.M.C., W. R. Stewart, I.M.S.
Captain J. A. A. Kernahan, I.M.S.

A special Supplement to the *London Gazette*, dated September 12th, announces the following appointments to the Order of the British Empire for services rendered during the war:

O.B.E. (Military Division).

Surgeon Commanders: G. E. Duncan, A. Gaskell, C.B., and H. W. Gordon-Green, R.N.
Surgeon Lieutenant A. G. L. Reade, R.N.V.R.

FOREIGN DECORATIONS.

THE following decorations have been conferred by the King of the Belgians for distinguished services rendered during the war:

Croix de Guerre.—Lieut.-Colonels (temporary Colonels): O. W. A. Elsner, C.B.E., D.S.O., and Langford N. Lloyd, C.M.G., D.S.O., R.A.M.C. Lieut.-Colonel G. J. Houghton, D.S.O., R.A.M.C. Major and Brevet Lieut.-Colonel (temporary Lieut.-Colonel) F. D. G. Howell, D.S.O., M.C., R.A.M.C. Captain and Brevet Major (acting Lieut.-Colonel) F. R. Laing, R.A.M.C. Captains (acting Lieut.-Colonels): J. M. A. Costello, M.C., R.A.M.C.(T.F.), John Rowe, M.C., R.A.M.C. Captains (acting Majors): J. D. Fiddes, M.C., R.A.M.C.(T.F.), H. A. Rowell, M.C., R.A.M.C. Temporary Captains (acting Majors): W. S. Berry, O.B.E., M.C., W. S. Danks, T. Ferguson, James Jack, M.C., and H. C. Watson, M.C., R.A.M.C. Captains: L. A. Dingley, R.A.M.C.(T.F.), Ivor R. Hudleston, D.S.O., R.A.M.C., Harold Seddon, R.A.M.C.(T.F.). Temporary Captains: G. E. Lindsay, M.C., C. W. B. Littlejohn, J. B. Mason, and J. C. Robb, R.A.M.C. Lieutenant (acting Major) L. S. C. Roche, M.C., R.A.M.C.

The French Government has conferred upon Dr. Gregory Lamb O'Neill the decoration of Officier de l'Instruction

Publique, in recognition of his valuable services rendered to the French community in New South Wales.

The President of the United States of America has conferred the Distinguished Service Medal upon Surgeon Vice Admiral Sir William H. Norman, K.C.B., R.N.

The President of the Portuguese Republic has appointed Surgeon Commander Percy H. Brogden, R.N., to be a Commander of the Military Order of Avis.

India.

INFLUENZA PRECAUTIONARY MEASURES IN MADRAS.

At the instance of the Health Officer to the Corporation of Madras a special meeting of medical practitioners was held recently at the Medical College Hall. Lieutenant-Colonel C. Donovan, I.M.S., presided. The meeting was called to consider and combat the recrudescence of influenza in the city. The two waves of influenza in 1918 claimed a toll of 60.3 persons per mille, and now the city is passing through a third wave. It is regrettable that there were not in Madras many independent leagues or voluntary agencies as in Bombay and Calcutta. The chairman said that it had been decided that educative propaganda in the city was indispensable. Another essential thing was to avoid congestion. Hospitals should be opened by the corporation, which should allot large sums of money for the purpose, but as the corporation was poor the Government should come to its aid.

DEATHS FROM PLAGUE.

The following interesting table has been published, showing monthly mortality from plague recorded in India in 1918-19 as compared with the monthly mean for twenty years:

Months.	1918-19.	Mean for 20 Years.
July	3,972	5,934
August	6,174	12,340
September	6,945	21,607
October	7,632	27,750
November	4,697	27,481
December	3,205	35,808
January	7,629	51,549
February	12,872	64,875
March	15,069	101,100
April	10,221	99,436
May	6,104	54,656
June	1,182	10,259
Totals	85,700	512,711

Mortality per mille of population: 0.28.

Previous lowest: 0.42 in 1898-99 and 0.43 in 1908-9.

Previous highest: 4.51 in 1904-5.

The previous lowest mortality recorded in period July 1st to June 30th of following year was 119,045 in 1898-99; the previous highest mortality was 1,328,249 in 1904-5.

INDIA AND EAST AFRICA.

In a recent report referring to the East African campaign the Commander-in-Chief in India affords an insight into the climatic conditions with which the troops were faced. "The campaign," he writes, "had been a long and trying one, and disease had throughout taken a heavier toll than enemy's bullets. Although the strength of the Indian contingent had never reached fifteen thousand, and casualties in action had been comparatively few, over three times that number were sent from India during the course of the campaign."

COLUMBIA UNIVERSITY, New York, is about to establish a system of compulsory supervision of the health of its undergraduates. They will be examined physically on entering, and if necessary helped to get the best treatment. Each student will be further examined once a year, and will be required to learn at least two outdoor and two indoor sports.

Correspondence.

"THE CULT OF INDIVIDUALISM."

SIR,—The many inaccuracies and misstatements contained in the communication from Dr. E. R. Fothergill, published in your last issue, must be our excuse for requesting space for a brief reply. Seeing that no issue exists between the British Medical Association and the Federation of Medical and Allied Societies (late Medical Parliamentary Committee), of the former of which we are also members, we are not concerned with the defence of the body we represent.

In the first place we do not subscribe to the wholesale condemnation of the Association contained in the fourth paragraph of your contributor's letter. We cannot agree that the British Medical Association "is now recognized by all departments in the State as the mouthpiece of the profession," much as we would wish it to be; apart from the fact that the *Medical Directory* contains the names of twice the number of medical men that the membership of the Association embraces, there are several other professional bodies that the Government departments consult direct. The policy of the Federation can in no way be construed as making for rivalry with the Association; the aims of the former are definite in extent. It provides a permanent "round table" at which representative doctors, of all shades of opinion and engaged in all branches of medical work, may meet and confer with one another and with the representatives of lay bodies whose activities are ancillary to medicine; it aims at obtaining support for the profession from a much larger section of the public than any purely medical body can hope to obtain; it constitutes a "reference library" on matters affecting the public health, and by being in a position to supply information to the profession and the public, on the one side, and to those guiding legislation, on the other, it is truly a "liaison committee." Thus in place of overlapping and confusion in policy the Federation offers a real prospect of unity in thought and action.

Dr. Fothergill has a great deal to say regarding schisms in the ranks of the profession; it will therefore interest him to know that the three bodies he mentions and whose existence he deprecates are amongst those who have taken part in the formation of the Federation, so that already far greater unity exists than was the case prior to the formation of the Medical Parliamentary Committee. It will be time enough to discuss the objection raised regarding individual subscriptions when the Federation asks for them.

It would be well if Dr. Fothergill could understand that there are others besides himself who are working disinterestedly for the good of the profession and the community.—We are, etc.,

MALCOLM MORRIS,
Chairman.

CHARLES BUTTAR,
Honorary Secretary.

N. HOWARD MUMMERY,
Organizing Secretary.

The British Federation of Medical and Allied Societies,
20, Hanover Square, W., Sept. 15th.

SIR,—I was highly interested in the letter from Dr. E. Rowland Fothergill in your issue of the 13th instant, to which for some curious and obscure reason he has given the title of "The Cult of Individualism," although it is difficult to understand how a tendency to create associations whose object, according to Dr. Fothergill, is to promote "greater union in the profession" can be regarded as evidence of individualism. This, however, is by the way, and there is no one who is interested in medico-politics and in the common good of the profession and of the community who can withhold sympathy from the desire expressed by Dr. Fothergill for the promotion of union in the medico-political activities of the profession and the elimination of schism.

Does Dr. Fothergill's appeal, however, to the individual members of the profession to withhold support from any other organization of the medical profession than the British Medical Association really help towards union, and still more help to secure from the profession the

Table of Total Emoluments.

Rank.	Pay.	Rations.	Servant.	Married.			Unmarried.		Total per Annum.	
				Lodging.	Fuel and Light (average)	Furniture Allowance.	Lodging.	Fuel and Light (average)	Married.	Un-married.
	£ s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	£	£
Lieutenant	1 0 0	2 1	2 0	3 6	1 0	2 0	2 3	0 10	558	495
Captain	1 5 0	2 1	2 0	4 6	2 0	2 0	3 0	1 2	685	622
Captain, after 5 years	1 7 6	2 1	2 0	4 6	2 0	2 0	3 0	1 2	731	652
Captain, after 10 years	1 10 0	2 1	2 0	4 6	2 0	2 0	3 0	1 2	777	698
Major	1 15 0	2 1	2 0	4 6	2 0	2 0	4 0	1 7	868	815
Major, after 15 years	2 0 0	2 1	2 0	4 6	2 0	2 0	4 0	1 7	959	907
Lieut.-Colonel	2 10 0	2 1	2 0	4 6	2 0	2 0	4 6	1 7	1,142	1,098
Lieut.-Colonel, after 20 years	2 12 6	2 1	2 0	4 6	2 0	2 0	4 6	1 7	1,187	1,144
Lieut.-Colonel, after 25 years	2 15 0	2 1	2 0	4 6	2 0	2 0	4 6	1 7	1,233	1,189
Colonel	3 5 0	2 1	2 0	5 6	2 10	2 0	5 6	1 10	1,449	1,395
Major-General	4 10 0	2 1	4 0	11 0	3 7	2 0	11 0	2 7	2,056	2,001

Charge pay (2s. 6d. to 10s. per diem) and specialist's pay (2s. 6d. per diem) in addition for a considerable percentage of officers (from £45 to £180 per annum additional).

the present rules as to the counting of service towards increases of pay continue to apply, and reference is given to Army Order 286 of 1914, which provides that only mobilized service counts.

Every endeavour will be made to expedite adjustment of pay due under the new Warrant, but considerable administrative complications arise, and some delay is inevitable. The pay for October, 1919, will be issuable at the new rates in every case, but the adjustment of arrears from July 1st, 1919, will take some time.

TOTAL EMOLUMENTS.

As an appendix to the Warrant tables are given for the purpose of showing approximately the total emoluments issuable at present under the new scheme; they refer to officers serving at home and not occupying Government quarters or drawing rations in kind. The totals are published for the convenience of officers, and must not be regarded as the authority for any of the rates laid down in the Warrant and Regulations. A married officer is defined as one who is or has been married, and is 30 years of age or over; but all officers serving on September 13th, 1919, who were then or had then been married, irrespective of age, are eligible for the allowances as "married." As already stated, children's allowance will be given until the end of the year, in addition to the emoluments shown. An outfit allowance will be given on first appointment to a permanent regular commission; the amount will be announced shortly. The above is the table of the total emoluments for the various officer ranks of the R.A.M.C. and Army Medical Service.

R.A.M.C. TEMPORARY COMMISSIONS.

As stated in our last issue, the War Office has revised the terms and conditions for temporary commissions in the Royal Army Medical Corps.

Candidates who have served before will be commissioned in their previous rank. Lieutenants who have completed one year's satisfactory service as such will be commissioned as captains. Those who have not served previously will be commissioned as lieutenants. The period of engagement will be for six months, and the contract will not be terminable by either party prior to the expiration of that period except for misconduct, inefficiency, or medical unfitness.

Pay will be at the rate of: Lieutenants £600 per annum, captains £650 per annum, and in addition the following will be issuable: (1) Pay at the rate of £50 per annum when serving elsewhere than in Europe. (2) Rations or an allowance in lieu thereof (present rate 2s. 1d. per diem). (3) Specialist or charge pay when holding a position for which the issue of such is authorized. (4) Officers holding higher acting or substantive rank than that of captain will, if desirous, be granted the pay and allowances of their rank. Kit and outfit allowance will be issued to candidates who have not previously received such allowance.

All candidates must be fit for general service or garrison duty abroad, and must undergo a medical examination prior to being accepted. Applications should be addressed to the Secretary, War Office, Cornwall House, Stamford Street, S.E.1.

Medical News.

THE Right Hon. Sir Auckland Geddes, K.C.B., M.D., President of the Board of Trade, will distribute the prizes at Charing Cross Hospital medical school on Wednesday, October 1st. The ceremony will take place in the out-patients' hall, at 3.30 p.m., and a reception will be held afterwards at the school, when the laboratories, museum, and library will be open to inspection.

THE Guy's Hospital biennial dinner will take place at the Connaught Rooms on Tuesday, October 28th, at 7 p.m., with Dr. Lauriston Shaw in the chair. Old students who have not received an invitation to the dinner are asked to communicate with Mr. F. T. Steward, 98, Portland Place, London, W.1.

THE old students' dinner of the Westminster Hospital will be held on Thursday, October 2nd, at 7.30 p.m., in the Imperial Restaurant, Regent Street. The honorary secretary is Mr. Rupert Farrant, 51, Harley Street, W.1.

THE old students' dinner of University College Hospital will be held on Friday, October 3rd, in the Imperial Restaurant, Regent Street, with Sir J. Rose Bradford, K.C.M.G., C.B., in the chair. The honorary secretary is Dr. A. M. H. Gray, 30, New Cavendish Street.

THE seventy-eighth session at the School of Pharmacy of the Pharmaceutical Society of Great Britain will open on Wednesday, October 1st, at 3 p.m., when the Pereira medal will be presented, and Mr. W. J. Uglow Woolcock, M.P., will give the inaugural address.

THE annual dinner of past and present students of the Charing Cross Hospital Medical School, which has been in abeyance for the past five years owing to the war, will be held in the Adelaide Gallery, Gatti's Restaurant, on Wednesday, October 1st, at 7.30 p.m., with Colonel William Hunter, C.B., A.M.S., in the chair. Old students are cordially invited, and are asked to send a note of their intentions to the Dean.

THE Right Hon. Christopher Addison, M.D., M.P., Minister of Health, will give the introductory address at the opening of the winter session of the London (Royal Free Hospital) School of Medicine for Women on Wednesday, October 1st, at 3 p.m.

THE annual dinner of the staff and past and present students of the Royal Dental Hospital of London will be held at the Connaught Rooms on Saturday, November 22nd, at 7 o'clock. Sir Harry Baldwin will take the chair.

THE opening of the winter session at St. Mary's Hospital Medical School will take place on Wednesday, October 1st, at 3 o'clock. The prizes will be distributed by Lieutenant-General Sir John Goodwin, K.C.B., Director-General Army Medical Service.

THE University Court of St. Andrews on September 12th appointed Mr. James Fairlie Gemmill, M.A., M.D., D.Sc., to the vacant chair of natural history in University College, Dundee.

DR. A. J. CAMPBELL of Uley, Gloucestershire, was recently presented with a testimonial on the occasion of his retirement from the chairmanship of the Panel Committee for the county of Gloucester.

SEVERAL months ago we recorded the holding of a medical conference at Cannes, called by the Committee of Red Cross Societies to formulate an extended programme of Red Cross activities for the improvement of health, the prevention of disease, and the mitigation of suffering throughout the world. To carry out the programme drafted by the Committee with the approval of the Governments of Great Britain, France, Italy, Japan, and the United States, a League of Red Cross Societies was organized in Paris on May 5th. The League publishes from its head quarters at Geneva a *Bulletin*, of which the second number is devoted to the proceedings of the conference at Cannes, and gives the main resolutions adopted by the delegates. The full reports of the various sections may be obtained from the League of the Red Cross Societies, Geneva, Switzerland. The president of the conference was Professor Roux, and the secretary Dr.

Emmett Holt. The chairmen of the sections were: Dr. Ducrey (venereal diseases); Sir Arthur Newsholme (child welfare); Dr. Calmette (tuberculosis); Professor Laveran (malaria); Miss Julia Stimson (nursing); Dr. Hermann Biggs (preventive medicine). The delegates from Great Britain attending the conference were: Colonel S. L. Cummins, A.M.S., Brevet Colonel L. W. Harrison, R.A.M.C., Dr. E. C. Hort, Professor Henry Kenwood, Dr. F. Truby King, Sir John Lumsden, Dr. Kay Menzies, Sir Arthur Newsholme, Sir Robert Philip, and Sir Ronald Ross. The League of Red Cross Societies formed as a result of the conference has as the chairman of its board of governors Mr. Henry P. Davison, of the American Red Cross, and the Director-General is Sir David Henderson. The conference recommended the establishment of a bureau of health—a central organization operating mainly through national Red Cross societies, whose aim it would be to strengthen, aid, and co-operate with other voluntary organizations and national health and relief agencies; also to assist in the establishment of Red Cross societies in countries where none now exist.

AN American hospital is to be established in Havana to meet the needs of the large Anglo-Saxon colony in Cuba. The approximate cost of the site and buildings is estimated at £60,000, half of which amount has already been raised.

IN a debate in the French Senate on a proposal to establish sanatoriums, it was stated that 25,000 French soldiers had died of tuberculosis during the war, while 120,000 men were exempted from service because of the disease.

THE reorganization on modern lines of the Persian Government Hospital, Teheran, has been entrusted jointly to Dr. A. R. Neligan, Physician to the British Legation, and Dr. Joseph Scott, Medical Superintendent of the Indo-European Telegraph Department, Teheran.

THE medical department of the United States army is preparing plans for the construction of an air ambulance capable of carrying two to fifteen patients.

STATISTICS compiled by the New York Metropolitan Life Insurance Company show that 450,000 deaths occurred in the United States from influenza during the recent epidemic. More men died than women and the highest mortality was among wage-earners, especially those belonging to the poorest class.

AN interallied medical mission has gone to Warsaw, at the request of the Polish Government, to study the problem of typhoid fever and other contagious and epidemic diseases which are at present rife in Poland. The mission has been organized by the League of Red Cross Societies. The head is Colonel Hugh S. Cumming, representing the United States Health Service, and the other members are Professor Aldo Castellani of the London School of Tropical Medicine, Dr. G. S. Buchanan of the Local Government Board, and Dr. Visbecq, principal physician of the French Health Service.

IN the recent elections to the Spanish Senate Dr. Nicolas Rodriguez Abaytua was returned by the Academy of Medicine; Dr. Luis Ortega Morejon by the University of Madrid; Dr. Ricardo Royo Villanova by the University of Zaragoza; Dr. Rodolfo del Castillo Ruiz by the district of Albacete, and Dr. Luis Fatás by that of Huesca.

AN Institute of Biochemistry is to be founded in Milan. Its creation is due to a benefaction by Dr. Rizzi, formerly physician to the Ospedale Maggiore, who bequeathed £12,000 for the purpose.

THE report on the work of the Central Midwives Board for Scotland for the year ended March 31st, 1919, has now been issued as a parliamentary White Paper. During the year there were held twenty board and committee meetings. The number of midwives enrolled was 281, of whom 216 were enrolled after passing the Board's examination. The total enrolments to date are 3,591, and the number of practising midwives is about 1,560. There are ten institutions in Scotland at which midwives may be trained, and these are approved annually subject to inspection. During the year seven midwives were cited before the Board under its penal powers to answer charges of malpractice, negligence, or misconduct. In the result three names were removed from the roll. A number of cases of minor offences were dealt with by a warning sent through the M.O.H. Arrangements are now in full working order with the Central Midwives Board for Ireland—and latterly with that for England on its obtaining the amending Act—whereby the reciprocity clause in the Scottish Act is given full effect: thus a nurse who has passed any of the examinations of these boards can be allowed to practise in any country on payment of an enrolment fee.

Letters, Notes, and Answers.

ORIGINAL ARTICLES and LETTERS forwarded for publication are understood to be offered to the BRITISH MEDICAL JOURNAL alone unless the contrary be stated.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Office, 429, Strand, W.C.2, on receipt of proof.

In order to avoid delay, it is particularly requested that ALL letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL.

THE postal address of the BRITISH MEDICAL ASSOCIATION and BRITISH MEDICAL JOURNAL is 429, Strand, London, W.C.2. The telegraphic addresses are:

1. EDITOR of the BRITISH MEDICAL JOURNAL, *Artiology, Westrand, London*; telephone, 2631, Gerrard.

2. FINANCIAL SECRETARY AND BUSINESS MANAGER (Advertisements, etc.), *Articulate, Westrand, London*; telephone, 2630, Gerrard.

3. MEDICAL SECRETARY, *Medisecra, Westrand, London*; telephone, 2634, Gerrard. The address of the Irish Office of the British Medical Association is 16, South Frederick Street, Dublin.

QUERIES AND ANSWERS.

COLOUR CHANGES IN FRUIT.

"M.D." asks what is the explanation of the fact that the colour of many fruits alters in cooking. Thus the jam made from green gooseberries is nearly always red, but greengages retain their colour when converted into jam. Stewed pears usually have a brown or red colour, while apples generally retain their colour.

* * * The strong coloration which takes place, sometimes very rapidly, in cut or macerated fruit is conditioned by the presence of oxidases, bodies of the enzyme class, which act as carriers of atmospheric oxygen to other oxidizable substances, often of a tannoid nature. A good example is given by the rapid browning of a sliced apple, or of the expressed juice of some white grapes. In the case of the apple the oxidases, when they occur, are present throughout the fruit, but apples from certain countries contain but little. In the grape the oxidases are confined to the inner layer of the skin and the vascular bundles. The banana is rich in oxidases, and colours very readily, and especially on cooking. Heating, if not carried too far, intensifies the action, but oxidases are as a rule destroyed at temperatures below boiling water, so that in the case of jam the coloration is probably produced in the earlier stages of heating. This oxidase-coloration, modified by the natural colour of the extractives of the coloured part of the fruit (which may in themselves be altered by the fruit acids), probably accounts for the cases cited by "M.D." The natural colour of the greengage, as he says, is retained in the jam, and this particular fruit would most likely be found to contain little or no oxidase if tested by the benzidine-hydrogen peroxide method. It is an interesting subject, on which comparatively little work has been done.

STAMMERING.

"A. C." desires instructions for carrying out at home the best method of treatment for stammering, and inquires whether nerve tonics are of any use.

HYPERIDROSIS.

DR. HENRY WALDO (Clifton) writes to recommend to "Sudor" the late Radcliffe Crocker's suggestion, to give a level teaspoonful of precipitated sulphur in milk twice a day. Where it purges too much it may be combined with astringents, as in the following: Pulv. cretae co. 3vj, pulv. cinnam. co. 3ij, sulphur. praecipit. 3j; a teaspoonful to be taken twice a day.

DR. CHRISTOPHER KEMPSTER (London) writes: "Sudor" requires a remedy for a patient who suffers from hyperidrosis of the face and head. Hyperidrosis, which is usually considered beneath the serious consideration of the physician, is one of life's worries, and not only is a disagreeable annoyance to its victim but is often a serious social bar on account of its associated odour, and when situated in the axillae, its disfiguring and destroying effect upon ladies' clothing, and in those cases where it takes the form known as "bromidrosis," it is a disgusting disease, nauseating to those around and wrecking to the mental and physical wellbeing of the sufferer. It is surprising, when one considers the discomfort and danger of the wearing of perpetually saturated clothing, that a more serious view is not taken of the complaint by the medical profession, especially when an effective and easy remedy is at hand. During the past years I have followed the line of treatment first introduced by Howard Pirie in the use of x rays and have not yet met with a case which has not successfully responded to its influence. Whether the complaint be at the axillae, groins, hands, feet, head, face, or