This machinery is devised for the purpose of confining medical and other relief to the destitute. Is there any reason why it should not succeed? We may admit at once that its success has not been perfect in the past, and the obvious reason is that we have never provided any proper machinery for extracting payment from those who are able to make it. There is to-day nothing in the way of systematic charge and recovery throughout our public administration. The need for it has never been consciously recognised by the State.

But even with such broken and rusty machinery as exists, there has been sufficient charge and recovery to justify a belief that it will be easy to make it effective and systematic. The public health authorities have consistently recovered for all improvements made by them in the sanitary conditions of private houses. The Home Office collects annually a large sum in a thoroughly systematic fashion from the parents of children sent to reformatory and industrial schools. Where a board of guardians is energetic it collects every year from applicants or their relatives a considerable amount, running up to £3000 or £4000 in some unions, and for the lunatics in our county asylums the full cost of treatment is often recovered. Practically nothing is, of course, recovered for school feeding, because the education authorities are by law only entitled to feed the destitute.

The point to be enforced is that there is no inherent difficulty in recovering the cost of treatment from patients. It has been done to a large extent already. Given a properly framed code and the adequate machinery, it will be as easy as the collection of rates and taxes to restrict our medical service to the destitute by this process of charge and recovery.

Most members of the medical profession would like to see the voluntary hospitals brought into this scheme in order to prevent all hospital abuse and completely safeguard the private practitioner. The Minority suggest that some arrangement might be made with the voluntary hospitals by which they would fall into line with these proposals.

We have addressed ourselves throughout this article solely to the interests of the medical profession. We have urged the unassailable fact that changes are imminent in our public provision for medical assistance, and we would point out once more that unless the profession has some conscious plan of campaign with which to take the field it stands in risk of disaster. We believe that the proposals of the Minority introduce the measure which Parliament will almost certainly outlive, and we think that these proposals offer practitioners many advantages which they do not enjoy to-day. Our only fear is lest by reason of divided counsels the profession should not demand from Parliament the consideration to which it is entitled.

In conclusion, we ask that these proposals may be studied also from the wider view-point of the welfare of the community. By means of a well-organised and well-qualified Public Health Service, acting in conjunction with a highly skilled private medical profession, it is easy to do much towards building up the health and with it the self-respect of our people. Every practitioner knows that almost an infinity of sickness might be prevented were proper measures taken to effect it. Underlying the whole scheme that we are recommending, and especially in its public health proposals, lies this intense desire to prevent what evil can be prevented. Upon that ground alone we claim with confidence the coöperation of the medical profession in converting these proposals into law.

CHELTHENHAM GENERAL HOSPITAL.—At a recent meeting the governors of the Cheltenham General Hospital decided to draw on capital and to sell Consols to the amount of £2748 to meet a balance on the "Extension Building Fund" and an accumulating deficiency on the last two years working of the charity.

THE SOCIETY OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.—A general meeting of this society will be held on July 26th at 4 P.M., at 1, Upper Montague-street, Russell-square, London, W.C., when short addresses will be given on the history and aims of the society. During the afternoon Dr. W. G. Dickinson, who has for 15 years served the society as honorary secretary, will be presented with an illuminated address. All Members and Fellows of the College are cordially invited. The honorary secretary of the society is Dr. Sidney C. Lawrence.

TUBERCULOSIS IN ITS RELATION TO THE GENERATIVE FUNCTIONS.¹

By JAMES T. R. DAVISON, M.D. EDIN.,
FORMERLY RESIDENT PHYSICIAN TO THE EDINBURGH ROYAL INFIRMARY.

IN order to be able to interpret correctly the mortalities from tuberculosis, as well as those from any other disease, it is necessary to compare the number of deaths with the living populations of the same age. If we divide a given mortality into its component parts and compare each of these with the general population, we shall arrive at completely erroneous results. For example, in 1904 154 Argentine males aged 20-30 years died from tuberculosis in Buenos Aires; 25 aged 50-60 years died from the same disease. If we compare these numbers of deaths with the general population, we arrive at the conclusion that the mortality from tuberculosis is greater at 20-30 years than at 50-60 years, when in reality what occurs is the opposite, as can be verified by comparing the first series of deaths with the respective living population, which amounted to 34,979, and the second series with its respective population, which only reached 4415.

Relatively recent studies carried out by this exact method in some countries of Europe have shown that the idea, so generally held up to a short time ago, with respect to the most fatal epoch of life in the case of tuberculosis was a mistaken one.

Applying the method to the mortality from tuberculosis in Buenos Aires, it becomes possible to confirm the fact that youth is not the age of predilection for this disease. At the same time certain data can be obtained which appear to place mortality from tuberculosis in marked relation to the exercise of the generative functions. The year 1904 has been selected as the basis of study, for the reason that on that year the last city census was taken, and there we find complete statistics regarding living populations with respect to age, sex, and nationality. The appended table shows the

	ARGENTINES.				FOREIGNERS.			
	Age.	Living population.	Deaths from tuberculosis.	Per 1000.	Age.	Living population.	Deaths from tuberculosis.	Per 1000.
Males ...	0-2	26,219	35	1.33	—	—	—	—
Females ...	0-2	24,828	18	0.72	—	—	—	—
Males ...	2-5	33,594	37	1.10	—	—	—	—
Females ...	2-5	33,049	28	0.84	—	—	—	—
Males ...	5-10	51,006	33	0.64	5-10	4,854	2	0.41
Females ...	5-10	51,319	34	0.66	5-10	4,686	4	0.85
Males ...	10-15	40,862	24	0.58	10-15	7,944	5	0.63
Females ...	10-15	42,813	46	1.07	10-15	7,441	4	0.53
Males ...	15-20	27,935	60	2.14	15-20	17,565	28	1.59
Females ...	15-20	33,339	126	3.77	15-20	15,504	31	2.0
Males ...	20-30	34,979	154	4.40	20-30	58,259	128	2.19
Females ...	20-30	43,672	206	4.71	20-30	45,461	92	2.02
Males ...	30-40	18,919	106	5.60	30-40	57,644	158	2.74
Females ...	30-40	20,983	100	4.76	30-40	40,539	81	2.0
Males ...	40-50	10,295	55	5.34	40-50	49,223	159	3.23
Females ...	40-50	11,233	40	3.56	40-50	32,329	53	1.60
Males ...	50-60	4,415	25	5.66	50-60	27,575	77	2.79
Females ...	50-60	5,338	7	1.31	50-60	18,943	14	0.70
Males ...	60-*	2,588	12	4.63	60-*	16,126	46	2.85
Females ...	60—	5,029	4	0.79	60—	13,503	9	0.66

* Sixty years and upwards.

mortalities from tuberculosis as they affect Argentine males, Argentine females, foreign males, foreign females, calculated:

¹ A paper read at the American International Congress of Medicine and Hygiene held in Buenos Aires in May, 1910.

at so many per 1000 of the respective living population. In the part dealing with male and female foreigners, the first two epochs have been omitted, because at these ages relatively few come to this country, and calculations based on small numbers are apt to give fallacious results.

What first attracts our attention is the greater mortality from tuberculosis amongst Argentines than amongst foreigners. This was what was to be expected, since the Argentine population is composed of strong and weak, whereas the foreign one is selected, for the strong and not the weak emigrate from one country to another in search of work.

In the second place, we find that in the Argentine, as well as in the foreign populations, men die generally from tuberculosis in greater proportion than women. This is opposed to what we should expect. We know that the conditions of life in which man lives in this country render him less predisposed to this disease than women; man is much more active, he lives in better surroundings of pure air, he receives in greater quantity the light of the sun. Drunkenness is rare in Buenos Aires. Some potent factor must therefore exist which so heavily weighs on the male mortality. What is this factor?

Let us note what occurs in the epoch of life between 50 and 60 years of age—an epoch in which the generative functions of women have ceased, while they continue in the case of men. As shown in the table, among Argentine women the line of mortality undergoes a rapid and marked descent, and the same occurs in the case of foreign women, and the descent in the mortality line continues yet further, in both cases, during the next epoch of 60 years upwards. We have then this fact, that in the case of women, both Argentine and foreigners, the advent of the menopause coincides with a marked failure on the part of Koch's bacillus to invade efficiently the human organism. Let us meanwhile find out what occurs with man at the same ages. Amongst Argentine men, in the epoch of 50–60 years, the mortality line, far from accompanying that of women in its descent, on the contrary rises to its highest level; in the case of male foreigners the line reaches a very high level, although not so high as in the epoch of 40–50 years. After 50 years of age man does not cease in his generative functions, but in the later epochs of life these functions are carried out at the expense of great loss of nervous energy. Generative functions always require a great expenditure of nervous force. The human organism does not possess an unlimited supply of this force, and this energy is necessary if Koch's bacillus is to be successfully resisted. So long as man finds himself in the fulness of his strength, the moderate use of his generative functions does not place him in unfavourable conditions to resist the bacillus of tuberculosis. But after mature age the organism is subject to degenerative changes, and then the exercise of the generative functions, especially if carried out in an immoderate degree, implies such an expenditure of force as leaves the organism in a defenceless condition to resist the invasion of the bacillus. After 50 years of age, woman economises her nervous force with the advent of the menopause; man, on the contrary, goes on spending his strength when the organism more than ever requires vigour to defend itself. Koch's bacillus attacks both. Woman defends herself successfully; man succumbs for want of resisting power.

In the third place the table shows that tuberculous mortality reaches its highest level in the case of Argentine men from 20 years upwards, especially between 30 and 60 years of age. In the case of Argentine women the highest level of tuberculous mortality obtains between 15 and 50 years of age, especially between 20 and 40 years. These epochs of life correspond more or less to those in which the generative functions are most active in each sex. Woman anticipates herself a few years. (For every man who marries in Buenos Aires before he is 20 years old ten women marry at the corresponding age.) And woman ends her generative life long before man. In the case of the foreign population the same tendency to coincidence between high tuberculous mortality and great sexual activity is manifested; foreign men present their highest level of tuberculous mortality from 20 years upwards, especially after 30 years of age; foreign women between 15 and 50 years, especially between 15 and 40 years.

In the fourth place the table can be divided into two marked levels of mortality—a high one and a low one. The

low one corresponds to the ages of infancy and childhood in both sexes, and to the period after the menopause in the female; this level corresponds, therefore, to the ages of low sexual activity. The high level corresponds to maturity and advanced age in the male, and only to maturity in the female; that is to say, it corresponds to the epochs of great sexual activity in both sexes, and in the case of the male also to that epoch of life in which sexual activity takes place under disadvantageous conditions for the maintenance of vigour in the organism.

We know that Koch's bacillus can only successfully invade organisms which lack proper defence; we know that the lines of natural defence are weakened when the organism loses its vigour; we know that sexual functions exercised in immoderate degree, or exercised by organisms in a state of degeneration, spend inordinately the strength of the individual. Finally, we know that modern hygienic measures snatch from a sure death many children who afterwards pass on to the reproductive epochs of life with frail organisms. This simultaneous occurrence of great sexual activity, or sexual activity exercised under disadvantageous conditions (maturity in both sexes and advanced maturity in the male), and great mortality from tuberculosis cannot, therefore, be a mere coincidence—the first must be the cause of the second.

Buenos Aires.

A CASE OF SUPPURATIVE PERICHONDritis OF THE LARYNX IN THE COURSE OF ACUTE PNEUMONIA; RECOVERY.

By JAMES COLLIER, M.D. LOND., F.R.C.P. LOND.,
PHYSICIAN TO ST. GEORGE'S HOSPITAL;

AND

HAROLD S. BARWELL, M.B. LOND., F.R.C.S. ENG.,
SURGEON TO THE THROAT DEPARTMENT, ST. GEORGE'S HOSPITAL.

THE great rarity of laryngeal complications in the course of acute pneumonia is accentuated in an annotation which appeared in THE LANCET of Feb. 26th, 1910, p. 586, where a case of œdema of the larynx is described which was reported to the Société Médicale des Hôpitaux de Paris by A. Chauffard and G. Laroche, and another case is referred to which was reported by Dévé¹. The following account of another case in which severe œdema of the larynx progressing to suppurative perichondritis occurred in the course of acute pneumonia, and in which recovery occurred, may therefore be of interest.

The patient was a man, aged 28 years, who on Dec. 21st, 1909, was taken suddenly ill with symptoms which were thought to be those of influenza. Four days later he developed severe lancinating pains in the lower part of the left side of the chest, the temperature rose to 105° F., and he became delirious. He was admitted to St. George's Hospital on Dec. 31st, 1909. An extensive pneumonia of the left lower lobe was present, the physical signs were typical, and the sputum was swarming with pneumococci. One million of a vaccine of a stock pneumococcus was administered subcutaneously on Jan. 1st, 1910, and two millions on the 4th. Crisis occurred on the 5th, but the delirium persisted until the 7th, and he remained feeble and tremulous. On the 10th the temperature rose to 102°, and a general punctate erythematous rash made its appearance which persisted until the 17th. On the 19th he developed a sore throat with enlarged tonsils, œdema of the fauces, and enlargement of the cervical glands. On the 22nd the right tonsil was incised and a small quantity of pus was evacuated. The right side of the epiglottis was now seen to be red and cedematous. On the following day there was considerable dyspnoea, and a further incision was made in the right tonsil, releasing more pus. The temperature during the 11 days following the development of the sore throat was normal. The swelling of the tonsils, fauces, and epiglottis subsided slowly, but an increasing swelling, which became brawny and painful, made its appearance in the neck on either side of the hyoid bone, larynx, and trachea, gradually extending downwards and greater upon the right side; there were much dysphagia and dyspnoea. The region of the right arytenoid was markedly

¹ Normandie Médicale, June 1st, 1908, p. 306.