is a Bill to authorise the city of Paris to issue a loan of 117,000,000 francs for the purpose of carrying out important sanitary works for the benefit of the capital. It is proposed to adopt the system of getting rid of all waste matter by means of the sewers, and to establish a sewage farm instead of turning the sewage into the Seine as heretofore.

M. Picqué has been elected secretary to the Perpetual Committee of the French Surgical Congress, to replace Dr. Pozzi, who has resigned the post, and has been elected honorary secretary.

The Municipal Council of Montpelier has created a Chair of Microbiology. A stipend of £240 is attached to it.

CORRESPONDENCE.

"A GIGANTIC MEDICAL ABUSE."

SIR,—Dr. Rushton Parker's letter opens up a question which I hope will not be allowed to drop without further discussion. What is true of the London hospitals is equally applicable to the provincial infirmaries. In Cardiff the Committee of the Glamorganshire and Monmouthshire Infirmary periodically make appeals to the public for assistance, and, in doing so, publish startling statistics about the number of out-patients who are treated at their institution. A year or so ago the public were informed that no fewer than 40,000 patients had been treated in the out-patient department! As there are only three medical officers deputed to attend to that department, each of these gentlemen would have to treat 13,000 persons in the course of the year, or an average of 128 for every biweekly visit. I need hardly say that what the officials of the infirmary meant was that the attendance of the patients amounted to 40,000. But to come to a more practical point. Two years and a-half since a committee was appointed to consider what measures should be adopted for the better organisation of the medical charities; and, after several meetings had been held, this Committee unanimously adopted the following recommendations:

1. With a view to prevent the abuse of the charity by improper objects a paid officer should be appointed to inquire into the circumstances of out-patients presenting governors' letters and applying for medical relief.

2. That a wage limit for all patients at the infirmary be adopted, the following being suggested as applicable to Cardiff:

Single man or woman	18s.	per week.
Man and wife	22s.	,,
Each child	1s. 6d.	,,

And that all applicants for outdoor medical relief whose wages shall be found on investigation to be in excess of this limit (unless for special reasons it seems to the out-patient medical staff desirable to retain them as patients) shall be referred to the Provident Dispensary or refused attendance, as the case may be.

There were other recommendations adopted, but the foregoing are the most important. It would be interesting to learn why these recommendations have never been carried out by the Committee of the infirmary. Perhaps some of the honorary medical staff will be good enough to throw a little light on this subject.

The Cardiff public are confronted with appeals for aid, and if it can be shown that the infirmary spends thousands of pounds every year on the relief of people who can well afford to pay for that relief, it is full time for the authorities to deal boldly with the question and endeavour to reduce their expenditure by relieving only those who are not in a position to pay for it elsewhere.—I am, etc.,

January 8th. A GENERAL PRACTI R.

SIR,—As a medical man who has been obliged to be a looker on at the play for nearly a year, may I be allowed to write a few words in connection with Dr. Parker's letter in your issue of January 6th. The abuses therein referred to can only be remedied by the united action of the British Medical Association and the General Medical Council. The British Medical Association, by its connection with so many members of the profession, can gauge opinion, condense it, and lay it before the General Medical Council, which body can place the matter in such form that a Bill can be introduced, and it is hoped passed, in Parliament for the better protection of professional interests. The introduction into our profession of competition and price cutting—in other words, of low trade expedients—is the cause of many abuses. The overcrowded state of the profession is another cause of them. The inclusion in its ranks of so many members whose conduct ranks them among the lowest and most degraded trading class is still another.

There must be:

Abolition of false charity, such as free attendance on non-pauper patients, either at hospitals or privately, by those who desire experience at the expense of their less fortunate brethren.

A settled scale of fees for private and club patients.

A much more strict mode of dealing with medical aid members, members who keep "shops," "medical halls," and "cheap dispensaries."

And, finally, the British Medical Association must act with real severity against such offenders by striking their names off its list; and by bringing such matters before the General Medical Council with a view to removal of names from the *Register* and heavy fines.—I am, etc.,

Belstone, Jan. 9th. EDWARD H. RYAN-TENISON.

THE PREVENTION AND CURE OF AGUE BY OPIUM.

SIR,—Under the above heading Dr. G. Thin, in the BRITISH MEDICAL JOURNAL of December 23rd, 1893, raises some question on the above subject, to which, with your permission, I will endeavour to reply. First as regards the Terai. This is probably, at certain seasons, the most malarious tract in the world, and as I have a personal knowledge of its peculiarities and climate I will give you my experience. First let me explain what the Terai is. Immediately below the outer range of the great Himalayan Mountains, which is commonly known as the "Sewaliks," runs a tract of forest averaging about five miles wide, called the "Bhāber;" this is practically a waterless belt, that is, there are no springs, and most of the hill streams and small rivers disappear into its soil soon after entering it. This is accounted for by the fact that the "Bhāber" is evidently the old shore of the sea which, in prehistoric times, washed up to the foot of the Himalayas, and is proved by the fact that for several hundred feet the ground is composed of rounded boulders, sand, shells, etc., into which the water disappears and percolates as far as the substratum of clay will allow. The Bhāber has rather a sharp fall towards the plains, which can be easily proved by observing the velocity with which the larger rivers run over it. At the lower edge of the Bhāber the Terai commences, and here, as the boulder tract ends, the water meets with clay and is forced to rise to the surface. It is very remarkable to see just above the Bhāber tract the small streams disappear into the soil, and below it to observe them issuing forth here and there, till at length the rivers re-form; in addition the ground for many miles becomes a waterlogged tract, averaging ten to twenty miles in width. This is the deadly Terai, the home of the tiger, and one of the few places now left in India where he can breed with tolerable safety from disturbance.

It will be understood from the above what a terribly deadly place this Terai tract is during and after the rainy season. Attempts are being made to induce natives from other parts to settle on this land, which is is exceedingly fertile, and some fairly good results have followed. I have travelled through it in many directions when shooting in the company of the late Mr. Macdonald, the Commissioner, to whose exertions are due any success that has attended these operations. One curious result of residence in the Terai is that in a few years nearly all of both sexes become barren, though, as far as I could ascertain, not

impotent. It is an undoubted fact that consumers of opium in the Terai find much benefit from the habit, and that it is to a considerable extent a prophylactic. So, indeed, is alcohol; and in the Terai much country liquor is consumed with excellent effect. Dr. Thin asks why do not the police magistrates and others in the Terai take opium? The reply is a simple one, namely, the European officials go up to the hills as soon as the rains commence, and do not return (except under most urgent circumstances) till the deadly season has passed, that is, about the middle of November. Again, if Europeans have to visit the Terai during the sickly season (which may be set down as from June 1st to November 15th), they are provided with suitable clothes, are well fed, take all the precautions that experience suggests, including quinine freely, and then—nearly always suffer from severe attacks of malarial fever, and not infrequently die. Indeed, it was the result of one of these flying visits to the Terai during the rains that killed the late Mr. Macdonald, who had been working continuously in the district since the mutiny.

Perhaps the actual prophylactic value of opium is not as high as that of quinine, but the comfort it confers on the fever-stricken native is immense. Give a man suffering from a severe attack of ague a grain or grain and a-half of opium (say 20 drops of the tincture), and what a relief it is! The hot stage comes on quickly, is much shortened, and the sweating stage soon follows, with intense comfort to the patient. The poor fever-stricken native looks on opium as his sheet anchor, his truest friend, and, from my experience, seldom takes it to excess. It is cheap, easily carried, and taken in the form of a pill.

I have lived for over twenty years in India, and have gone out of my way to see and investigate the condition of opium eaters. I had in my service for several years a cook who was a confirmed opium eater; about once in six months he exceeded his usual dose, and became stupid and careless for a day or two, but beyond that he did not seem to differ, and was an excellent servant.

I have frequently visited the "opium den" at Lucknow, which is so often quoted by the anti-opiumists. It certainly was an unsavoury place to the senses — a native house in a crowded bazaar, containing numbers of small rooms in which men and women lay in different stages of opium sleep, but they were quiet, happy, and harmless; and one public-house in Whitechapel would show more misery in a single evening than the "opium den" in Lucknow would in a year.

Dr. Thin asks why we do not prescribe opium for Europeans as a prophylactic. I answer, because we find quinine more suitable and more efficacious, and besides there is a sentimental objection to prescribing opium for this purpose which I consider perfectly justifiable. Why should we substitute opium for quinine and arsenic, both well known prophylactics? It may, then, be said, why not substitute quinine and arsenic for opium in India and other malarious places? First, however, there is the expense of quinine and the danger of arsenic in non-professional hands to be considered; but, as a matter of fact, the Government of India has done and is doing all in its power to bring quinine within the reach of everyone. Mixed alkaloids are sold at all post offices for one pice—equal to a little over a farthing—for a 5-grain dose. This is much used; still the native prefers his opium, which experience tells him not only acts as a prophylactic but gives him much comfort in other ways. It enables him to endure fatigue better, and, taken in moderation, has no evil effect on his physique or general health.

I cannot help thinking that Dr. Thin rather begs the question when he inquires why medical men do not prescribe opium more than they do for Europeans in malarious tracts; that is not the point at issue regarding the opium question.—I am, etc.,

J. B. HAMILTON,
Surgeon-Colonel A.M.S.

SIR,—As a contribution to this question so pertinently raised by Dr. Thin, I beg to offer a few remarks. Some years ago, when acting as medical officer in the P. and O. Company's service, I had the opportunity of observing cases of chronic malarial infection in Lascar opium eaters The attack of fever usually occurred, or my attention was called to it, when the man's stock of opium was exhausted. The type was intermittent, generally quotidian, and always slight. Under the use of opium the fever disappeared, and the man was soon fit for work again, while without opium the case dragged on a little longer, and the debility was greater. It must, however, be pointed out that there was no malarial environment, and that non-opium eating members of the crew frequently had slight attacks of fever on the high seas, which got well with no other treatment than a few days' rest and an aperient. The opium eaters were well known to their companions, and despised by them, as they could not or would not take their fair share of work. On inquiring into their history, I learned that when living in malarious districts they had suffered from ague about as frequently as their non-opium eating neighbours, but they stated that their attacks were less severe. As the result of my observations and inquiries, I came to the conclusion that opium was no true prophylactic or specific, but that the symptoms were mitigated just sufficiently to form a popular and plausible excuse among an ignorant and short-sighted population for the continuance of a harmful habit. Some American authorities advise the use of morphine or opium as an adjunct to quinine in severe cases. The effect seems to be to lessen the discomfort of the cold stage, and possibly to render the patient more tolerant of large doses of quinine, but in other respects it appears to do harm.—I am, etc.,

Elvaston Place, S.W., Dec. 27th. NEVILLE WOOD.

MEDICAL MISSIONARIES.

SIR,—Some letters have appeared in the BRITISH MEDICAL JOURNAL animadverting, as I think, unfairly, not to say unkindly, on the Zenana Medical College for Women. Will you kindly permit me, as one of the oldest lecturers in the College, to refer to them?

First, I should say with us it is entirely a question of conscience. We do not profess to "qualify," but to make the lady missionaries as useful as possible by giving them a sound medical training as far as the time at their disposal and their pecuniary means will allow, and for countries where qualified men are not admitted to attend upon women, and where women may be qualified, and because non-missionaries are not the lady helps required. Moreover, in the parts where our trained ladies go—India, China, Africa, and Burmah—the natives care very little for qualified persons and know little of, and care less for, universities or colleges of physicians or surgeons.

It is urged that in two years our lady students cannot know much. Granted; but two years well employed will often do as much as three or four carelessly consumed, and that it is so every examiner knows and the number of persons plucked every year proves.

In olden times, when young men served an apprenticeship, it was always noticed that those who had been assiduous apprentices almost always carried away the prizes; they were so well grounded before they came to college. Will anyone maintain that the training of girls in a college where they are well taught can be other than a great good to a missionary woman, though she is not fully qualified?

Again, the Church Missionary Society and other missionary societies take care to teach their pupils a little medicine and surgery as well as cooking and carpentering, etc. It is not supposed that they are perfect in these departments, but can it be denied that the knowledge so acquired is of immense advantage to missionaries among ignorant heathen or savages? The Zenana Medical College undertakes to give medical, surgical, and midwifery, etc., instruction in a systematic manner.

Again, it certainly would be an advantage if women could be trained for five years as medical women, but who is to find the women and the money? Few wealthy ladies follow missionary life. Those who do adopt the medical profession do so as the great majority of medical men have done—as a vocation by which hereafter they shall be able to earn their living. If Miss Jex-Blake and her friends will provide the funds, doubtless more medical missionaries will be qualified. But personal poverty and the want of funds for this purpose among many societies preclude five years' maintenance and a five years' course of study in ordinary medical schools. More