

66,875 males and 7803 females. Whether a community constituted on those lines possesses elements of stability may be an interesting question for sociologists. Dr. Charles Porter, the medical officer of health, in his report on the period from July 1st, 1903, to June 30th, 1904, gives the following as the marriage-, birth-, and death-rates per 1000 among the white or European population: marriage-rate, 28·4; birth-rate, 28·9; and death-rate, 17·2. Among the Asiatics the death-rate was 19·5 per 1000 and among the coloured African races it was 32·4 per 1000. The area of Johannesburg is 52,330 acres and the density of the population is 3·12 persons per acre, but within the area in question Asiatics live in "warrens" which are seriously overcrowded and Dr. Porter recommends the removal of these persons to an "Asiatic location." The chief causes of death in the mortality returns for the white population are diarrhoea and dysentery with 313 deaths, including 207 of children under one year of age, and pneumonia with 171 deaths. "Rock-drill pneumonia," or "miner's phthisis," caused 36 deaths. Among coloured persons who died within the municipal area pneumonia was by far the most fatal malady, causing 762 deaths; tuberculosis of the lungs was credited with 195 deaths; whilst "rock-drill pneumonia," or "miner's phthisis," was registered in only three cases. The death-rate from pneumonia among whites was 2·0 per 1000, while among coloured persons it was 10·2 per 1000. An outbreak of pneumonic plague was recognised in a coolie location on March 19th, 1904, and between that date and June 30th there occurred 24 cases in whites with 12 deaths and 88 cases in coloured persons with 70 deaths. The cases as they arose were transferred to the plague camp which had been prepared in the beginning of 1903 and the coolie location was burnt after the inmates had been transferred to a segregation camp.

THE TREATMENT OF CARDIAC DISEASE BY ELECTRIC CURRENTS.

IN the *Deutsche Medicinische Wochenschrift*, 1904, No. 52, is a contribution by Dr. Paul C. Franze, entitled "The Electro-therapy of Heart Disease in Combination with the Nauheim Treatment." Dr. Franze has carried out a large number of experiments in order to ascertain the effect of electric baths with the alternating sinusoidal current and of the "four-cell bath" with the faradic current on the action of the heart and on the circulation. The former produce, in the majority of cases, an increase in the blood pressure, a diminution in the frequency of the pulse, a more powerful contraction of the ventricles, and a decrease in the size of the heart if it be dilated. The faradic current does not seem to produce any decided influence on the frequency of the pulse or on the blood pressure, but it apparently has a favourable action on a dilated heart, the area of cardiac dulness decreasing in size after the application of the current. Dr. Franze states that he confirmed these observations by the use of the Roentgen rays, employing the method known as "ortho-diagraphy." He is of opinion that the above results are due to various factors—contraction of the muscular fibres of the myocardium, the direct action of the current on the nervous mechanism of the heart, and a reflex action set up by a stimulation of the sensory nerves of the skin. Dr. Franze further states that the practical results of a course of treatment consisting of a combination of the Nauheim baths with these electrical measures are highly satisfactory and certainly superior to the combination of "baths and exercises" hitherto known as the "Nauheim method." The amount of literature dealing with the mechanical therapeutic measures suitable for the treatment of chronic affections of the heart is now very large. Physicians in this country, however, are

by no means unanimous as to the amount of benefit to be obtained by resorting to these methods and further experience of the effects of electric currents in combination with the baths will be necessary before any conclusions can be arrived at in regard to their efficacy.

THE medical officer of health of the Cape Colony states that for the week ending March 4th the condition of the colony as regards plague was as follows. No cases of plague in man or other animal were discovered throughout the colony except at Port Elizabeth and at East London, where plague-infected rodents continued to be found. As regards the Mauritius, a telegram from the Governor received at the Colonial Office on March 24th states that for the week ending March 23rd the number of cases of plague reported was 0. In Brisbane 9 cases of plague were reported during the fortnight ending Feb. 11th and of these cases 4 were fatal.

MANY of our readers will learn with regret that owing to ill-health Mr. F. J. Marshall has been compelled to resign the post of resident medical officer at St. George's Hospital, which he has held for over 30 years. A testimonial is shortly to be presented to Mr. Marshall by his friends at St. George's and elsewhere in token of their regard for himself and of their appreciation of his unvarying kindness and tact. Subscriptions may be sent to Sir William Bennett, K.C.V.O., honorary treasurer, at 1, Chesterfield-street, Mayfair, W., or to the Dean of the Medical School of St. George's Hospital.

MEDICINE AND THE LAW.

A Twice-convicted Abortionist.

A MAN named Thomas Millerchip, whose name was removed from the Medical Register in 1885 in consequence of a conviction for felony, was sentenced to seven years' penal servitude at the recent assizes at Warwick for performing an illegal operation. The woman herself gave evidence against him and her story was amply corroborated by facts which the prisoner himself did not dispute, such as the enormous fee extorted from her and the fact that he had instructed her to burn his letters to her, both inconsistent with any innocent operation which the most fraudulent quack could pretend to perform. Indeed, the defence seems to have been that he pretended to do more than he actually did. The case in itself did not differ from many others of the same class but for the circumstance that other charges of a similar character which might have been made were referred to before sentence was passed and that a previous conviction for the same offence was recorded against the prisoner which had been punished by a sentence of ten years' penal servitude. It is interesting to note that to criminals of this class previous experience of conviction and punishment does not act as a deterrent but that after emerging from the convict prison they seem always to return to their old courses and frequently find themselves again in the prisoner's dock. The reason for this is indicated in the case of Millerchip by the fee to which reference has been made. The operation which he performed upon his accomplice in the crime, for such, of course, she was, earned for him the sum of £40. The money was "found by a friend" and the prisoner told the wretched woman when she tried to reduce his demand that he sometimes got £70 for assistance of the same kind. He also admitted in the witness-box that he "performed all sorts of operations, mostly upon women." It need hardly be said that a man of this type does not live in affluence but that the temptation to earn without hard work such sums as those named is great. They are also the reward of crimes which it is the interest of those upon whom they are performed to conceal and which may consequently, should all go well, be carried out many times without detection. The manner in which the quack is earning his living may be suspected by the police but evidence sufficient to justify arrest and to secure conviction may be for a long time unobtainable. A crime of a similar nature in that it involves a heavy penalty and yet is perpetrated upon a victim who dares not complain is that of blackmailing and it possesses