WENDT (ED. C.)

THE NEW ROME

AND THE

QUESTION OF ROMAN FEVER

BY

EDMUND CHARLES WENDT, M.D.

NEW YORK

presented by the author

Reprinted from the MEDICAL RECORD, *August* 27, 1892

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THE NEW ROME AND THE QUESTION OF ROMAN FEVER.

EVERY person of culture has probably, at one time or another, experienced a distinct desire to see Italy. And, indeed, what higher intellectual treat could well be provided than a holiday judiciously spent in that ancient land? That this is a mere truism is attested by the fact that, despite her reputation for insalubrity, thousands upon thousands of foreigners, year after year, continue to flock to Italy. It has almost come to be part of a liberal education to examine all her natural beauties, and to seek fresh inspiration by a study of those marvellous treasures pertaining to history, literature, science, and especially to art, which no other country possesses in like degree and number.

As for Rome itself, the eyes of the world have ever been directed toward the Eternal City. And this commanding position was freshly emphasized when, in 1870, the ancient town of Romulus became the capital of the new United Italy. Ever since then a distinctly modern life has been infused into the sluggish current of her existence. Even the outward appearance of the city has changed under the stimulus of a grand national revival. It is true the archæologist, the historian, the poet, and even the lover of art, have not looked on without dismay; for, although by no means completed, the process of modernization has already effaced many a cherished memento of the past, and thus robbed Rome of some of her

ancient glory. Everywhere crumbling ruins and mouldy piles of dilapidated masonry have been replaced by those commonplace modern structures which the demands of a practical age have set up in all the larger towns of the civilized world. But sanitation is divorced from sentiment, and from a purely sanitary point of view there is surely nothing to regret in a transformation which substitutes healthful modern dwellings for the dangerous and scarcely habitable houses of by-gone centuries.

But quite apart from its permanent interest to all classes of men, Rome will soon receive the special attention of physicians, owing to the International Medical Congress which is to meet there in 1893. Under these circumstances some account of the city, from a medical point of view, may be of interest to the profession in America, more particularly as the bugbear of "Roman fever" is responsible for an exaggerated dread concerning the unhealthfulness of its climate, which most physicians share with the laity.

My personal observations and studies in Rome extended over a period of less than three weeks, and it is not pretended that they were at all exhaustive.

In fact, as will be seen later on in reference to several matters, and especially touching the vexed question of Roman fever, I have preferred to trust to the experience of able local authorities rather than to hazard opinions based on necessarily imperfect observations.

Of course, in some respects, a foreign physician may have a clearer judgment of local affairs than an old time resident. Yet one cannot expect to do justice to a large city, and certainly not to Rome, in the short space of a few weeks. I have, therefore, suppressed all except the most essential information.

Clean Streets.—The first thing that favorably impresses the stranger, especially if he happens to be a New Yorker, is that Rome is a clean city. There are few wide streets, except in the essentially new quarters, and the paving is

far from good. Nevertheless, the admirable cleanliness of even the smaller and less important avenues shows that an efficient system of street cleaning and garbage removal is now in force. New York has much to learn from Rome in this matter.

Disgusting Public Urinals.—But in spite of clean streets disagreeable odors are far more frequent than they have any right to be. These odors for the most part arise from the public urinals, which everywhere disgracefully obtrude their obnoxious presence upon normal eyes and nostrils. The Romans have the most frank and astonishing disregard of the common proprieties of civilized life, in the matter of relieving themselves of their surplus renal secretion, which it is possible to imagine. And I may remark in passing, that the same indecency is found repeated in all the principal Italian cities, with the single exception of Milan. In almost every side street, and usually but a few steps beyond the teeming thoroughfares, these countless urinals have been introduced. With few exceptions they are malodorous, disgusting, public nuisances. Fancy wedge-shaped shallow clefts sunk into the walls of the houses and unprovided with even the pretence of a covered approach. It seems incredible that such barbarous stench-breeders should be allowed to remain in a large modern town, where civic pride is not altogether unknown. I can account for the anomaly only on ethnological grounds, the Latin view of public decency being a much broader one than prevails in Anglo-Saxon lands.

Purity and Abundance of the Drinking-water.—Turning next to the water-supply of the city, a very satisfactory state of affairs is found to exist. For the drinking water of Rome is clear, pure, and tasteless. It is supplied in practical over-abundance, and is without doubt a potent factor in maintaining the present standard of health of the city. The water is conducted in several well-built aqueducts, the sources of supply being located

miles away from the city. The water is rather hard, however, and while the natives and residents take it with impunity, a stranger may experience some temporary discomfort during his period of acclimatization. The chief aqueducts running into Rome[1] are *la Vergine*, *la Felice*, *la Paola*, and *la Marcia*. Among the minor sources of supply are the *Sallustiane*, *Argentina*, *Api*, *San Damaso*, *Grillo*, *San Felice*, *del Sole*, *la Lancisiana*, and *l'Innocenziana*. But these waters include those of the entire "*Comune di Roma*," although I have not mentioned all of them.

It is unnecessary to present a detailed account of the chemical analysis of these waters. It has been found that, barring the hardness already alluded to, there is no ground for complaint.

Bacteriological examinations were also made by Professor A. Celli, of the Institute of Hygiene of the University of Rome.[2] The results were in the main satisfactory. But some of the local suburban waters were found to be suspicious, and certain well-waters were pronounced decidedly impure. All such waters have been, or will be, entirely suppressed. All the subsoil waters were, however, found to be germ-laden.

To give some idea of the quantity of potable water now carried into Rome, the following figures may be adduced. In twenty-four hours the Vergine supplies 80,000 cubic metres, the Paola, 40,000, the Marcia, 108,000. Moreover, the authorities state that these quantities could be easily doubled, so that for all time to come an abundance of unimpeachable drinking water is assured to the citizens.

Drainage Imperfections.—Hundreds of fountains play day and night in Rome, and one would naturally suppose that with all this enormous flow of water the drainage

[1] Risultati dell' Inchiesta sulle condizioni igieniche e sanitarie. Roma, 1886.

[2] Bolletino della Com. speciale d' igiene del municipio di Roma.

problem would have been satisfactorily solved there long ago. This is not the case, however, and in the matter of sewage disposal, and especially in all that relates to sanitary house fixtures, Rome is still far behind the age, if the best Anglo-American standard is used for comparison.

Mr. W. J. Stillman, the able correspondent of the London *Times*, who kindly placed at my disposal much valuable information culled during his thirty years' residence in Italy, has indeed assured me that cesspools no longer exist in Rome, and that the drainage of the town now approaches perfection. But with all due deference to his ripe experience in sanitary matters, I must emphatically dissent from so optimistic a view of the present condition of Rome. Much has been done since the authorities have busied themselves with this vital sanitary problem, and to an old resident the changes will naturally appear very great. But the new-comer cannot avoid observing that much more remains to be done.

The new Tiber embankment, when completed, will doubtless be a long step in the right direction. But what Rome needs above everything else is a complete reformation of her system of house plumbing, including the proper ventilation of soil-pipes, the introduction of traps, the disconnection of house-pipes from main drains by modern methods—in a word, the radical transformation of present arrangements.

It is quite true that many of the better class of hotels and dwelling-houses are now supplied with clean-looking, modern English cabinets, which apparently answer every hygienic requirement. But the Roman sanitary engineers have not yet learned that more than this "surface trimming" is needed to reform obsolete house-drainage methods.

As for the absence of cesspools, I will at once admit that such dangerous old pits as are found in Florence and elsewhere, I have not personally discovered in Rome. But many houses have square receptacles situated

in the courtyard, which appeared to me to be cunningly contrived breeders of noxious stenches, while immense pipes (in some instances of such ample calibre as to admit the body of a man) very successfully convey foul gases to the apartments of the residents. It is alleged that these receptacles are frequently emptied and cleansed, and that they really serve as cut-offs from the main sewers. I can only say that those boxes which I inspected were actual receptacles of filth, that ought not to have been allowed to accumulate for a single hour of the day. Moreover, in spite of the abundance of water, the flushing arrangements are often primitive, and the water is thus needlessly wasted. Evidently a little English missionary work in the direction of enforcing the introduction of sanitary plumbing would not be wasted in Rome. Eight years ago Mr. Hart wrote in the *British Medical Journal* as follows :

" Most of the best and newest hotels are indeed provided with excellent cabinet fittings, but this is delusive and incomplete unless the ventilation and disconnection of the soil-pipes are carried out. This is the more important in Rome, because the main sewers are mostly of a labyrinthine character and Brobdignagian proportions. In some places they are connected with the vast ancient cloacæ, and it is certain, from their form and size, that they must be very largely elongated cesspools of deposit rather than sewers of transit. Under these circumstances it is conceivable that the more modern and complete domestic arrangements for water-carriage adopted in the hotels become sources of danger, by providing also for a more abundant reflux of sewer-gas, which the heating of the corridors sucks into the atmosphere and disperses throughout the building."

These criticisms apply to-day with even greater force than they did in 1884, owing to the large increase of population.

Rome's sewage is discharged into the Tiber, and the

numerous evils incident to floods or an abnormal lowness of the river water will be done away with when the really fine granite embankments are completed. It is to be hoped that the financial straits of the Italian Government will not seriously hamper the completion of this necessary, though costly, undertaking.

Health, Disease, and Mortality.—In spite of the imperfection of its drainage system, and a still excessive mortality from malarial diseases, Rome is at present the healthiest city in Italy, and one of the healthiest cities in all Europe. This surprising statement is not based merely on the concurrent testimony of the leading physicians of Rome. It is clearly shown by a study of the bulky but eminently trustworthy Government reports. From the *Annuario Statistico di Roma*, published in 1890, the following tables have been compiled. For purposes of ready comparison the death-rate of the principal Italian towns is placed side by side with that of other European cities. (St. Petersburg is also included in the table.)

General Death-rate per 1,000 *of Italian and Foreign Cities.*

Italian cities.	1885.	1886.	Foreign cities.	1885.	1886.
Rome	23.6	20.0	Buda-Pesth	29.4	39.4
Padua	27.6	37.4	Marseilles	39.0	35.0
Bologna	27.3	32.6	St. Petersburg	28.9	30.6
Venice	31.6	32.6	Hamburg	26.0	29.3
Verona	28.1	31.9	Vienna	27.9	26.2
Genoa	27.1	30.1	Berlin	24.8	25.8
Naples	28.5	29.6	Paris	23.6	24.6
Milan	29.1	29.5	Liverpool	23.7	23.7
Florence	27.0	28.6	Amsterdam	24.0	23.6
Turin	25.4	24.6	Copenhagen	20.7	23.2
Leghorn	22.2	25.9	Lyons	23.3	23.0
Messina	29.8	23.9	Brussels	21.6	22.9
Palermo	36.7	20.5	London	17.1	19.8

Italian Lack of Sanitation.—That Italian lack of sanitation is still responsible for many unnecessary deaths cannot be seriously questioned. And it is all the more creditable to Rome, therefore, that in spite of the negligence of the ignorant masses, a material improvement has of late years become manifest in the general health of the city.

A glance at the following table will show the deplorable loss of life from zymotic and paludal diseases for the kingdom at large. It is made all the more apparent by comparison with England and Wales, these countries having a population about equalling that of Italy.

The figures are for one year only, viz., 1887.[1] But they are more eloquent than words.

Number of Deaths Resulting from Various Diseases in Italy and England.

Disease.	Italy.	England and Wales.
Scarlet fever	14,631	7,859
Diphtheria and Croup	28,273	8,422
Typhoid fever	27,273	5,662
Malarial fever	21,033	193
Cholera	8,150	462
Small-pox	16,249	506

In place of lengthy descriptions of the occurrence of diseases and their seasonal prevalence, the subjoined tables may be profitably studied. A glance will show that Rome is at its worst during the very time when it is most crowded with foreign visitors and tourists. But fashion has ever been a more formidable power than mere health.

[1] See Nineteenth Century, March, 1892. Article *Italia non fara da se.*

Table Showing Number of Deaths from Principal Diseases (except Malaria) at Rome.

	Typhoid fever.	Small-pox.	Croupous pneumonia and acute catarrh.	Other diseases of the repiratory organs.	Diphtheria.	Malarial fevers and chronic affections from malaria.	Enteritis, diarrhœa, indigenous cholera.
January.....	11	47	116	100	32	36	23
February.....	10	37	96	80	31	24	36
March.....	10	44	138	71	20	35	43
April.....	11	32	78	41	12	23	30
May.....	8	38	82	40	10	22	56
June.....	12	23	57	31	8	24	74
July.....	7	20	47	27	4	33	112
August.....	12	16	23	11	10	30	93
September....	16	24	30	11	5	28	85
October.....	25	49	29	21	6	35	87
November....	21	67	46	39	17	34	77
December....	27	79	92	57	9	29	61
Total.....	170	476	834	529	164	353	777

Table Showing General Mortality at Rome during Fifteen Years, 1872–86. Divided by Months.

	Daily Averages.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Year, 1886.....	32.6	32.4	33.4	24.6	22.7	21.2	23.3	19.7	20.0	22.8	25.9	27.7	25.5
Year, 1885.....	27.5	24.7	22.6	20.4	20.2	21.1	25.3	24.4	21.6	22.7	22.0	30 1	23.5
Daily, 1872–85..	28.6	28.9	27.3	24.2	21.7	21.8	23.4	22.4	21.2	22.1	24.1	26.5	24.3

Fatal Malaria.—To the courtesy of Mr. W. J. Stillman I owe the compilation of the following painfully instructive figures, showing that while the mortality from malaria is on the decrease in Rome, it is still decidedly high. The significance of this table is enhanced when it is remembered that the population of the commune of Rome has risen rapidly from about 280,000 in 1881, to something like 450,000 in 1891.

Thus there is observable in this period an actual decrease of malaria, which, taken in conjunction with the growth of population, is to some extent reassuring as to the future of Rome in this particular.

And further, it is only fair to state that the suburban population is much more responsible for this mortality than the dwellers in the city. The malarial peasant invariably goes to Rome to die, even if he took the fever scores of miles away. It is this influx of outsiders that helps to swell the death-rate of the city, and may lead to erroneous conclusions.

Table Showing Number of Deaths from Malaria in the Commune of Rome.

Year.	Permanent Population.					Adventitious Population.					Combined total.
	In private houses.	In public institutions.	In prisons.	In other places.	Total.	In private houses.	In public institutions.	In prisons.	In other places.	Total.	
1881.....	319	67	..	1	387	63	191	7	2	263	263
1882.....	257	67	1	..	325	30	135	15	..	189	505
1883. ...	276	56	1	2	335	35	97	20	1	153	488
1884'....	212	54	1	..	267	43	75	6	..	122	389
1885.....	246	37	..	..	283	41	66	15	..	122	405
1886.....	195	25	2	3	225	53	61	16	..	130	355
1887.....	223	27	..	..	250	50	64	9	1	124	374
1888.....	200	33	1	..	234	46	78	8	1	133	367
1889.....	....	..	..	..	....	...	....	....	..	....	344
1890.....	....	..	..	..	...	...	....	....	..	....	299

Roman Fever.—Turning now to the important question of "fever," I found fewer differences of opinion among the physicians of Rome than I had anticipated. Indeed, there is a singular unanimity of judgment among local medical men on this point, namely, that the danger from Roman fever has been grossly exaggerated. Serious illness is indeed often invited by the neglect on the part of swarming tourists of ordinary prudence. And for some occult reason every departure from health occurring in visitors of the Eternal City is by them promptly labelled "fever." But while Rome is not in any sense a health-resort, as it was once held to be, I am convinced that the city is not a more dangerous place of residence than Paris, or Berlin, or Vienna, or, for that matter, than New York.

Owing to the importance of this subject and the many misleading statements often found in print, I believe the following views, kindly expressed to me in writing by Dr. Charles, of Rome, will be read with interest by American physicians. It will not be out of place to state here that Dr. T. Edmonston Charles has had a very wide experience, both as a practitioner and lecturer, in India, in France, and of late years in Rome, where he now occupies the official positions of physician to the British Embassy, and of honorary physician to the Queen. In answer to my questions, Dr. Charles writes: "Tradition has it that when he had to write an article to order on the snakes of Iceland, the writer, after boldly commencing by the statement, 'There are no snakes in Iceland,' ran short of ideas on the subject. You ask me what is Roman fever. But here the similarity of our positions ceases, for there yet remains much to be said on the subject, and you can easily understand that your question will require a longer answer than you might at first have imagined. It may seem a paradox to affirm that there is no Roman fever, when all are aware that there is no article of faith more generally held, and certainly none more firmly clung to, than that Roman fever is very fatal, and that it is very

common. Everybody knows this, so what is the use of denying it? I confess I think there is very little to be gained by running counter to such a widely diffused delusion. *Populus vult decipi; decipiatur.* As soon would I attempt to persuade a member of the Psychological Society that ghosts do not walk, or an aged Scotch crone that the Banshee exists only in her imagination, as to argue the question of Roman fever with an ordinary tourist. I cannot pretend to be able to give a complete explanation of the origins of a faith which has succeeded in dominating so many minds, but the poverty of the Italian vernacular in regard to illness, seems to have been at the root of a good deal of the misconception.

"The uneducated Italian, when he feels ill, has but one way of expressing himself, '*che febre*,' or '*ho la febre*.' Now, place yourself in the position of receiving the same answer every time you made inquiries about a trivial indisposition of a servant, an artisan, or a mechanic—and this, be it remembered, whether he suffered from a toothache, a cold, a bilious attack, nay, even a fit of idleness—and consider how long it would take you to arrive at the conclusion that you were living in a very feverish country. From this it is but a short step to begin to calculate how long it will be before you yourself are attacked; and on the first symptoms of any trivial illness appearing, to believe that your own time has come, and that you are already in the grip of this all-devouring monster. The staple article of conversation among certain classes of visitors to Rome is about that haunting spectre, the Roman fever. It is a subject that seems inexhaustible, and from its having a terribly personal significance, it possesses a fascination far beyond the glorious pile of St. Peter's, or the classical ruins in the Roman Forum. Such being the case, it not only affords occupation to the thoughts during the waking hours, but intrudes itself into the dreams of the night. Some brains cannot long resist the strain. From fearing to get it, they fear they have it.

One of the painful experiences entailed by a practice in Rome consists in meeting with people who, though physically well, are mentally ill, having worried themselves into believing that they are already the victims of this dread malady. I have seen people (otherwise very intelligent) who, with a common cold, or some very simple ailment, or perhaps only tired with a long journey to Rome, have sent for me on the day after their arrival, and in beseeching tones implored me to tell them if I thought they had Roman fever, as they would not stay a day longer in the place, but would clear out by the evening train. It is lamentable to attempt to estimate the sum of human misery caused by such a widely spread belief.

"No one gains by being an apostle of this false creed, and yet no missionaries are more zealous than its votaries, and no faith is so well supplied with a never-ceasing flow of converts to it. Medical men come by hundreds to Rome. How many of them have seen a case of any kind of fever in Rome, and yet how few of them could say boldly that they did not believe in Roman fever?

"In the sense in which you ask me, I have seen only three fevers in Rome: 1, malarial; 2, typhoid; 3, febris communis continua. You may, if you like, call one or all of these Roman fevers, only if you do so you lodge yourself in the awkward predicament of finding exactly the same fevers in America, in the persons of people who have never been in Rome, or have even never crossed the Atlantic. In the above enumeration I have purposely omitted febricula, as it manifestly has no bearing on your question. Let me say a few words of explanation about each of these three fevers, as from what you say I gather that American physicians would like some positive information regarding them.

"**1. Malarial Fever.**—Though I am here from the middle of October to the end of June, I have never seen a case of malarial fever caught in Europe, in any Ameri-

can or Englishman. I doubt very much whether they could have caught a malarial fever in Rome even in the months in which I am not here. But of this I am certain, that no one has consulted me with either a quotidian, tertian, quartan, or any other form of malarial fever contracted in Rome, or, as I said before, in Italy. In Americans I have only seen minor manifestations of the malarial poison, and in every case the sufferers have assured me that they were only too familiar with their symptoms from their American experience. Circumstances bring my way numbers of aristocratic and moneyed classes of Englishmen. It is among these classes that sportsmen are to be found, and hence all the malarial fevers I have seen in Rome have been contracted in shooting excursions in India, Southern Africa, Algeria, or elsewhere. Since Laveran wrote and Marchiafava labored, and Osler, of the Johns Hopkins University, taught, the word malaria has come to occupy a very subordinate place in the causation of fever in Rome. Even now, however, the word is much too loosely used. It is far too convenient a cloak for our ignorance to be lightly laid aside, too easy a subterfuge to be easily taken from us. Patients do not like being told that we do not know what trifling indiscretion has made them feel ill, but they do like having it laid down that malaria is at the root of their trouble. Such being the case, it is too much to expect of human nature—just yet—that a medical man will allow himself to be badgered about a case when he can see so easy a way out of his difficulty. Or, to take a higher view of the position, there are many medical men who for a lifetime have been persuading their patients that they had some malarial element in their case, and they have made the statement so often that they believe it implicitly themselves, and cannot be got to understand that they may be wrong, and that an error, however often repeated, can never come to be the truth. Even here, however, perhaps it would be well if they realized that their position is

rendered distinctly untenable by the fact that they have never sent a specimen of malarial blood to a pathological laboratory to have the correctness of their diagnosis disproved, and have never moved a finger to try and confirm their diagnosis by an appeal to their own microscopes.

"There are many thoughtful and highly educated medical men in Rome who live on the traditions of the past, and from having seen a little, and heard much, of malarial fever in Rome, would be staggered if it were pointed out to them that for the last ten years they have not seen a single case of quotidian, tertian, or quartan fever. Nor is the explanation of this hard to seek. The Rome in which they gathered up their experience of malaria is not the Rome of to-day. In the city of twenty years ago large districts were unbuilt over and were consequently undrained, and formed choice habitats for the malarial poison to be generated. Since Italy chose it for its capital, all this has been changed. Any low swamp, garden, or vineyard has become a valuable possession as a building-site. Long lines of well paved and carefully drained streets cover the picturesque haunts where malaria so long lingered; and it would be difficult for an investigator to obtain a list of possible places where he might reasonably search for malaria inside the city walls. The uninhabited slopes of the Janiculum hill is the only place I know of where I would not like to sleep at night in the malarial months of August and September. This, though technically in the city from being within the walls, is far removed from the Rome inhabited by visitors, and lies on the other side of the Tiber. Malaria requires for its development intense sun heat and a certain amount of moisture. Ground built over by barracks and palaces, with all its surface moisture and subsoil water drawn off into a fine net work of well-laid drains, no longer fulfils the conditions required for producing malaria. A well-cultivated patch of garden in a few years is equally free

from danger. This is why a student of malaria is now driven outside the walls of the Italian capital if he wishes to make researches on this subject.

"**2. Typhoid Fever.**—We have typhoid fever at Rome as you have it elsewhere, only not so much of it. We have nearly as good a record as they have in London, and the death-rate from this disease is consequently a far more favorable one than can be shown in Berlin, Vienna, and Paris. In fact, this exemption from typhoid has always seemed to me very remarkable. I believe it can be traced to two circumstances: to an abundant and excellent water-supply, and to well-flushed and consequently well-emptied sewers. Some of our hotels are fairly well disconnected from the sewers, and in other respects have had a good deal of money expended in their sanitary plumbing; but I am unable to attribute much influence to this, as the immunity from typhoid extends to the general population, who are as badly off in this respect as they can well be. The late Dr. Aitken, whom I succeeded in practice, told me he had seldom seen a case of typhoid contracted in Rome. I can add my testimony to his, and as our united experience covers about a quarter of a century, it is not without its value. When anyone asks me about their danger of contracting typhoid during their residence here, I have but one answer for them. 'I cannot pronounce you safe till you have been fourteen days here, but as soon as this period of probation is over, your danger of contracting this disease during all the rest of your stay in Rome is infinitesimal, so you may stay here for ten years if you like.' The reason for my excluding the preliminary two weeks is a simple one. The incubation period for typhoid being of this duration, anyone having imbibed the poison, even on the day before his arrival, may develop it in Rome from having brought it with him. This, perhaps, is the place to say a few words regarding these cases of imported typhoid. Up till quite recently they formed a very considerable part of an Eng-

lish medical man's work in Rome. In fact his year's income depended very much on the number of such cases that came into his hands. Cases came from elsewhere also, but a constant stream flowed from Naples. After the late terrible experiences from cholera in that city, their disgraceful water-supply was changed. Now their drinking-water is abundant and pure, and their typhoid death-rate has gone down. During all the years I have been in practice in Rome I have not seen a single case of typhoid brought from any of the hotels of Naples situated high up above the sea. After this digression about typhoid cases imported into Rome, I now return to those cases for which we are ourselves responsible. In my own practice, as distinct from cases I have seen in consultation with my *confrères*, I nave not yet met with a single case among the travelling public, in any American or Englishman, which was contracted in Rome. Among the residents I have attended one French servant and one English servant in whom the disease was distinctly due to local influences. In the practice of my friends I have only been able to recall two, or perhaps three, cases that have contracted the disease here. I have before me the records of all the burials of American Protestants in the cemetery in Rome from June 1, 1881, to May 31, 1891 — that is, for a complete ten-year period. In it I find only five deaths that can with an approach to certainty be traced to typhoid. That is an average of one death in two years. Besides this, there have been other two deaths from fever, one returned as febris subcontinua, the other as perniciosa. It is open to anyone to regard those as possible deaths from typhoid, but I prefer to class them as deaths from the next fever that I shall presently have to refer to. Even, however, throwing them into the typhoid account, they do not raise the average risk that an American has run during the last ten years of dying from typhoid in Rome to any very alarming figure, and, when contrasted with the popular beliefs

on this point, ought to tranquillize the medical mind, and through it to allay the apprehensions of the lay members of the multitudes that flock every winter to Rome.

"**Febris Communis Continua.**—Simple continued fever, though appearing in the nosologies of English, Americans, French, Germans, and Italians, has not yet attracted the attention that it deserves. Its natural history has still to be written, and yet it is a most important disease. Murchison in his great classical work alludes to it. All are agreed that it is independent of any specific poison. The primary part affected seems to be the nervous system. Murchison says 'the best illustration is to be found in the fever that occasionally results from sheer nervous exhaustion consequent on mental or bodily fatigue.' He also traces cases to exposure to the sun, and surfeit. Many of the cases that I have seen have been evidently traceable to entering a cold building when the body was overheated.

"Early in my career in Rome I came to speak of it as chill fever. It is very difficult to get a patient who is seriously ill to understand the position when he hears you talk of simple fever or common continued fever. As often as not they tell you they never heard of chill fever, but, having experienced the chill and being convinced they have fever, they accept the designation as something intelligible. As a rule, however, my cases have borne out Murchison's dictum as regards nervous exhaustion. Many of them have been fagged out with days of excessive sight seeing before getting heated in the sun, and then entering a cold church or museum. Again, a long day's picnic in the country—say at Tivoli or Frascati—miles of walking, far beyond their powers, and hanging about for hours, seeing classical ruins, with nothing but a biscuit or other imperfect refreshment; then—always when tired out and heated—a wait as the sun went down in a draughty station, a keen north wind, and no extra clothing to protect themselves, an hour or two in a cheerless, draughty, railway train, and you have another sure

prescription to get an attack of the fever we are considering. To see this fever in its full force, go to any country with a great daily range of temperature. A hot sun during the day and a cold wind at night. The Malta fever is one prominent example of it; the Bengal remittent, as seen in Calcutta during the cold-weather season, is another. But instances of this fever may by met with everywhere—in New York, London, Berlin, and Paris. In Rome it has disturbed us much in our diagnosis. On the one hand it may make us think we may have a malarial remittent to deal with, and on the other may make us believe that we are treating a typhoid. If we have a succession of cases, however, that we look on as malarial, we very soon persuade ourselves that quinine is of no use in malaria, as this fever goes on in spite of the largest doses of quinine. In the early stages, though it may depress the temperature a little, it does not bring the fever to an end. When, however, the fever is near its end, and the temperature is very little over normal, a little quinine comes to have its place.

"If you label these cases typhoid you come to have no belief in the diarrhœa-specific eruption, or classical range of temperature connected with typhoid, and if, in addition, you, like the German, begin your treatment with a dose of calomel, or, like the French, with an emetic, you soon convince yourself that you have discovered the secret of cutting short your typhoids, as you see many cases ending before three weeks, and not a few between ten days and a fortnight. Abortive typhoids become the rule, a rich experience in such cases is soon gained, if you only diagnose cases of common continued fever as typhoid. This fever can hardly be traced in the death-rate. It is registered either as a malarial remittent or as a typhoid, according to the view taken of it by the medical attendant. In referring to the typhoid mortality among Americans I had occasion to allude to two cases which from the way they appeared in the registers you might

choose to regard in the light of typhoids. I may also now say that one or more of the deaths registered under the head of typhoid may possibly have been due to the fever I am now writing about. From the point of view of 'Roman fever,' it does not much matter of what fever the person is believed to have died. It is important, however, that the true fever-rate is known. And on this point there can only be one doubt. No one can be very sure that the case registered as perniciosa was a fever at all. It possibly was a sudden death from apoplexy or heart disease. The mistake, however, if there is one, is on the side of overstating the fever mortality. I believe no cases of fever have been registered under any other head. These seven cases of fever form the most important group of deaths. Then follow four deaths under the heading of morbus cordis, and three under the heading of pneumonia. These account for four and three deaths respectively. The cause of one death is not recorded, and eight deaths are due to cancer, diabetes, anæmia, gangrene of the mouth, peritonitis, laryngitis, consumption, and meningitis. These twenty-three deaths are all that have taken place among the American Protestants living in Rome during the ten years I have referred to. The deaths among the Roman Catholic Americans cannot be procured.

"As the great majority of travelling Americans are Protestants, these figures may be relied on as giving a very correct idea of what the Americans who have died in Rome owe their deaths to. This record speaks for itself. That only twenty-three Protestant Americans have been buried in the cemetery in Rome during ten years, must be a revelation to most people. During this time the number of Protestant Americans who have visited Rome has been very large—how large no one can say with any approach to certainty. I will not allow myself to hazard any attempt at an exact statement of numbers, but I will say, without fear of contradiction, that if you want to rep-

resent in figures such a multitude, you cannot do so in either hundreds or thousands, but will have to number them by the hundred thousand.

"I have previously made the statement that malarial fevers do not kill Americans in Rome, also that deaths from typhoid have been much reduced in frequency. Building, drainage, water-supply, have conduced to this happy result. The growth of the city, accident, and design have led to this being done for the travelling public. In other words, the community has diminished the death-rate from these two of the fevers alluded to. As far as my knowledge goes, they cannot do anything to lessen the dangers of the third fever. But what the community cannot do, the individual can. If everyone who comes to Rome is impressed with the idea that it is more or less his own fault if he gets attacked with chill fever, doubtless the frequency of such attacks will be much lessened. To be forewarned is to be forearmed. So let everyone avoid depressing his nervous system by cruel over-fatigue, and let him be careful never to enter a cold edifice when overheated. Cab fares in Europe are very cheap. For less than a quarter dollar two persons can drive from one end of the city to the other. The physical exertion of standing about sight-seeing for hours is quite enough of strain on the nervous system without the needless exertion of walking for miles to reach the point you wish to arrive at. When entering a cold place, put on an extra top-coat or cloak or shawl, a jacket, or what not. When sight-seeing, also make a point of securing a good mid-day meal. With these precautions you are safe. Those who cannot afford a cab fare, or who will disregard the other necessary precautions, will best consult their true interests by remaining safely at home."

To this description of "fever at Rome," by Dr. Charles, I have nothing to add, except to repeat that natives do die of malaria in and around the Italian capital, even if foreigners are not apt to suffer in the same way.

It would be easy, of course, to give some account of the preliminary organization, now well under way, of the International Medical Congress, also to speak of medical instruction at the University of Rome, of the great hospitals of the city, of recent medical legislation, of the peculiarities of practice, the income of professional men, and many other matters likely to interest physicians. But, as already intimated, my object was not to write exhaustively, but rather to present certain points touching what I conceived to be essentials, in a succinct yet accurate manner. I trust that, with the co-operation of Dr. Charles, this may have been accomplished.