in charge of British troops or cantonments, as it is evident he obtained his experience only from this source. Inquiry by him, when he was in Burma, would have revealed the fact that for the past nine years to my knowledge fevers have been carefully investigated at the Civil General Hospital, Rangoon. Numerous papers on the subject of obscure fevers had been read at monthly meetings of the British Medical Association. I am also well aware that not only in Rangoon has the diagnosis of fevers been investigated by the aid of a clinical pathological department, and that considerable interest has been roused throughout the civil surgeoncies of this province for many years past. I therefore cannot allow Lieutenant-Colonel Forrest's reported misleading statement to pass, and can only conclude that he is referring only to the methods of station hospitals.—I am, Sir, yours faithfully,

Rangoon, Sept. 4th, 1909.

E. R. ROST, Major, I.M.S.

THE EXHIBITION OF QUININE.

To the Editor of THE LANCET.

SIR,—A firm believer in quinine in the prophylaxis and treatment of malaria, I have been, as I suppose many others practising in the tropics have, surprised from time to time to see a man taken ill with malaria while using prophylactic quinine or a pyrexia resist full doses of the drug.

Everyone in the tropics carries his own medicine chest, and in 99 per cent. of cases he has been prescribing for himself quinine in the form of tablets, often the sugar-coated variety, or some similar preparation, and herein lies the fault. When the gastro-intestinal catarrh commonly associated with malaria is taken into account, I have little hesitation in saying that the dose of quinine it is desired to bring into action in the blood bears often no relation to the number of tablets, for instance, swallowed. I am equally convinced that much of the "upsetting of the stomach" complained of by persons taking quinine is due to the drug being taken in these forms. There can be no doubt that the only effective method of exhibiting quinine by mouth and that causing least ill-effects is as a solution. For this reason sugar-coated tablets should cease to appear on the market and only such salts of quinine as are easily soluble in water should be made up in these forms. Would it be too great an assumption of the rôle of the physician on the part of manufacturing chemists to give directions on the label that quinine tablets should be dissolved in water before being administered?

I am, Sir, yours faithfully,

HUGH S. STANNUS, M.B. Lond.,
Medical Officer, Nyasaland Administration.

DARK-GROUND ILLUMINATION FOR BACTERIOLOGICAL MICROSCOPY.

To the Editor of THE LANCET.

SIR,—Having read the interesting communications by Mr. H. Wansey Bayly and Mr. Shillington Scales in your issues of Sept. 11th, p. 782, and Sept. 18th, pp. 889-90, relative to the use of dark-ground illumination in the observation of living bacteria, &c., I should like to be allowed to add a few remarks. It is generally understood that the source of light required must be much more intense than is ordinarily used in microscopical work; in fact, the makers all recommend a strong light. At first I employed the small arc lamp made by Leitz in conjunction with his dark-ground condenser when searching for spirochætae and bacilli, but found it advantageous to reduce the intensity of the light by interposing screens. Afterwards I discarded the arc lamp for the Nernst electric lamp, and eventually, for the incandescent gas lamp, the weaker light being more pleasant to the eyes and giving a better contrast between the brightly illuminated objects and the dark background. During the last few weeks I have been using the recently improved reflecting condenser by Leitz, which absorbs less light than his first model, and in consequence I have reduced the strength of my light to the ordinary microscope oil lamp with simple bull's eye lens, and the results are certainly surprising. Spirochætae and typhoid bacilli, for example, are distinctly shown against a perfectly black background, and the light being less injurious to the eyes I was able to work continuously for several hours without feeling the usual fatigue which follows the use of strong illuminants.

The fact that so weak a light as an oil lamp can be used satisfactorily in this mode of illumination may not be so highly appreciated by those at home as workers abroad, especially in regions where such commodities as gas and electricity are not to be found. Several workers in tropical medicine whom I have met were obliged to give up the idea of adopting this mode of illumination because of the impossibility of getting a sufficiently strong source of light.

I am, Sir, your faithfully,

Crouch End, N., Sept. 20th, 1909. J. W. OGILVY, F.R.M.S.

DIAGNOSIS IN THE GYMNASIUM.

To the Editor of THE LANCET.

SIR,—This morning I was consulted by a young lady with lateral curvature of the spine: she had previously been advised by her family medical man to put herself under Sandow's treatment; so she was examined by Sandow who promised to cure her for 80 guineas. The parents could not afford this amount, so they decided to consult me.

Yesterday a father and mother brought me three sons who had recently been examined by Sandow; the latter said that one had serious disease of the spine and another serious heart disease without any ground for such diagnoses.

You must agree with me that it is bad enough to see Sandow's costly advertisements in the daily press, but it is worse when general practitioners stultify themselves by sending their patients direct to him.

I am, Sir, yours faithfully,

Harley-street, W., Sept. 24th, 1909.

BERNARD ROTH.

THE HYPNOTIC TREATMENT OF MORPHINISM.

To the Editor of THE LANCET.

SIR,—The problems considered by the recent International Congress on Alcoholism in London are of world-wide importance, and the British Government showed a far-seeing comprehension of the needs of the times by inviting the principal Governments of Europe and America to send to this Congress their official representatives. Nothing but good can come from such a convention in which are assembled the most distinguished scholars and ablest specialists from the foremost nations of the world.

Among the drugs that enslave, the two with which the physicians of the United States are especially concerned are alcohol and morphine. While alcoholic intoxication is an ancient and well-understood condition, morphinism is a modern disease and has not received the attention from the medical profession which it deserves. It was almost unknown in the United States before the invention of the hypodermic syringe about 50 years ago, but now it has spread through that and other nations till it has become a world-wide menace to mankind. Unlike alcoholism, morphinism is not a social vice. It flourishes alone and in the dark. Unsuspected by the victim and unknown to his friends morphine quietly and insidiously becomes master and owner of the patient's brain and nerves, and steadily month by month drags him down to mental incapacity and to physical ruin. From first to last the victim of morphinism is in perpetual slavery. He does not have a day or a week of bondage, followed by a period of freedom, as is usually the case with alcoholics. Every day in the week and every week in the year the morphine yoke bears heavily upon him and escape is impossible without medical aid. As physicians well know, morphine cannot be denied an addict for 24 hours without causing great suffering, and after 48 hours of abstinence the agony is beyond the power of human nature voluntarily to endure. Neither is harmless moderation possible. If this drug is used daily, even in very small doses, the patient soon becomes a helpless slave to it. Morphinism is not a mere habit, but is a serious pathological condition. The will cannot be invoked for its cure as it is a disease in which the will is not a factor. It is as absurd to ask an addict to stop the use of morphine as to ask him to amputate his own arm. He can be cured only by a thorough course of sanatorium treatment. All other methods are a delusion and a snare.

The morphine addict could easily be cured, in fact, he could cure himself if it were not for the extreme suffering caused by depriving him of the drug. These withdrawal pains are so great that he is naturally willing to resort to the

most desperate means to obtain the drug which he knows will give him prompt and sure relief. Thus it becomes evident that all possibility of self-help is out of the question. Fear that he will suffer in the same way if he goes to an institution for treatment deters him from seeking remedial aid. How to cure these patients without suffering is, therefore, the most important factor in the problem. It has generally been considered impossible. I am convinced by years of experience in a sanatorium devoted to this specialty, that morphine can never be eliminated from an addict without suffering, if he is conscious, any more than his hand could be amputated without pain under similar circumstances. I therefore lay down the general principle that *sleep* solves the problem of the painless withdrawal of morphine as it has solved the problem of painless surgery. I have described this method of treating morphinism in other published papers. Briefly, it consists in keeping the patient asleep or in a somnolent state for a short time by the use of some of the hypnotic remedies that are familiar to all physicians. While the patient is thus somnolent the morphine is withdrawn. When he awakes the painful period is passed and all desire for morphine is gone. He then begins again to see clearly and to think normally. His outlook on life has entirely changed. Like John on Patmos, he beholds "a new heaven and a new earth." He begins once more to really live. While all this has been accomplished the patient has not suffered one minute of pain. The principle is the same as the administration of anæsthetics to obliterate the pain of a surgical operation. In carrying out this plan of treatment the physician's armamentarium should contain most of the hypnotic remedies, as no one remedy is sufficient. Among these hyoscine has been recommended, but I do not approve of it. It is a very uncertain, if not a dangerous, drug. For ten years I have been continuously using apomorphine in my sanatorium work for hypnotic purposes, and have found that in promptness and certainty of action it has no equal. While there are few infallible remedies, and this one may occasionally fail, yet among the hypnotics I know of none that is so certain in its effects. Its safety is another advantage. As one-tenth of a grain is universally considered a safe emetic dose, the hypnotic dose of one-thirtieth of a grain must be absolutely devoid of danger. The old gradual reduction method consists in reducing the size of the morphine dose daily till zero is reached. This means long-drawn-out misery for the patient as well as uncertain results. On the other hand, the method herein described is not only painless but sure. The after-treatment of morphinism is very important and should last several weeks. In addition to the products of the Pharmacopœia I find high-frequency electricity, mechanical vibration, light therapy, &c., often of great value during this period.

To the resolution of the International Conference at Shanghai last February asking for international investigation regarding methods of treatment for the opium habit, I would make this reply: Morphinism can be cured surely, safely, and painlessly by a method that has been repeatedly used with all classes of patients under careful scientific observation. This method consists in artificially inducing the somnolent state during the withdrawal period.

I am, Sir, yours faithfully,

C. J. DOUGLAS, M.D.

The Douglas Sanatorium, Dorchester, Mass., U.S.A., Sept. 20th, 1909

RAT DESTRUCTION ON SHIPS.

To the Editor of THE LANCET.

SIR,—My attention has been called to the report in your issue of the 18th inst. on the Sixteenth International Medical Congress at Budapest in which, on p. 875, Dr. Belleli is reported to have said in the course of a discussion on the different methods employed for the destruction of rats in ships that "the Clayton gases damage several kinds of goods; silks are discoloured by it, tea loses its aroma, and cargoes of silk and tea are constantly arriving from the Far East, representing an enormous total value." Of course, you give only a short summary of Dr. Belleli's remarks, but if Dr. Belleli declared without qualification that silks are discoloured and that tea loses its aroma when exposed to the action of the gas produced by my machine during the process of rat destruction on board ship, I can only say that he is very much misinformed. Numbers of vessels under all flags

have had their rats destroyed with silk and tea in their holds without any damage whatever resulting to these goods. The silks, of course, are in bales, thoroughly protected by careful wrapping; the tea is in chests lined with tin-foil. It is very doubtful whether the gas penetrates the bales of silks, and still more questionable whether it passes through the tin-foil protecting the tea. But, in any case, the fact remains that no damage has ever resulted to such goods, and this can be attested by numerous firms in London and elsewhere who have had practical experience in the matter.

I am at Dr. Belleli's disposal to furnish him proofs of what I state and to give him facilities to carry out any experiments he desires, and I trust that you will give to this letter the same publicity as you have given to your correspondent's *résumé* of Dr. Belleli's remarks.

I am, Sir, yours faithfully,

Paris, Sept. 22nd, 1909.

T. A. CLAYTON.

THE RECENT NAVAL COURT-MARTIAL.

To the Editor of THE LANCET.

SIR,—All naval medical officers will approve of your note on the foolish proceedings taken at a court-martial against Fleet-Surgeon C. G. Matthew, but such a situation as is described should be impossible. It clearly resulted from the want of definite assignment of rank in the titles of naval medical officers. The commander could not have behaved so petulantly towards an officer whose rank was the equal of his own if that rank had been quite clearly marked in the title by which the fleet-surgeon was addressed. The title "Fleet-Surgeon" merely indicated to the commander an officer of seniority but of a subordinated branch. The title "Commander" would mark a man as an officer whom by instinct another commander would deal with as an equal. In the army the commander in this case would at his age have probably been a major and the fleet-surgeon a lieutenant-colonel, when such abuse of authority could never have occurred. If the Admiralty desire to prevent such occurrences in future they will attend to this lesson of the case. If rank, however, cannot be given, pay can, and increased pay generally secures increased consideration. If the Admiralty Committee on the Naval Medical Department cannot recommend more definite titular rank it should recommend material increase of pay to compensate for the obvious hardships which this case shows may lie before professional men who join the navy rather than the other military services of the State.

I am, Sir, yours faithfully,

Sept. 25th, 1909.

A. B. C.

* * We doubt the value of our correspondent's proposal to obviate such occurrences by titular alterations.—ED. L.

NURSING IN MONTGOMERYSHIRE.—A scheme for the formation of a County Nursing Association was discussed at a largely attended meeting held at the Victoria Hall, Newton, Montgomeryshire, on Sept. 14th. Mr. David Davies, M.P., presided, and in his opening remarks pointed out that at the present moment no provision existed for nurses in rural districts in the county. Nursing associations had been formed, he believed, in connexion with every county in England. Wales, however, was very backward with regard to provision for nurses. Mr. C. E. Humphreys, medical officer for the county, said that the ideal nurse that was required for rural districts was a combination of district nurse and maternity nurse. A county nursing association ought to be able to supervise its nurses in the same way that midwives were supervised. With regard to the training of nurses, they should not go through a three years' course but a 10 or 12 months' course—four as maternity nurses and eight as district nurses. They would also act as health visitors to teach poor women the best way to feed and care for the children. The establishment of such a system of nursing throughout the country would have a great effect in diminishing the infantile mortality which at present stood very high. The Montgomery County Nursing Association was subsequently constituted, Mrs. Edward Davies being appointed president. The executive committee, consisting of 18 members, includes the names of Dr. Rees, Mr. W. E. L. Davies, Mr. R. D. Thomas, and Mr. N. W. Fairles-Humphreys.