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Dundas, Robert.
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Publication/Creation

[London?] : [publisher not identified], [1851]

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ON

THE ARREST OF TYPHUS FEVER BY QUININE.

BY

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[*Extracted from the "London Journal of Medicine".*]

ON THE ARREST OF TYPHUS FEVER BY QUININE.

In the *Medical Times*, I recently endeavoured to impress my professional brethren with the evidence in favour of the efficacy of large and repeated doses of quinine, in arresting the course of typhus fever. My observations have called forth several valuable communications from different correspondents; to many of whom I have not the honour of being personally known. Some have fully admitted the soundness and the importance of the principles which I have laid down; others demand more extended statistical proof; and a third class state, that the quinine treatment had, in their experience, failed, in several instances, to arrest the disease. Such are the chief points in the correspondence with which I have been favoured.

Instead of replying to each inquirer individually, I am anxious to be allowed to make the present explanatory communication to the London Journal of Medicine, as an answer to all.

I have reason to think that my observations on the specific powers of quinine in typhus fever have been to some extent misapprehended. I do not believe, nor have I ever asserted, that large and repeated doses of quinine will *always* cure or arrest typhus fever. I have stated the contrary. And I now ask:—Will quinine always arrest ague? will calomel always salivate? or will opium always induce sleep? Assuredly they will not. Yet notwithstanding exceptional cases, who will question the general—not universal—specific action of these agents? If we take, as an illustration of the failure of quinine in typhus, some unhappy patient from the noisome and unhealthy courts or cellars of a large city — his constitution broken down by intemperance, by "poverty, sorrow, and dirt"—what remedy, or what treatment, can snatch, with certainty, that wretched being from the grave? What I say, and what experience will I believe confirm, is, not that quinine will certainly cure such cases as the above:—no, nor those in whom, from a fatal trifling with worse than useless remedies, the vital fluids have already become irrecoverably vitiated, or some vital organ already irrecoverably damaged;—but I do distinctly state, that quinine will, *generally*, cure every case of typhus fever curable by medicine, including a large number of those who would sink under any other form of treatment. I say that quinine, administered as I have directed, will, in the vast majority of cases, stay or avert the symptoms that threaten life,—will, in the forcible words of Mr. Eddowes, as proved at the Liverpool Fever Hospital, "*either cut the fever short, or prevent the accession or increase of the more formidable symptoms.*" And such also are the results in the hands of Dr. Goolden, the experienced physician of St. Thomas's Hospital; of the practice at the Liverpool Northern Hospital; and in the private practice of myself and others.

The dogma so tersely laid down by Pitcairn, and adopted, probably, more from its antithesis than its truth, that "*you may guide a fever—you cannot cure it*", was obviously based on the hypothesis, that fever

originates in a specific poison, and must consequently run a specific course. What wonder, then, that the efforts founded on such premises should have so satisfactorily issued in proving the *incurability* of the disease? The prophecy insured its own fulfilment! Strange, too, that this generally received maxim, so far from being true, ought in fact to be precisely reversed; namely, that you "may *cure*, but cannot *guide* a fever." No human agency can guide a fever. While it continues, some of the symptoms may indeed be moderated, and death, from certain complications, may be averted; but the course of the disease will ever be fraught with danger, particularly if it be long continued, or if any system or any vital organ be predisposed, accidentally or hereditarily, to morbid action. Herein lies the chief danger in fever.

The methods of treatment—if, indeed, some of them deserve this name—have been legion, and of every degree of activity. Irish patients, in their cabins, have been abandoned to cold water: distinguished physicians have, under other circumstances, deliberately adopted and practised the expectant method; while the more heroic and imposing measures of bleeding, brandy, or mercury, have been pursued in clinical hospitals, or in the mansions of the rich. Typhus patients have recovered under each of these modes; but this fact only points out more strikingly the tenacity of life under the most disadvantageous circumstances.

As regards the demand for more extended evidence, and more numerous cases, I must at once confess, that, having observed how all new theories and modes of practice—from Hippocrates, the father of rational medicine, down to the visionary Hahnemann — have been ushered into life by a vast parade of successful cases, I have long regarded this kind of evidence with suspicion, and have avoided it on the present occasion, under the impression that many others might feel as I do. Moreover, when, as in the present instance, any principle admits of ready and conclusive proof, the cumbrous accumulation of cases is a downright imposition on the time and patience of the profession,—supposing, which I much doubt, that they would be read. Is your principle sound? *one* apposite case affords the illustration. Is it false? *a thousand* will not establish its truth. Let it be tested. Perhaps I may be allowed, in imitation of a celebrated northern surgeon, to introduce one other, though somewhat an unusual medical witness. A hospital nurse, E. McCartney, had been so employed for thirty years, and to her was entrusted the administration of the quinine to the patients in the Fever Hospital. Whilst I was discussing in the ward, with Dr. Gee and Mr. Eddowes, the relative results of the treatment, this woman voluntarily observed to us,—"I don't know, but the patients that take the powders (the quinine) get well the fastest. I never saw the patients get well so fast before." So much for a "nurse's tale".

Influenced by the considerations above stated, I have introduced only one case on my own authority; and in that the notes were taken, and the treatment carried out, not by myself, but by Mr. C. J. Evans, then house-surgeon to the hospital, and now apothecary to the Liverpool Infirmary—a gentleman whose competency few will question. I may be allowed to add, that all the witnesses whom I am about to cite were equally impartial, and thoroughly competent observers.

I shall now submit the valuable evidence of Dr. Goolden, who has also touched on some practical points, to which I shall afterwards briefly advert. In answer to my letter, requesting him to communicate to me the result of his experience of the quinine treatment in typhus fever, he replies :—

"I have only to state that it is so satisfactory, that I should not feel myself justified in treating any serious case of typhus without it. Of eight cases admitted under my care in St. Thomas's in one week—five adults and three children—all with the characteristics of typhus gravior, with one exception, the effect was well marked. Each dose of quinine produced a sensible effect; ten grains in solution, every two hours, to an adult, produced some giddiness and deafness in about thirty-six hours, when it was discontinued; and it was only necessary to give a few doses of nitre and a slight aperient, and nothing remained of the fever but slight debility—debility varied according to the previous duration of the disease. In one case in the hospital, there was so much headache and excitement after each dose, that after the third time it was discontinued, but there was no permanent ill effect; and I am satisfied the course is quite safe to adopt.

"I have met with several opportunities of trying it in private practice.

"In one case, a young gentleman had been travelling with his tutor in Germany, and, when at Giessen, was observed to be out of health; he had loss of appetite, shivering, debility, thirst, and feverish nights. Still, he was able to make the journey home. When at home, he was attacked with severe typhoid symptoms, and I visited him with his medical attendant. I found him with *a black dry tongue, hot dry skin, petechiæ, pulse* 140 *and full, delirium, deafness, and diarrhœa.* He had been in this state several days, when I suggested the large doses of quinine. After an emetic, he took eight grains every two hours. I saw him after the *fourth dose,* and found him *sensible, but rather deaf, the skin bathed in perspiration, pulse sunk down to* 80, *and the diarrhœa checked.* The medicine was continued during the night, and discontinued the next morning, as the surgeon in attendance had had no experience in the quinine treatment, and did not like to carry it on upon his own responsibility. I saw him two days afterwards, and found that he had had no sleep, and the diarrhœa was returning. He took some opium, and repeated the quinine in smaller doses. After a good sleep he awoke much better, and was apparently going on well, when after some days I was sent for, in consequence of a congested state of the left lung, and slight cough. The apex of that lung was quite dull on percussion; no respiratory movement was observed on that side, and bronchophony was distinct, and much large moist crepitation, which made me fear the result, as his mother was the only one of a large family who had not died of consumption. A blister was applied under the clavicle, and he was ordered port wine and nutritious food; and I am happy to say that he is now quite recovered, and the lung perfectly sound. I do not attribute the congested lung to the quinine, but to the fever; but I should be wrong to omit it in making a report.

"I requested the opinion of Mr. Hine, who has the care of the servants of the Great Western Railway at Swindon, including 2,000 families of artizans, etc., among whom typhus is prevalent,—perhaps from want of drainage in the new town,—and his report to me was, that for some time the result was most satisfactory; but latterly he

had found that the head symptoms had prevented his using it. He thought that there had been some change in the type of the fever.

"The only drawback that I see to the use of the large doses of quinine, is the necessity for frequently visiting the patients, say several times a-day, which is almost impossible in country practice, and very difficult in town when one is much occupied, and patients may consider such frequent visits to arise from the *nimia diligentia medici*, when the danger is over, and perhaps hardly apparent."

The above statement needs little comment. Of the eight hospital cases of typhus gravior, the treatment was conclusively satisfactory in seven; the exceptional case was also valuable, as proving the perfect safety of the remedy in those individuals where some peculiar condition or idiosyncracy interferes with its curative power. In one case, Dr. Goolden pushed the remedy, not only with perfect safety, but with entire success, beyond what I have ever done, or found necessary; and this fact is very important.

The case of the private patient is highly instructive, as proving, beyond all rational doubt, the specific power of quinine in arresting, *within the short period of eight hours*, the most formidable and alarming symptoms incident to typhus fever: and it is especially important in another sense,—had the fever been prolonged, considering the patient's constitutional tendency, fatal disease of the lungs was inevitable. No other form of treatment, I firmly believe, could have saved this youth's life.

Though deficient in the necessary details, the report of Mr. Hine will fix attention; and I trust that this gentleman, as well as others, who enjoy such extensive and favourable opportunities for observation, will favour the profession with the results of their future experience. I must not pass over the "*only drawback*" urged by Dr. Goolden against the quinine treatment of typhus—and its practical difficulty is indisputable—namely, the necessity for frequently visiting the patient. To ensure success, he should, undoubtedly, be frequently seen, whilst the large doses are being administered; and this, as Dr. Goolden observes, is almost impossible in country practice, and very inconvenient to the well-employed town physician. This difficulty, however, affects in no degree the intrinsic value of the quinine system of practice, or the rationality and truth of the theory on which it is based. At the same time, it must be admitted, that the efficacy of this method of treatment cannot be fairly and fully tried, unless the practitioner, or some competent substitute, exercise a frequent, even though an inconvenient, supervision.

Neither in my own experience, nor in that of others, so far as I am aware, have the large doses of quinine caused congestion of any important organ. On the contrary, by cutting short, or moderating the febrile excitement, they prevent all such congestions, and in this consists the great value of the treatment; seeing that the vast majority of fever cases are carried off by these local affections. In the event of any important organ being involved, I have, with great advantage, resorted to extensive dry cupping, either alone, or followed by a blister.

When the first large doses of quinine have failed to produce their usual curative effect, and the practitioner is obliged to discontinue them, an emetic ought to be administered, as formerly pointed out; and if, after this, the febrile excitement still continue, a full dose of

the liquor opii sedativus, with a few drops of nitric acid, will frequently afford the most signal relief, and enable the patient to resume the quinine with every prospect of success.

I would here observe, that the large doses of quinine are not only safe, but advantageous in every stage, and in every form of typhus fever, and that the action assigned to it by Dr. Pereira and others is altogether erroneous. The presence of intense headache, quick and strong pulse, dry and burning skin, dry, chapped and black tongue, intense thirst, hurried respiration, abdominal tenderness, and diarrhœa, do not contraindicate its use. On the contrary, under large and repeated doses, the headache will subside, the pulse calm down, the breathing become less frequent, perspiration will return, the tongue will become moist, and the diarrhœa will be checked.[1]

After the first decided impression has been made on the disease by the quinine, it is invariably necessary to support the patient's strength by good beef-tea, and a moderate allowance of wine. Purgatives, without some decided necessity, should be avoided. When the head continues much involved, a strong capsicum enema—a drachm of the *powder* to ten ounces of water—will often afford relief. The minor adjuvants in fever may also occasionally be resorted to with comfort and advantage.

In these observations I have confined myself to the exposition of general principles, and altogether avoided cases, as I entirely concur with that eminent physician, Dr. William Stokes, whose *Lectures on Fever* are unexcelled in the English or any other language, "that you might as well expect to find two human beings exactly alike, as to find two cases of fever perfectly similar":—the varieties are infinite.

I may here state, that I have repeatedly witnessed in Brazil, seasons of ague, (for the disease prevails in seasons), when quinine, though always curative, appeared less efficient in controlling the disease than at others; and similar modifications will doubtless occasionally occur in the fever of this country. Modifications in the quinine treatment, and probably very important ones, will also, I am satisfied, be introduced through the more extended experience of the profession, though I believe the *principle* will be only confirmed by being tried and tested by different observers.

I shall now briefly repeat the principles I have here, and elsewhere, laid down. The evidence on which I adopted them is embodied in my *Sketches of Brazil*, now in the press, and which in a short time will be laid before the profession.

1. Ague and remittent fever do not originate in malaria or marsh miasm. The doctrine of a special marsh poison I hope to show to be altogether unfounded.
2. Intermittent, remittent, and continued fever, are mere varieties of the same disease. The intermittent constantly merges into the remittent or continued type; and continued fever assumes still more frequently (in Brazil) the intermittent form; and all are curable by the same agents. By the same agents we can arrest them all. Could this be done if they originated in different

[1] For obvious reasons, the power of quinine in arresting typhus fever will be more strikingly displayed in private patients, than in the general run of hospital patients.

specific poisons? or, can we ever arrest, by any power, the course of a truly specific disease, as small-pox, etc.?

3. The notion of typhus fever being unknown in the tropics, is altogether ill-founded. The intermittent, remittent, and continued fevers of tropical climates often run into genuine typhus. In Brazil, when the disease takes this course, it is popularly termed "maligna", or "malina", and, in some seasons, is very frequent and very fatal.
4. Bark, duly administered, will generally arrest the intermittent and remittent fever; and typhus fever being essentially the same disease, bark ought to, and will, generally arrest it.
5. Ague will occasionally resist, for many days, the most judicious application of quinine—and finally yield: the same remark applies to typhus.
6. Quinine is more certain in its results in proportion to its early administration; but it is less to be depended on with the aged.
7. The administration of large doses of quinine in typhus, when not curative, is *never* followed by the slightest ill effects.
8. As typhus is, commonly, the more severe form of fever, and the subjects of its attack generally less favourably disposed, so we shall find considerable discrepancy in the several results.
9. Typhus will occasionally resist quinine, and yield to other remedies, and the same holds good with ague; yet who ever associates the latter disease with any other remedy than quinine? And I am firmly of opinion, that the time approaches when the treatment of typhus fever, after ages of vacillation, will be established on the same sure and satisfactory basis as that on which the treatment of ague now rests.

Mr. Eddowes continues to adopt the quinine treatment *universally* with the patients in his section of the Fever Hospital: and Dr. Gee in his wards of the same establishment is now giving it a trial. From two such able observers in such an extensive field, we cannot fail to obtain valuable and correct information.

Since the above was written, my attention has been called to an interesting report, in the last number of the *Medical Gazette*, by Dr. Humble, on fever, as it appeared during the last year, in the Newcastle Fever Hospital. The symptoms, indeed, are pretty much those which commonly characterise the fevers of this country; and I notice the report, chiefly, from the "relapsing" type assigned to the disease.[1]

After alluding to the different periods at which the "relapse" occurred, Dr. H. goes on to state: "In general, this came on after convalescence had commenced, and it did so in spite of any precaution which could be devised against it. . . . . A boy became convalescent, and was ordered to keep his bed until the usual period of relapse had passed over. This was accomplished with considerable difficulty, *as he felt himself perfectly well;* but on the evening of the fifteenth day, the relapse, or, as it might be called, *the second attack*, of fever came

[1] Upon Relapsing Fever, so well described, in 1843, by Dr. Cormack, and more recently by Dr. Jenner and others, I have made some remarks in my forthcoming volume.

on." Alluding to the class of patients, Dr. H. states: "A large importation of Irish were huddled together in great numbers, in a few lodging-houses, situated in the lower parts of the town. . . . . In one family, fever seemed to have been occasioned, or at any rate aggravated, by the want of the common necessaries of life . . . . two of the children presented all the symptoms described as belonging to the famine fever of Ireland. Four cases, after presenting the usual symptoms of continued fever for several days, took on the character of *regular ague;* in one, after twelve days, where the type was tertian; and in three, after ten days, in which it was quotidian", precisely as continued fevers often terminate in Brazil and other southern countries.

What, I ask, would large doses of quinine have done in these Newcastle fevers? But the *word* "relapse" unhappily presents itself, and all reasoning ceases. Speaking of fever, generally, that most accurate of observers, Dr. Stokes, writes: "We seldom meet with a case of typhus without morning remissions; and in some cases the symptoms are aggravated on alternate days, so as to bear some resemblance to double tertian." I have already stated what large doses of quinine would effect in *these* cases.

I now subjoin a letter from Mr. A. B. Steele, late surgeon to the Liverpool Fever Hospital, and medical superintendent of Irish Quarantine and Fever Ships in the Mersey. I had learned, at the hospital, that Mr. Steele had tested the quinine treatment in typhus, and was anxious to obtain the opinion of an authority so competent to decide on its merits. This opinion was kindly and promptly given as follows:

"49, *Russell-street, 24th Oct.* 1851.

"Dear Sir,—At your request, I have much pleasure in furnishing the following brief notes of my experience in the treatment of continued fever with large doses of quinine, as recommended by you, and of which I was only informed a few days ago.

"The first case was an Irishman, named Lawrence Connor, aged 40, living in 4 Court, Grosvenor-street, one of the very worst streets in Liverpool, and scarcely ever free from fever. I visited him here on Saturday the 18th instant, and found him labouring under the usual symptoms of the low type of continued fever; had been ill seven days; was lying on straw in a corner of the floor, destitute of all comforts, or even necessaries.

"I gave an order for his removal to the Fever Hospital, but he did not go. On Monday the 20th, I was again called to him. He was now so much prostrated, that I should have considered it hazardous to remove him. There was great nervous and muscular debility; skin hot and dry; suffusion of conjunctivæ; pulse small and frequent; tongue protruded with difficulty, very dry and brown; delirious, especially at night; can scarcely answer questions. I ordered one drachm of disulphate of quinine in six powders, one to be taken every two hours.

"On the 21st, I found the patient considerably better. The skin was moist; pulse softer, fuller, and less frequent; tongue readily protruded, moist, and whitish; the brown fur had quite disappeared; delirium stated to be quite removed; expresses himself better. The quinine in ten-grain doses was ordered to be continued, and wine and beef tea to be given. These directions were not properly carried out during

the following days, and a partial relapse has been the result; the tongue becoming rather dry and brown; the prostration returning; but still the patient is now (25th) in a far more favourable condition than he was anterior to the administration of the quinine.

"The second case, a woman named Galagher, 14 Collingwood-street, had been labouring under fever for several days. On the 20th, I found her in a state of great prostration, with well marked symptoms of low fever, with, I believe, pleuritic complication. The condition of the patient did not admit of auscultation, or a minute examination. General symptoms very similar to the first case. I ordered quinine in ten-grain doses, and a blister to the chest. The next day, she expressed herself much better; the symptoms had evidently given way. The quinine was continued, and she is now in a fair way of recovery.

"I have tried the plan in a third case of low continued fever, with dry brown tongue, etc.; but unfortunately, from the first, the medicine was not given regularly, or in the quantities ordered; still, what would be considered a large quantity of quinine was taken, and with a decidedly beneficial effect, although not to the same extent as in the other two cases.

"In the first case, the decided effect on the objective symptoms of the disease, *in twenty-four hours*, was so striking as at once to convince me of the value and importance of the remedy; and this improved condition was produced without the collateral advantages of *ventilation, cleanliness, nursing, nutritious diet, or stimulants*,—a fact which greatly enhances the value of this mode of treatment, in the hands of those who, unhappily, have to contend with the disease under the most unfavourable circumstances.

"I have witnessed the results of various methods of treating fever, in several hundreds of cases, during the epidemic of 1847, in our Fever Hospital, and on board the Fever Ships in the Mersey, and subsequently in the town; but I have never found any remedy, or remedies, which appeared to me to cut short the disease, or modify the symptoms, in the same decided manner in which the quinine has done when fairly tried.

"I hope shortly to be able to give you reports of more cases, as I shall continue to adopt your system, the importance of which cannot, I think, be overrated. "I remain, etc.,

"A. B. STEELE,

"*Late Surgeon to the Fever Hospital, Medical Superintendent of the Irish Quarantine and Fever Ships in the Mersey.*"

"P.S. I forgot to state that Lawrence Connor had, by mistake, fifteen grains instead of ten grains of quinine for the first four doses."

I have just received the following communication from my accomplished friend, Mr. Eddowes,[1] which, with his valuable cases, prevents the necessity of my adverting (as was otherwise my intention) to the very important question of *typhus with complications*. By the kindness of Dr. Gee and Mr. Eddowes, I observed these cases whilst under treatment, and to both gentlemen I am, for this advantage, very deeply indebted.

[1] The zeal, intelligence, and eminently practical mind of Mr. Eddowes, marks him out as one of those men who are destined to advance the profession.

"*Liverpool Fever Hospital, Nov.* 8, 1851.

"DEAR SIR,—In reply to your note of yesterday, I beg to state that my opinion of the quinine treatment is unchanged.

"In one important practical point, I entirely differ from Dr. Goolden and yourself. I do not consider that the quinine treatment requires, for its successful employment, any special supervision. For all practical purposes, *one* visit daily to the patient has been found sufficient in the hospital, where the ten grain doses have been given every two hours, for many days, without any inconvenience.

"I quite agree with Dr. Goolden (judging from the cases under Dr. Gee, and in my own charge), that the treatment appears to be altogether free from danger.

"The quinine has been used here in fevers, complicated with chest affections, etc. I enclose for your satisfaction the notes of two cases (*ex multis aliis*), and should you desire any more, you can have them.

"To Dr. Dundas. "I remain, etc., W. EDDOWES."

"CASE I. TYPHUS IN AN EPILEPTIC—ERYSIPELAS SUPERVENING—CONVALESCENCE ON THE FIFTH DAY OF TREATMENT. Richard Lewis, aged 30, a painter, has had colic and wrist-drop; has had epilepsy for seven years, having two fits a month. The epilepsy occurred a month after the attack of colic. His general health is good.

"*Present Attack.* Has been ill more or less for three weeks, but confined to bed for five days only: he had been under treatment, and had got worse.

"*October* 18. *Present State.* He complains of deafness and frontal cephalalgia; is propped up in bed, which, he says, eases the great headache. He passes restless nights; the countenance is flushed; the respiration hurried, 32; the pulse 106, jerking and weak; skin hot and dry; tongue dry, and brown in the centre, moist at the edges: there is tenderness upon firm pressure over the hepatic region. He was directed to have ten grains of the disulphate of quinine every two hours; four ounces of brandy daily; milk diet, beef-tea, and arrowroot.

"*October* 19. He sleeps better; the head is easier than yesterday; is not propped up as before; the breathing is easier; the tongue as before; a dusky erysipelatous flush is appearing on the cheeks and forehead. He was ordered to continue the remedies, and apply flour to the erysipelas.

"*October* 20. The headache is less, but he spent the night restlessly; the face is swollen; the breathing natural; pulse 96; tongue as before. He says that he "feels quite well, except the soreness of the head and face." To continue the quinine, etc.

"*October* 21. The deafness is nearly gone; the tongue moist; he was restless at night; headache quite gone; pulse 80, natural; skin cool, covered with a perspiration; the erysipelas is better. The medicines were continued.

"*October* 23. He was convalescent; and was directed to take ten grains of quinine three times a day.

"CASE II. PETECHIAL TYPHUS—PLEURITIS AND BRONCHITIS—CONVALESCENCE ON THE FIFTH DAY OF TREATMENT. *October* 23. Mary Maloney, aged 15, of good general health, has been ill five days; the skin is hot and dry, with petechiæ; she has great thirst; restless nights; slight headache; tongue coated with a white fur; loss

of appetite. The pulse is 100, natural. ℞ Ipecac. gr. xv., antimon. potass. tart. gr. i., statim sumendus. Postea sumat quinæ disulph. gr. v., secundis horis. To have milk diet, arrow-root, and beef-tea.

"*October* 14. She is breathing quickly; the pulse is 120, jerking and weak; the tongue white at the base; she has pain in the left inferior mammary region. In front, the chest is clear on percussion; there is sibilus on the right side, also on the left, with occasional cooing rhonchi. To the left of the cardiac region, is a dry friction sound, loudest during expiration. Behind, the left base is resonant, but less so than the right; the respiratory murmur is faint throughout. The friction sound is audible from the supra-spinous fossa to the base; mucous rhonchi are audible over the whole of the right side. To continue the quina. ℞ Ung. hydrargyri fort. ʒij., pulv. camphoræ ʒ ss., p. opii. ʒj. M. Sæpe lateri sinistro infricandum.[1]

"*October* 15. The pain in the side is easier; the respirations lower; pulse 118; skin hot; friction sound behind as before; no increase of dulness; friction sound in front moister. Continue the quina.

"*October* 16. The breathing is easier; the pulse softer and more natural; the countenance improving.

"*October* 17. Pulse 112, soft and natural; the skin moist; no cough; no headache; breathing natural; petechiæ fading; she takes food, and says her tongue is sore. The quinine was continued.

"*October* 18. She is convalescent; the tongue is clear; the countenance natural; pulse 84. She says she feels well. The friction sound is still audible. She had no relapse.

"There were two other patients in the same ward with the same complication: the above treatment was adopted, and the recovery was as speedy.

"Perhaps it may not be uninteresting to you to know, that there have been two cases of typhus occurring in pregnant women. The quinine was administered—in the one case five, and the other ten grains—every two hours. They both recovered without any ill effects."

I have lately conversed with several able men of great experience | Dr. Ewing Whittle of the South Dispensary, amongst others—who have observed fever on a large scale, and who are of opinion that no reliance can be placed on the "eruptions", to which many distinguished authors attach so much value, as diagnostic of the different fevers. They consider the character of the eruption as dependent on epidemic constitutions, idiosyncrasy, and atmospheric and other influences. All are aware of the numerous "rashes" which supervene on derangement of the digestive functions from the use of certain medicines, articles of diet, etc., in different constitutions, and at different seasons.

As regards the rosy lenticular rash, deemed peculiar to typhoid fever, all tropical practitioners must repeatedly have observed these spots in protracted cases of dysentery; and I have myself witnessed all the eruptions described by authors as *pathognomonic* of the several fevers, displayed, in the same patient, at one period or other of his disease. There is now a patient in the Liverpool Fever Hospital, A. B., who presents an abundant "*mulberry rash*", which quite disappears on pressure.

[1] From a formula recommended by Dr. Blakiston.

There is, also, at the present moment, another patient in the Hospital (James Moore), in whom we have conjoined the mulberry rash, the rosy lenticular rash, and "true erysipelas"—the latter classed by Dr. Watson, one of the latest and best authorities, with the contagious exanthemata—as "a specific disease, running a definite course, and attended with an eruption".

Now, in this instance we have, according to authority, three distinct morbid poisons—the typhus, the typhoid, and the erysipelatous—contending for mastery in the same unhappy individual, and all running their regular course, unchecked and unmodified in the slightest degree. Does the history of other morbid poisons present us with anything analogous?

On the authority, indeed, of Carmichael, a "plurality of venereal poisons" was at one time pretty generally admitted by the profession; but was finally exploded by M. Ricord, of Paris, who, on one occasion, exhibited, with a smile, to Mr. Carmichael himself, his *four* distinctive eruptions classically designed on one and the same patient.

This *argumentum ad hominem* did not, I believe, prove altogether conclusive to Mr. C., but perfectly so to every one else; and the "plurality of venereal poisons" soon disappeared.

All must admit that our lot is cast in revolutionary times. I, however, as a loyal citizen of the republic of medicine, have now discharged my duty in handing over "the quinine system", and the principles on which it is based, for trial before the "legal and constituted authorities".

Like other arch-revolutionists, the present doctrine is earnest in its *promises* to "benefit the public": I have not, however, allowed its justification to rest solely on my own testimony to character—naturally open to challenge—but have adduced other, and unimpeachable evidence, and I now await with confidence the verdict; for although the profession be a republic, and its decrees too often tinged by human infirmity, I firmly believe that its final judgments are never wanting in calmness, and justice, and truth.

An incidental interest attaches to the doctrine now advocated, namely, that it will afford an opportunity for testing the value of the infinitesimal doses of homœopathy with doses even larger than those commonly employed by regular physicians. Let an adequate number of fever cases be selected; place them side by side in the same room; let six be treated on my plan; six infinitesimally; let competent individuals (not including myself) be appointed on either side to take the notes, day by day, administer the remedies, and report the results; and on these results I am willing to stake, absolutely, my own professional reputation, and the reputation of legitimate medicine, so far as that can be staked by such an humble individual as myself. I entertain no doubt that the authorities of the Fever Hospital, or of the Infirmary, the Northern or the Southern Hospitals, or the Dispensaries, will readily afford the means of testing by direct comparison, that which I believe, with the rest of the profession, to be a dangerous delusion, but which has obtained sufficient extension to render its refutation an object of public interest. To this "experimentum crucis" no honest homœopath can object.

Canning-street, Liverpool, November 1851.