

Concise narrative of an ophthalmia, which prevailed in a detachment of His Majesty's 44th Regt. on their voyage to Calcutta in the summer of 1822 : together with an account of other tropical diseases and their treatment on board the H. C. ship, Warren Hastings / by Richard Jones.

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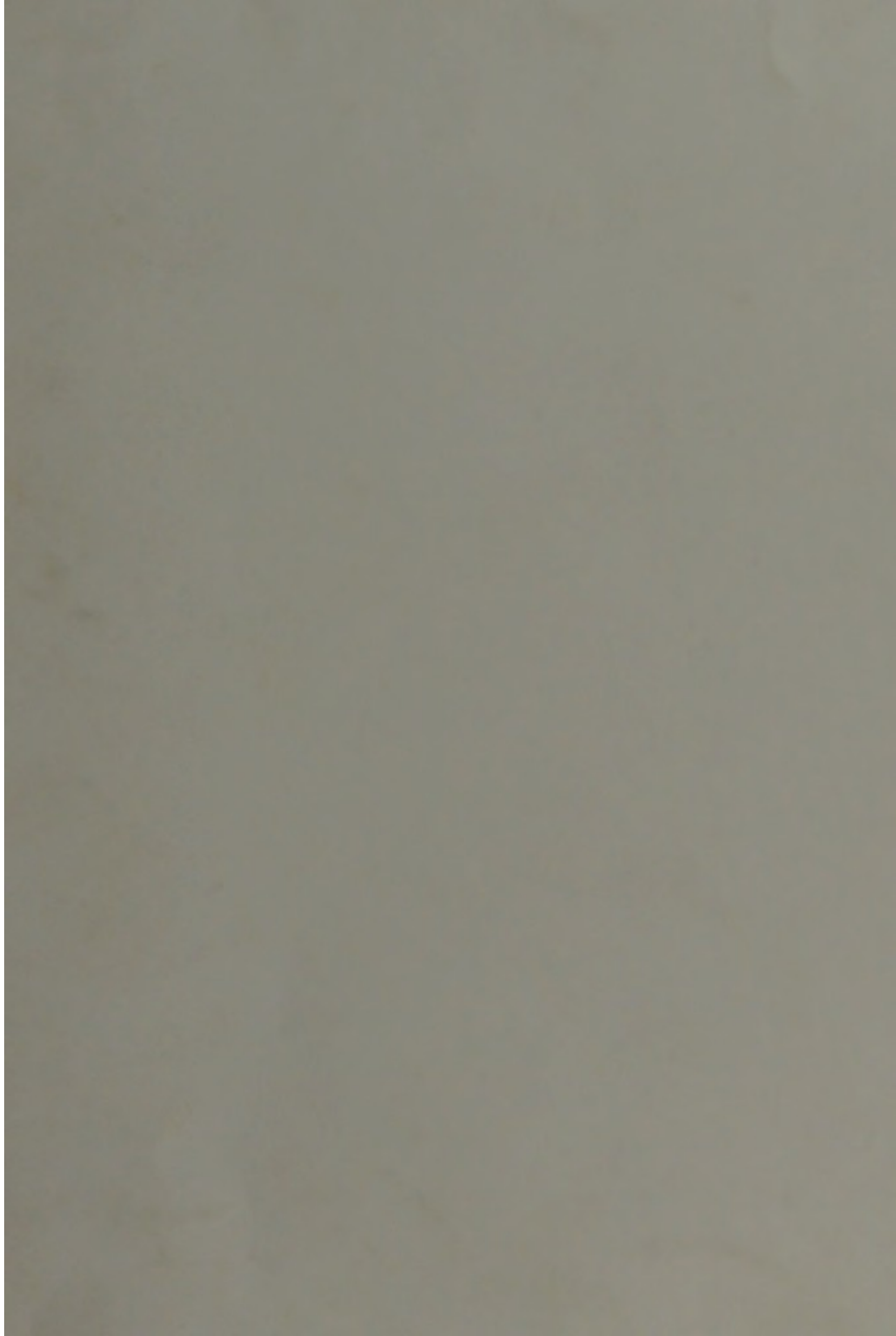
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CONCISE
NARRATIVE
OF AN
OPHTHALMIA,
WHICH PREVAILED IN A
Detachment of His Majesty's 44th Regt.
ON THEIR
VOYAGE TO CALCUTTA,
In the Summer of 1822;
TOGETHER WITH AN ACCOUNT
OF OTHER
TROPICAL DISEASES,
AND THEIR TREATMENT
ON BOARD
The H. C. Ship, Warren Hastings.

By RICHARD JONES,

LEAMINGTON.

Fellow of the Royal College of Surgeons,

AND LATE ASSISTANT SURGEON TO THE WARREN HASTINGS, &c.

WARWICK:

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1824.

GORDON

NARRATIVE

OF

OPHTHALMIA.

BY

Detachment of the 10th Regt.

OF

VOYAGE TO CALCUTTA.

In the Summer of 1822.

TOGETHER WITH AN ACCOUNT

OF THE DISEASES

TROPICAL DISEASES.

AND THEIR TREATMENT.

BY

The H. C. M. J. W. H. H. H.

OF

BY RICHARD JONES.

OF

Physician of the 10th Regt.

AND LIEUTENANT COLONEL OF THE 10th REGT.

OF

WARRINGTON.

AND LIEUTENANT COLONEL OF THE 10th REGT.

THE 10th REGT.

OF

1822

TO THE
SURGEONS,
AND
ASSISTANT SURGEONS,
IN THE SERVICE
OF THE
HONORABLE EAST INDIA COMPANY,

THIS LITTLE WORK
IS MOST
RESPECTFULLY DEDICATED,

BY,
THEIR VERY OBEDIENT,

AND
HUMBLE SERVANT,

THE AUTHOR.

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PREFACE.

THERE is no way in which medical science can be more beneficially illustrated, than by publishing the results of individual experience, whether they be or be not successful. It is thus, indeed, that opinions are illustrated and confirmed, and that practical knowledge is extended and applied to analagous cases.

WITH this object in view I submit the following pages to the Public, conceiving that a narrative of the diseases and their treatment, under the limited medical resources, necessarily attendant on a voyage to India, may render it not uninteresting to my readers, and be some apology for obtruding myself on their notice.

It may, perhaps, be proper to state, that when troops are sent out to India, the medical officers attached to them are not permitted to prescribe, or to interfere, in any way, for the restoration of their health, under any disease during the voyage. That duty belongs exclusively to the medical officers of the ship which conveys them to their destination.

THE importance of considering diseases so peculiar in their circumstances, and often so fatal in their effects, as those which prevail in our eastern hemisphere, is obvious. To this opinion all who have professionally witnessed them will readily assent, and others who know them only by the report of their overwhelming fatality, will I think not unwillingly yield their concurrence. In those therefore who have had an opportunity of watching their progress, it becomes an imperative duty to publish the result of their own experience, that others may be prepared to combat them, with the expectation of that success, which is to be anticipated only from the immediate application of the proper remedies.

WHATEVER may be the judgment of readers, therefore, upon some detail of cases, and some views of practice contained in these pages, I trust they will be of some general use ; by shewing the effects of remedies employed with more or less success : and thus enabling the young practitioner to draw inferences from facts more easily and more correctly than he could otherwise have done ; to reject that mode of treatment which appears to him erroneous, and to retain that which in his own opinion is most fit for the regulation of his own practice.

MANY writers have laid the result of their experience before the Public, and amongst the most eminent is Dr. JAMES JOHNSON. His work on tropical diseases should, I think, be in the hands of every practitioner who leaves these shores for India ; since it not only contains the practice of the East, but also that of the Continents of Europe, and indeed every quarter of the globe.

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NARRATIVE.

IN the beginning of June, 1822, the H. C. ship, *Warren Hastings*, having received on board upwards of 300 troops, of His Majesty's 44th Regiment, with their wives and children, amounting to about 80, left the Downs for the East Indies, with every prospect of a fair and healthy voyage. The whole number of souls on board, including 100 sailors, amounted to 485. The Orlop-deck was entirely set apart for the accommodation of the troops; besides which, they had a sick-bay on the gun-deck, as being more airy and cool.

Our destination was direct to Calcutta, and the weather was remarkably fine, till we reached the latitude of 27° South, when we had alternate gales for nearly five weeks. Those gales, indeed, continued while we were running down 80° of longitude. It was during this period that there came on a diarrhœa, which prevailed to a great degree, and will hereafter be more particularly described.

We had scarcely been at sea ten days before several of the soldiers complained of sore eyes, and

a collyrium calculated to relieve such cases, while they are trifling, was recommended. The symptoms, however, became more urgent, and the contagious nature of the malady was so apparent, that on the daily inspection of the troops, the attention of the officers was particularly directed to their eyes, in order that they might have immediate assistance. This was the more necessary, for the disease increased at once, both in the numbers whom it attacked, and in malignity; till at length it assumed the worst forms, and almost every variety of ophthalmia.

Whether this was produced by the exposure on deck to the direct rays of the sun, in the day; or the heat of the deck below, at night; I am not prepared to say. But I think the evil was aggravated by these combined causes.

The inflammation commonly made its appearance by a trifling redness of the conjunctiva, with little or no pain. About the third day from the attack, the symptoms rapidly increased, and suffusion of tears, intolerance of light, and the sensation of sand being in the eye, were now added to a vivid redness of the conjunctiva. In some cases, the eyelids were swollen almost to bursting, and the tumour was accompanied with a purulent discharge and painful burning sensation, and a complete chemosis was frequently formed by the distended vessels of the conjunctive coat. Circumscribed whitish spots, a line or two from the outer margin of the cornea, were frequently seen, produced by an uninflamed portion of the cellular membrane connecting the

tunica conjunctiva with the sclerotica. The latter membrane was also involved in the general inflammation.

We had unfortunately neither leeches nor distilled water on board, and were therefore compelled to substitute water which had been boiled, and general blood-letting for local. From the decidedly beneficial results, however, which so commonly followed the immediate use of the lancet, the want of leeches was not so much to be regretted; although, in several inveterate cases, I have no doubt the cure would have been expedited by their occasional use after venesection.

Local applications were given to the patients, but in consequence of the inconvenience attending their use, they were imperfectly and carelessly applied. The necessity for their employment was, in a great measure, happily superseded, by the signal benefit derived from venesection, which was almost uniformly practised; and, I think, cannot be too strongly recommended in the treatment of these affections on board of ship, where local blood-letting, and accommodations for the proper application of lotions, and other external remedies, are so deficient.

The collyrium in common use was that of sulphate of zinc, in the proportion of three grains to four ounces of water, applied cold. But in the more severe cases, where tumefaction and purulent discharge prevailed, bathing the eyes with tepid water was found more beneficial.—To remove the opacity of the cornea,

consequent on the active inflammation, the *Vinum Opii* was the common remedy. When ulceration had taken place, the *Ung. Hydr. Nitr.* was applied to the part with a feather. Various other remedies were occasionally resorted to; but the preference was deservedly given to those enumerated.

The two following cases, as examples of the virulence of the disease, shall be related in detail:—

JAMES MARTIN, a soldier, was entered on the sick list the 25th of July, in consequence of trifling inflammation of the conjunctive coat of both eyes. A collyrium was directed to be applied, and a dose of sulphate of magnesia immediately taken. The next morning his eyes were completely closed, and a purulent discharge was seen oozing out from between the palpebræ, and, when they were slightly separated, a congeries of vessels of a vivid red colour appeared. The cornea, from the small portion I could see of it, was coated with coagulable lymph. The pulse was quick and bounding.

The poor fellow said he had been in the utmost agony during the night, with a burning pain which darted occasionally into the ball of the eye. The pain was now somewhat mitigated, probably, in consequence of the purulent discharge being established. A vein was immediately opened in the arm, and feelings of syncope coming on from the abstraction of eighteen ounces of blood, no more was then taken. The salts given the day before had not operated. A dose of calomel was now ordered, and a mixture of

sulphate of magnesia and tartarized antimony was directed to be taken during the day. The eyes were ordered to be fomented for two hours, and then constantly bathed with tepid water.—In the evening he was somewhat better, and the medicine had operated freely.

27th. The eyes had been very painful in the night, but became much easier on his leaving his hammock. The tumefaction was, however, but little subsided, and the purulent discharge was copious. I directed the mixture and applications to be continued.

28th. He passed a comparatively good night, and there was less discharge, tumefaction, and pain.

Rj Vini Opii, drachmam unam.
Aquæ fontanæ, uncias octo. Misce fiat Collyrium, cum calore miti applicandum.

29th. He still improved. The conjunctiva much less distended, and the eyelids separated about a line. The cornea was very muddy; the purulent discharge and pain were considerably lessened. I ordered the collyrium and mixture to be continued.

30th. He passed a night almost free from pain. It may here be remarked, that the patients were all worse in the night, which evidently arose from the heat below, the thermometer ranging between 90°. and 100°.—The palpebræ were separated to half their natural distance, there was considerable opacity of the cornea, and a small ulcer was now visible. The collyrium was ordered to be repeated, with the addition of four grains of sulphate of zinc.

Sept. 1st. He improved slowly under the same treatment.

2d. He was still better. The pain had now left him except in the night-time, and then was but trifling. The tumefaction and discharge had gradually subsided. The ulcer on the cornea did not enlarge, and it looked cleaner. The collyrium was continued.

3d. The cornea did not brighten so fast as I could wish. The other unfavourable symptoms decreased. To the collyrium, which he was using, two grains of sulphate of zinc were added.

4th, 5th, and 6th. He continued to grow better, the cornea was somewhat clearer, and the ulcer healing; the conjunctiva remained turgid. He now gradually recovered; but the convalescent state continued a long time.

The conjunctiva was thickened by the chronic distention of its vessels, the cornea cloudy from the deposition of coagulable lymph, and small ulcers successively made their appearance. The Ung. Hydr. Nitr. Vinum Opii, and a solution of nitrate of silver, were occasionally used, and finally accomplished a cure.

PAT CARROL, a soldier, ætat. 28; this man had been afflicted with a trifling redness of the conjunctive coat of the eye for a week, and had been using the sulphate of zinc collyrium, and taking occasionally doses of salts and calomel, but with little benefit. On the eighth day from the attack, the symptoms were

suddenly aggravated. The pain had been very great during the preceding night, and on examination in the morning, the inflammation appeared to have extended to the sclerotica and iris. He was immediately bled from the temporal artery, and cold applications directed to the eyes. As he had taken an aperient that morning, nothing further was recommended. In the evening, the symptoms were much the same.

The next morning it was evident that the iris partook of the inflammation, and therefore more blood was taken from the temples. The following mixture was also prescribed.

R, Magnesiae Sulphatis, unciam dimidiam.

Antimonii Tartarazati, grana dua.

Aquæ fontanæ, uncias octo. Misce, fiat Mistura, cujus capiat cochlearia dua larga tertiis horis.

The next day the Iritis continuing, he was put upon a course of mercury, and the system became affected in four days afterwards, during which period he was again bled. The mouth was kept sore for a fortnight, and the inflammation gradually subsided. The iris had, however, contracted an adhesion to the capsule of the crystalline lens, and was consequently misshapen: the cornea and pupil had a nebulous appearance. There were also several small ulcers in various parts of the eye, and the vessels of both the conjunctive and sclerotic coats were in a state of chronic distention. Not having on board any extractum belladonnæ, which is so strongly recommended, by the late ingenious Mr. Saunders, to be used in such

eases, we were compelled to the adoption of other applications.

Stimulants were had recourse to, and particular attention paid to the improvement of the general health, which had suffered much from the continued irritation. Bark and the mineral acids were exhibited, and imperfect vision was at length attained; but there was a cloudiness of the pupil, and puckering of the iris when he left the ship.

From the relation of these two cases, I think the real and malignant nature of the complaint will be sufficiently evident; and, as I have before alluded to the remedy which was so generally successful in stopping its progress, the further detail of cases would only add to the bulk of the publication without increasing its utility.—The very insidious manner in which Carrol's case commenced, and the absence for a time of any appearance of the approaching danger, seemed to render the speedy use of venesection unnecessary. It proved to be, however, the worst case that occurred, and was an useful lesson for our future practice; for I have no doubt, that if bleeding had been resorted to on the onset of the attack, the violence of the symptoms would have been entirely prevented. I am led to this opinion from the beneficial results which followed this practice in upwards of a hundred cases.

It is but justice to observe, that every attention was paid by the Captain in all cases, to the recommendations of the medical officers, for supplies of

fresh provisions and other dietetic articles, conducive to the recovery and comfort of the sick. Rice, sago, and wine, were always abundantly supplied.

In the preceding pages I have mentioned a diarrhœa, which generally prevailed during our continuance in high southern latitude. And in giving a description of it, it may be well to observe, that the course pursued by our ship, and I believe the one commonly taken by others, was to run as far to the southward as 40° . and then run down 80° . of longitude, in nearly the same parallel of latitude. During the whole of this period, the weather was rough and stormy, and the decks constantly wet and damp; the thermometer ranging between 60° and 65° .

This sudden transition from the hot and fine weather of the tropics, to a resemblance of March in England, was a vicissitude which the constitutions of our troops could not resist; and even our sailors, those hardy sprigs of British excellence, were not entirely proof against the fury of the change.

The sick list consequently became very numerous; the increase being occasioned by violent bowel complaints. The symptomatic fever accompanying this derangement was but trifling: the evacuations were yellowish with much mucous intermingled. The compound powder of Ipecacuan, in doses of five grains every four or six hours, was first tried; as was also the chalk mixture with tincture of opium; but so little success attended this mode of treatment, that the plan was soon changed, and recourse had to sul-

phate of magnesia and calomel. The former was given in doses of half an ounce, or six drachms, in eight or twelve ounces of water, and the latter in doses of five grains, which it was rarely necessary to repeat. A second or even third dose of the salts was sometimes required, though not unfrequently one dose removed all the symptoms. When the first passages had been cleared by these remedies, half a scruple of the compound powder of Ipecacuan appeared to soothe the intestines and confirm the cure.

I never witnessed such uniform success attending any practice as that just mentioned, and I would strongly recommend the adoption of it under similar circumstances.

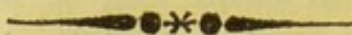
Suppressed perspiration, and consequent internal determination to the mucous membrane of the bowels, from the vicarious relation which subsists between them and the skin, were doubtless the causes of this complaint. This I am warranted in stating, from the effect produced by the remedies that were employed, the *modus operandi* of which may be thus explained. The vessels of the internal membrane of the intestinal canal, being morbidly distended, produced such a degree of irritation as to occasion increased peristaltic action; the medicines administered, acting as direct stimuli to those vessels, removed the distention, by exciting them to pour out serum: The skin, sympathizing with the relaxation produced, and being restored to its healthy action, prevents any further accumulation, and thus equilibrium in the circulation is established. As long as we continued exposed to the

exciting causes, secondary attacks occurred, and we did not entirely get rid of the disease till we again approached the tropics.

In confirmation of the opinion just stated, it may be remarked, that the officers and passengers, not being exposed to the inconveniences attending bad weather, in an equal degree with the sailors and soldiers, and being also better clothed, with one exception, all escaped.

After this no other disease of importance occurred till we reached the anchorage abreast Sorgur Island. But as we were then assailed by the endemics of the climate, they shall form the subject of the next Section.

TROPICAL DISEASES.



THE first tidings of importance communicated to us on our arrival were, that the cholera had been raging in Calcutta with greater violence than it had done for three years before.

The troops did not leave the ship for six days, but during that period no disease occurred.

The first attack worthy of notice happened on the fourteenth day after our arrival. The subject of it was T. GREEN, ætat. 24, who was seized, when about to sit down to dinner, with a most severe pain in the stomach. I was sent for, and found him lying on the deck, apparently in the greatest agony. I immediately gave him the following draught :—

*R*_j Tincturæ Opii, drachmam unam.
 Ætheris Rectif. minima quadraginta.
 Aquæ fontanæ, drachmas decem. Misce, fiat haustus.

In half an hour he was much relieved, and at 3 P. M., two hours from the attack, he became entirely free from pain. As the bowels were rather confined I ordered—

*R*_j Hydrargyri submuriatis, grana octo.
 Opii pulveris, granum dimidium. Conf. Rosæ, q. s. fiat
 Bolus, statim sumendus.

At 7 P. M., he was seized still more violently than before, and the seizure was accompanied with numb-

ness of the hands and feet. The pulse was 80 and labouring. The draught was repeated. No relief following in half an hour, his extremities were put in hot water, his bowels fomented, and a wine-glass full of equal parts brandy and water, was given. The symptoms not being in the slightest degree mitigated, in ten minutes the brandy was repeated, and I opened a vein in the arm and took away eighteen ounces of blood. Immediate ease followed, and in about a quarter of an hour, he vomited a quantity of bilious matter. This discharge relieved him much, and shortly after he fell asleep; he dosed during the night and perspired freely.

5th, 8 A. M. He appeared perfectly free from complaint, and had two plentiful evacuations of a dark colour, in the morning. The pulse was 84, and soft.

6th. There was no return of any unfavourable symptom, and as he complained only of debility, a more generous diet was ordered.

7th. He was convalescent. But the bowels were rather costive; an ounce of castor oil was, therefore, given.

8th. He had two stools; but, in the night, vomiting came on with pain, which, however, soon subsided. Still suspicious that the bowels had not been freely acted on, I ordered—

R, Hydr. submuriatis, grana sex.

Opii pulvere, granum dimidium. Conf. Rosæ q. s. fiat
pilula, horâ meridiani sumenda.

9th. He was sick after the pill yesterday. He passed a tolerable night. The bowels were not moved.

Rj Magnesiae sulphatis, unciam dimidiam.

Aquæ menthæ piperitæ, uncias octo. Misce, fiat mistura, cujus sumantur cochlearia tria larga secundis horis.

In the evening he had a scanty evacuation, and was better.

Rj Extracti Colocynthis comp. grana octo.

Hydrargyri submuriatis, grana dua. Misce, fiant pilulæ duæ, horâ somni sumendæ.

10th. He had three stools of a reddish brown colour, passed a large worm, and felt better. I prescribed—

Rj Magnesiae sulphatis, unciam dimidiam.

Infusi Gentianæ comp. uncias septem cum semisse. Misce, fiat mistura. Capiat cochlearia dua larga sextis horis.

11th. He was better in every respect.

12th. Convalescent; and, on the 14th, was discharged from the sick list.

Remarks.—That some parts of the practice in this case will appear paradoxical to many, and especially to those who have never witnessed tropical diseases, I can readily imagine; but I shall endeavour to explain and reconcile what may appear inconsistent. We have seen that the stomach was primarily affected by violent and rigid spasm: to relax this,

a powerful antispasmodic was given, and with complete success. On the second attack, the same means were employed, but without a similar result. Stimulants were then given and, lastly, blood-letting had recourse to. In common attacks, the treatment adopted in the first instance would have been sufficient; but when the local affection continues obstinate and unyielding, it then becomes necessary to produce a general effect on the constitution; whilst the stimulus imparted to the stomach by the internal administration of medicine, prevents a recurrence of spasm in that organ; and thus renders the treatment more effectual than it would have been if blood-letting only had been resorted to, even though we were to admit that venesection alone would have relaxed the spasm.

J. WILSON was attacked in the morning of the 14th of November, at 4 A. M. with cramps about the soles of the feet, pain in the head, so violent as, in his own language, to make him blind; pain in the right side, short cough, and difficulty of breathing. At half-past seven, when I first saw him, the cramp occupied both the lower extremities and epigastrium. The pulse was weak, small, and 130; the other symptoms continued unmitigated. He appeared in so much torture from the cramp in his stomach, that previously to bleeding him, I gave the following draught:—

R, Ætheris Rectif. minima quadraginta.
Tincturæ Opii, minima viginti.
Aquæ puræ, unciam unam. Misce, fiat haustus.

On opening a vein in the arm, the blood spouted out, till the accumulation in the veins below the ligature was removed, when it merely trickled down the

arm. This was apparently occasioned from the thickness and viscosity of the blood. The pulse was hardly perceptible. Forty minims of æther in an ounce of water were now given, and in five minutes he bled freely; and thus I was enabled to take twenty-two ounces, though sometimes the blood merely oozed from the orifice, and at last entirely ceased. No alteration in the ligature, or position of the arm, could make it flow. The pulse at this time was very feeble and 120; the pain in the head was easier, and the cramps less violent. I secured the arm, and left him for half an hour. On my return he was taking some tea, and appeared in every respect much better. The pulse was not diminished in frequency, but was firmer and more regular. I prescribed—

R, Hydrargyri submur. scrupulum dimidium.

Opil pulvere, granum dimidium. Confectionis Rosæ,
q. s. fiat Bolus, statim sumendus.

At the expiration of another half-hour, I again visited him, and as there was still considerable pain in the head, and tenderness in the right hypochondrium, I bound up the arm to take more blood from the orifice already made, and so powerful was now the re-action, that, after the first ounce had flowed, it was projected from the arm to the distance of six feet. When ten ounces had been abstracted, a slight trembling came on, and the pulse became more feeble; I therefore desisted. The tremor continued five minutes and then left him for a quarter of an hour, when it again returned; pulse 130.

R, Ætheris Rectif. minima triginta.

Aquæ puræ, unciam unam. Misce, fiat haustus, statim sumendus.

In half an hour the tremor ceased ; the pulse had fallen to 120, and was increased in volume.

Ten, A. M. The pulse was 115, and very much increased in volume ; he felt sleepy, and a general warmth was diffused. There was no perspiration.

Five, P. M. He continued better throughout the day, and perspired copiously. He had been taking pills with antimonial powder and calomel, and a mixture of sulphate of magnesia ; but as he had no evacuation, an ounce of castor oil was given.

Eight, P. M. He vomited once, and had a pious dark coloured stool. Pulse was 100, and soft.

15th, Eight, A.M. He had been tolerably comfortable during the night, and had two stools of a very light colour, and perspired freely ; pulse 88 ; the right hypochondrium was painful when pressed, and he complained of pain in the lower part of the thorax on the right side. The tongue was moist, but was covered with a yellowish fur. I prescribed—

Rj Hydrargyri submur. grana sex.

Opii pulvere, granum dimidium. Conf. Rosæ, q. s. fiant pilulæ duæ, quarum sumat unam, secundis horis.

Noon. He still complained of the right side, and had one stool of a greenish colour.

Rj Magnesiæ sulphatis, unciam dimidiam.

Aquæ puræ, uncias octo. Misce, fiat haustus, statim sumendus.

Eight, P. M. The pulse was soft and 90 ; the other symptoms remained nearly the same.

Conceiving the cure would not be effected without producing ptyalism, or an approach to it, I ordered the following:—

Rj Hydrargyri submur. drachmam dimidiam.
 Opii pulvere, granum unum cum semisse. Conf. Rosæ, q.
 s. fiant pilulæ vj, quarum sumat unam tertiis horis.

Rj Magnesiæ sulphatis, unciam unam
 Aquæ fontanæ, uncias quindecim, cum semisse.
 Antimonii tartarazati, granum unum, cum semisse.
 Misce, fiat Mistura, ejus sumat cochlearia tria
 larga secundis horis.

16th, 8 A. M. He had vomited, and was also purged during the night very frequently. These symptoms came on shortly after taking the first dose of the mixture, which, however, he still continued to use. His gums were spongy and sore, his breath offensive, and his tongue was covered with a greenish fur. The pulse was 80.

Eight, P. M. He continued much the same, except in the vomiting, which left him, on his discontinuing the mixture. Indeed, he had taken no medicine since noon, and had but one evacuation. I prescribed—

Rj Hydrarg. submuriatis, grana duodecim.
 Opii pulvere, granum unum. Conf. Rosæ. q. s. fiant
 pilulæ iv., quarum sumat unam tertiis horis.

17th. Ptyalism had freely come on; his pulse was soft and 84; and all the other symptoms were considerably mitigated. He had two stools during the night, and one in the morning, of a natural colour

and consistence. There was no tenderness of the right hypochondrium.

18th. He felt perfectly well, except the soreness of his mouth. The ptyalism was lessened, and he said he was very hungry.

19th. He was still convalescent, with the exception of sore mouth. He continued improving daily, and on the 27th went to his duty,

Remarks.—This case clearly demonstrates the superior efficacy of the lancet in relieving the manifest congestion and oppression. It also points out the absolute necessity of using stimulants to rouse the vital energy of the system. I have little doubt, if timely assistance had not been given, the case I have described would have proved one of the worst cases of cholera, since the only symptom wanting to constitute that disease, in the more common acceptation of its definition, was vomiting; and nature, in all probability, would soon have had recourse to that effort, as the only means of relieving herself.

T. REVEL.—When going my usual morning round, I was surprised at finding this man lying on the deck. He took no notice of me as I passed, but upon my rousing him, he with difficulty told me, that he had been ill during the night. He now complained of violent pain in the head, and cramp in the extremities. The pulse was 90, conveying a sensation of deep labouring. By the time I had my lancet and bleeding apparatus at hand (a space of five minutes)

the pulse was scarcely perceptible. The blood flowed, till I had taken about six ounces, and then merely trickled down the arm. It was of a dark colour, and nearly the consistence of treacle. He complained of being sick, and vomited a quantity of half digested food, which he had taken the preceding evening. To encourage the complete evacuation of the contents of the stomach, half a pint of warm water was given him; and that water not returning, another half-pint was given with the addition of an ounce of sulphate of magnesia. This solution also remained, but appeared to produce much uneasiness, and the pulse became more torpid. The following was, therefore, prescribed:—

*R*_j Tincturæ Opii, drachmam dimidiam.
 Ætheris Rectif. minima quinquaginta.
 Vini adusti.
 Aquæ fontanæ, a unciam dimidiam. Misce, fiat haustus,
 statim sumendus.

After taking this he vomited copiously. I had now obtained about twenty ounces of blood. It was uncommonly black and viscid, and stopped up the orifice so completely, that during several efforts to vomit not a single jet escaped. In ten minutes afterwards, I gave him the following bolus:—

*R*_j Hydr. submuriatis, scrupulum unum.
 Opii pulvere, granum unum. Conf. Rosæ, q. s. fiat bolus
 mollis.

It was immediately ejected. The thirst was now excessive, and he was constantly calling for water; except in the intervals when he suddenly screamed out “the cramp; oh! the cramp.” By this time a warm bath was in readiness, and another bolus being

prepared was given and retained : the temperature of the water was only 96. He complained, however, of its scalding him, and he had not been in more than five minutes before he began to faint, and was immediately taken out, well rubbed with dry coarse cloths, and conveyed to a hammock. Whilst in the bath, he passed a copious green evacuation.

Noon.—The pulse was 110, firm and active. He perspired generally. There was no tenderness of the abdomen, and the cramp left him shortly after he quitted the bath. He had all along complained of giddiness and swimming in his head, which still continuing, I bound up his arm, and took from the orifice made in the morning, ten ounces more blood ; which flowed freely, and was of a florid colour. The pulse became softer, and rose to 125 ; and the giddiness was relieved.

Eight, p. m. He had been much better since last report. The thirst was mitigated, the pulse 120, and the perspiration free. But he still complained of a little giddiness, and had no other evacuation.

Rj Hydrarg. submuriatis.

Pulveris Antimonialis, ā grana duodecim. Conf. Rosæ
q. s. fiant pilulæ sex, quarum capiat unam tertiis
horis.

17th, Eight, a. m. The pulse was full, and 120. He had slept in the night tolerably well.—The tongue was furred and moist. There was little thirst, no pain or giddiness of the head, or tenderness of the abdomen, and on the whole he seemed better. In

the morning, he had a copious dark coloured evacuation.

Rj Magnesiæ sulphatis, drachmas tres.

Aquæ fontanæ, uncias octo. Misce, fiat mistura, cujus sumantur cochlearia duo larga tertiis horis.

Eight, P. M. He had five stools within these three hours. In other respects he continued better. The pulse was 115.

Rj Pulv. Ipecacuan. comp. grana quindecim. Mucilaginis q. s. fiant pilulæ tres, quarum sumat unam quartis horis.

Omitte misturam mane jussit.

18th, Seven, A. M. He passed a tolerable night, but had five evacuations somewhat yellowish. The pulse was 104. The tongue furred and moist. There was no return of pain in the head.

Noon.—The purging continued, and the pulse was 130.

Rj Tincturæ Opii.

Ætheris Rectif. a a drachmam dimidiam.

Aquæ fontanæ, drachmas decem. Misce, fiat haustus, statim sumendus.

Two, P. M.

Rj Misturæ Cretæ, uncias octo.

Tincturæ Opii, minima quadraginta. Misce, fiat mistura, cujus sumat cochlearia tria larga quartis horis.

Eight, P. M. He was better; the purging was mitigated; the pulse 120, and skin moist.

19th, Eight, A. M. He passed a good night. The pulse 104; the thirst trifling, and the tongue coated with a yellowish fur. He had two stools of a thicker consistence.

Nine, P. M. He seemed very low and was crying. The pulse was 120. He had but one evacuation during the day. The chalk mixture was, therefore, discontinued, and I ordered—

Rj Pulveris Antimonialis, grana octo.
 Opii pulvere, granum unum.
 Hydrarg. submur. grana dua.
 Camphoræ, grana dua. Mucilag. Acaciæ q. s. fiant pilulæ quatuor, quarum sumat unam tertiis horis.

Rj Misturæ Camphoræ, uncias sex.
 Sp. Ætheris Nitrici, drachmas duas. Misce, fiat mistura, cujus sumantur cochlearia duo larga tertiis horis.

20th, Seven, A. M. He was much worse. About two, A. M., sickness seized him, and he continued to vomit at intervals. Pulse 110, tongue furred and moist. He had two evacuations during the night, and perspired copiously. A troublesome hiccup likewise came on.

Rj Ætheris Rectificat. minima quadraginta.
 Tincturæ Opii, minima quindecim.
 Aquæ puræ, drachmas decem. Misce, fiat haustus, statim sumendus

The draught was almost immediately thrown off his stomach. But on being repeated in half an hour without the opium, it was retained.

Noon.—He had a copious evacuation of a light yellow colour and the vomiting had ceased. His diet

had hitherto chiefly consisted of sago and rice ; and to-day he asked for more of the former, to which I added half a glass of port wine, and ordered him a little wine and water during the afternoon.

Nine, p. m. He had been rather better till within two hours, when the hiccup returned as also the diarrhœa. Another antispasmodic draught had been given ; but the hiccup continued. The stools were thin, and there was mucous intermixed with them. The pulse was 104.

Rj Hydrarg. submur. scrupulum unum.
Opîi pulvere, granum unum. Conf. Rosæ q. s. fiat bolus mollis, statim sumendus.

21st, Seven, A. M. He passed a good night. The pulse was 100, the tongue cleaner, the hiccup had left him, and he had but two evacuations.

Ten, A. M. Liquids did not remain on his stomach, and he had used the bed-pan four times since I last saw him.

Rj Opîi, granum unum. Fiat pilula statim sumenda.

Five, p. m. At noon, he took a little sago and wine ; but after two o'clock, the hiccup returned.

Rj Ætheris Rectif.
Tincturæ Opîi, a a drachmam dimidiam.
Aquæ puræ, drachmas decem. Misce, fiat haustus, statim sumendus.

Ten, p. m. The bowels had not been moved since noon. He was very restless ; the tongue was dry, the skin hot, and pulse 120. He complained of

frequent desire to make water, and passed a little each time. The hiccup continued:

Rj Pulveris Antimonialis, grana duodecim.
Hydrarg. Submuriatis, grana sex.
Opii pulvere, granum unum. Conf. Rosæ q. s. fiant pilulæ sex, quarum sumatur una tertiis horis.

Rj Liquor. Ammoniaë Acet. unciam unam.
Aquæ fontanæ, uncias duas.
Misturæ Camphoræ, uncias tres.
Spiritus Ætheris Nitrici, drachmas duas. Misce, fiat mistura, cujus sumat cochlearia dua larga secundâ quâque horâ.

22nd. He was purged during the night and felt sickness. The hiccup was not so troublesome, the skin was dry and hot, the pulse was 108, and the tongue rather moist.

Rj Hydrarg. Submuriatis, grana decem.
Pulveris Antimon. grana quindecim.
Opii pulvere, grana dua. Conf. Rosæ q. s. fiant pilulæ decem, quarum sumat unam omni horâ.

Five, p. m. He was something better, and used the bed-pan but twice since morning. The evacuated matter was thin and slimy. A solution of supertartrate of potash formed his common drink.

Abdomini Affricetur Unguenti Hydrargyri, drachma una.

23rd, Eight, A. M. The evacuations were frequent and slimy, the pulse was weak and 104. There was no sign of the mercury having entered the system; but, on the contrary, the gums were remarkably pale and contracted.

Rj Opii, granum unum, fiat pilula, sextâ quâque horâ sumenda.
Repetatur Unguent. Hydrarg.

Four, P. M. The pulse was weak and 130, the tongue dry, and the thirst excessive. He was very restless and evidently much worse. He had one stool since morning, and took a little port wine and water occasionally.

Rj Hydrargyri Submuriatis, scrupulum unum.
Opium pulvere, granum unum. Conf. Rosæ q. s. fiat bolus mollis, statim sum.

Eight, P. M. He was certainly worse, and had a thin evacuation in which small black flakes were floating. There was a cold sweat about his forehead, but his legs and thighs were perfectly warm and dry.

Rj Misturæ Camphoræ, uncias octo.
Ætheris Rectificat. unciam dimidiam.
Tincturæ Opium, drachmam unam, cum semisse. Misce, fiat mistura, cujus sumat cochlearia dua larga sextis horis, aut post sedes singulas liquidas.
Repetatur Ung. Hydrarg.

Two, A. M. I went to see him, and found the symptoms unmitigated; and the desire to stool frequent. The pulse was quick, and the skin cold.

Rj Adde misturam supra præscriptam.
Confectionis Aromatici, drachmas duas.

Six, A. M. He had used the bed-pan four times since my last visit. The coldness of the skin continued. I ordered him half a tumbler full of equal parts port wine and hot water. At seven, A. M., he took a little sago with cinnamon and wine.

Noon.—The bowels had been moved four times: the evacuated matter was the same as on the preced-

ing night. There was not the slightest appearance of the mercury having affected the system. The pulse was 130, and very weak. He breathed with difficulty and was evidently sinking. At Eight, P. M. he had a slight convulsion, and at Nine he died.

Post mortem appearances.—The liver was healthy, but the gall-bladder was much distended with dark coloured bile, which, on escaping into the abdomen, tinged the contiguous parts with a deep orange colour. The spleen was nearly twice its natural size, and gorged with thick grumous blood. The whole of the intestinal canal presented a perfectly healthy appearance, but was much distended with flatus. On the internal surface of the colon was a muddy fluid. There was nothing remarkable about the kidneys.

Unfortunately the want of a saw prevented me from pursuing the examination into the other cavities.

Remarks.—This case was somewhat similar to Wilson's. But the constitution could not sustain the powerful remedies, which I was obliged to employ to overcome the primary attack. And secondarily, the resistance of the system to the admission of mercury, deprived me of the advantages which might have been anticipated from the use of that powerful mineral, if that idiosyncrasy had not existed.

The peculiar paleness of the gums which has been noticed in this case, I have frequently observed in patients who have been using large quantities of mercury, without being able to bring the system under its influence.

I shall here particularly notice a circumstance to which my patient was unfortunately much addicted, and which ought to be most carefully avoided. *I mean the act of sleeping, while persons are exposed to night winds and heavy dews, when ships are near marshy or jungly land.** The ports should, therefore, be closed at night,† especially those to windward, and yet more especially if the wind comes off the shore. When ships are well out at sea, I think this caution altogether unnecessary.

C. FINLEY went on shore yesterday evening to bury his messmate Revel, and was attacked in the boat with severe pain in his head, and such a general lassitude as obliged him to give up his oar. It was about Eight, P. M. when I first saw him. He complained of the above symptoms, and some uneasiness in his bowels. I desired him to go to bed, and take the following bolus:—

*R*_j Hydrarg. Submuriatis, scrupulum dimidium.

Opii pulvere, granum dimidium.

Pulveris Antimonialis, grana dua. Conf. Rosæ q. s.
fiat bolus.

26th, Seven, A. M. He had perspired in the night, but at the same time felt coldness. His lower extremities were much below the natural temperature: the pulse was 76 and oppressed. He had five stools in the night, and now complained of pain in his bowels, accompanied with a sensation of coldness.

* The danger has been particularly noticed by Dr. JAMES JOHNSON, in his work on the Diseases of Tropical Climates.

† This precaution is now pretty generally observed in the Ships of the Honorable East India Company.

The regions of the abdomen were perfectly free from tenderness.

R, Ætheris Rectificat. minima quadraginta.
Tincturæ Opii, minima viginti.
Misturæ Camphoræ, drachmas decem. Misce, fiat haustus, statim sumendus.

Eleven, A. M. His extremities were warmer, and a general perspiration appeared to be coming on. The pain in the forehead continued, and he complained of thirst. The pulse was 76.

R, Magnesiæ Sulphatis, drachmas tres.
Antimonii Tartarazati, granum unum.
Aquæ fontanæ, uncias sex. Misce, fiat mistura. Sumat cochlearia dua larga tertiis horis.

He began this mixture about noon; but almost immediately after taking the first dose, he was seized with violent pain in his bowels, accompanied with urgent inclination to stool, but without passing any thing.

R, Tincturæ Opii.
Ætheris Rectificati, a minima quadraginta.
Aquæ fontanæ, drachmas decem. Misce, fiat haustus.

The draught gave decided and quick relief, and in half an hour afterwards, the bolus, prescribed last evening, was repeated. He continued easier till five P. M., when the pain in the bowels returned with increased violence, accompanied with very painful tenesmus. Administered a glyster of warm water and sulphate of magnesia, which procured for him some relief, and the evacuation of two scanty stools.

Eight, P. M. The pain in the forehead continued, and the scrobiculus cordis and right hypochondrium were rather tender. I had, therefore, recourse to ve-

nesection. When sixteen ounces had been obtained, the pulse rose from 78 to 84, and he felt relieved. The blood was rather of a florid colour, after the first ounce had flowed :

Rj Magnesiae Sulphatis, unciam dimidiam.
Aquæ Callidæ, uncias octo. Misce, et bibat statim.

Ten, P. M. He had been comfortable since my last visit. There was less pain in the forehead, and the tenderness of the abdomen was now principally confined to the umbilicus. He still complained of thirst.

Rj Pulveris Antimonialis, grana octodecim.
Hydrarg. Submuriatis, grana sex.
Opii pulvere, granum unum. Conf. Rosæ q. s. fiant
pilulæ sex, quarum capiat unam tertiis horis.

At Two, A. M. I was called to him in consequence of his being in violent pain, and suffering much from the most distressing tenesmus. I immediately gave him an ounce of castor oil, on a draught, containing twenty minims of tincture of opium. He was relieved till four, A. M., when I was again summoned to him. The pain and tenesmus had returned, and being accompanied with vomiting, I gave him the following draught :—

Rj Ætheris Rectificati, minima quadraginta.
Tincturæ Opii, minima viginti.
Aquæ fontanæ, drachmas decem. Misce fiat haustus.

Seven, A. M. He was somewhat easier ; but complained of headache and tenderness about the umbilicus.

Ten, A. M. The tenesmus was now very urgent, and there was general pain in the bowels accompanied

with some tenderness. The evacuations consisted of slime and bloody mucous, streaked with whitish flakes; in short, closely resembling macerated flesh. Venesection was again employed, and after sixteen ounces of blood had been taken, which was very thick and black, the pulse rose from 84 to 100. I then gave him the following bolus:—

Rj Hydrargyri Submuriatis, scrupulum unum.
 Opii pulvere, granum dimidium. Conf. Rosæ q. s. fiat
 bolus mollis, statim sumendus.

He talked incoherently, and complained of headache and thirst. Rice water, acidulated with nitric acid, formed his common drink.

Three, P. M. Until this period he had been much better, and within the last two hours the tenesmus was considerably relieved. He still complained much of pain in his bowels, and, therefore, I gave him a draught containing thirty minims of laudanum.

Eight, P. M. The pain in the bowels had ceased shortly after the exhibition of the anodyne. The pulse was 94 and soft; the tongue was slightly furred, but moist; the skin dry and hot; and the gums were a little swollen. There was slight tenderness in the right hypochondrium, and in the track of the colon. He passed an evacuation, at four P. M., with comparative ease.

Rj Hydrarg. Submuriatis, scrupulum unum.
 Pulveris Antimonialis, grana octo.
 Ipecacuanhæ Rad. pulvere, grana quatuor. Conf. Rosæ
 q. s. fiat Massa in pilulas quatuor distribuenda, quarum sumat unam tertiis horis.

28th, Eight, A. M. He had a good night. He took all the pills, and ptyalism had freely come on. The tenesmus, pain in the head, and tenderness of the abdomen, were all completely removed. The pulse was soft and 88.

Eight, P. M. There was no return of any bad symptom. Ptyalism continued free; pulse 96. He had one stool, which passed with perfect ease.

29th, Eight, A. M. He slept very comfortably in the night, and in every respect was doing well. The ptyalism continued. He had no other evacuation.

Eight, P. M. He still improved. At noon, he took an ounce of castor oil, which had not operated.

30th. He was perfectly free from complaint, except the inconvenience of a sore mouth. The ptyalism was lessened, and he had a copious green stool.

From this period he continued convalescent, and shortly returned to his duty.

Remarks.—This was a well-marked case of dysentery, and the mere palliative treatment at first adopted, proves how little it availed in arresting the progress of the disease. In short, nothing appeared to have any powerful influence till ptyalism was produced. The scruple dose of calomel was highly useful in relieving the tenesmus, and allaying the irritability of the stomach, which I have seen it do in several instances; and willingly I add my humble testimony to the supreme rank which calomel, given in those doses, now holds, of restraining that inordinate

action of the stomach, which so distressingly prevails in the majority of tropical diseases, even when all other means have failed.

In dysentery, therefore, where it removes the most urgent symptoms of the complaint by its primary operation, and where it subsequently assists in producing that effect on the constitution which is so necessary for the cure, it becomes a remedy of the most vital importance, and cannot be too strongly recommended.

RICHARD RAWLINS was seized about half-past five, P. M., with shivering, sickness, and pain in the epigastrium. He vomited twice, and sent for me at seven, P. M. The pulse was then 120, the skin very hot, thirst considerable, and inclination to stool frequent. I immediately dissolved an ounce of salts in a pint of warm water, and gave it him to drink; it was soon ejected, but brought up nothing with it. Venesection was then had recourse to, and when fifteen ounces had flowed, he began to vomit, and threw up a quantity of half-digested food, which he had taken at dinner time. Just before he vomited, the pulse was 140, and then suddenly fell to 116. He was excessively thirsty, but began to perspire.

Ten, P. M. He was better.

Rj Pulveris Antimonialis, grana tria.
Hydrargyri Submuriatis, grana sex. Conf. Rosæ q. s.
fiat bolus, statim sumendus.

Eight, A. M. He slept but little in the night. But the pain and tenderness of the epigastrium were



much better. He had six stools during the night ; they were thin and scanty. The pulse was 100.

Rj Olei Ricini, unciam unam. Statim sumendus.

Noon. He had three stools since my last visit ; they were thin and of a greenish colour. The tongue was furred in the centre, and clean at the edges. He had complained much of giddiness the day before, but it had now left him. The pulse was 92.

Rj Hydrargyri submuriatis, grana octo.

Pulveris Antimonialis, grana duodecim.

Opii pulvere, granum unum. Conf. Rosæ q. s. fiant pilulæ iv. Capiat unam tertiis horis.

Eight, P. M. He appeared much better. The pulse was soft, and 85 ; there was slight tenderness about the right hypochondrium. He had no other evacuation.

Continuentur pilulæ.

Eight, A. M. He had an indifferent night, and passed one thin evacuation. The pulse was 80, and as the pain in the right side was rather increased, I repeated the blood-letting, to the quantity of sixteen ounces ; his pulse then rose to 100 ; a trifling perspiration came on, and he felt relieved.

Rj Magnesiae sulphatis, drachmas sex.

Aquæ callidæ, octarium dimidium. Misce, et bibat statim.

A copious evacuation was soon produced, and much relief followed.

Eight, P. M. He was entirely free from pain.

Eight, A. M. He had passed a good night, and there was no return of any bad symptom. In two days afterwards he went to his duty.

Remarks.—The attack in this case appeared, in the first instance, to arise from an oppressed state of the stomach, which must have been rendered torpid by congestion; for as soon as that was removed by blood-letting, this organ regained its energy and expelled the noxious contents. Considerable relief followed these two expedients; but much visceral derangement still existed, arising probably from congestion of the liver. For an organ of such paramount importance in the venous circulation, and from its complicated structure, naturally prone to morbid distention, would certainly require a much more considerable evacuation than the former viscus, and we have seen how decidedly beneficial a second bleeding proved.

JAMES TOOKEY, Nov. 24. During the mustering of the ship's company this day, it was discovered that this man was absent, and reported sick. I was immediately ordered to visit him, and found him very ill. He was sweating profusely about the chest and forehead. The extremities were warm, but dry. He complained of no pain, neither was there any tenderness in the regions of the abdomen; but he said that he was very weak, and that he had been seized with shivering about three hours before. The pulse was 84, and rather full.

Rj Magnesiae sulphatis, unciam cum semisse.
Antimonii tartarazati, granum unum.
Aquæ callidæ, uncias duodecim. Misce, et bibat statim

This speedily operated, both by purging and vomiting, in consequence of which he was much relieved, and the perspiration became general.

Rj Pulveris Antimonialis, grana tria.
Hydrargyri submuriatis, granum unum.
Opii pulvere, grani partem sextam. Conf. Rosæ q. s.
fiat pilula, secundâ quâque horâ sumenda.

Eight, P. M. He had perspired freely during the afternoon, and continued better.

Sumantur pilulæ præscriptæ tertiis horis.

25th, Eight, A. M. He had been tolerably comfortable during the night, and appeared much the same as last evening; but had no evacuation since yesterday.

Rj Magnesiæ sulphatis, unciam dimidiam.
Aquæ callidæ, octarium dimidium. Misce, et statim bibat.

Noon. The medicine had not operated, and he complained of pain in his forehead when he coughed or sneezed. The pulse was 100, and full. Venesection; when sixteen ounces had been taken, the pulse rose to 120, and perspiration came on. The blood drawn had a black treacly appearance.

Four, P. M. The pulse was full, and 90; there was slight pain in the forehead, and he had one copious evacuation of a yellowish appearance, producing, as it passed through the rectum, a burning sensation.

Repetantur pilulæ.

Eight, P. M. The pulse was full, and 106. There was general warmth, and some perspiration; but as

the pain in the forehead continued, I again resorted to venesection. After taking eight ounces of blood, the pulse became softer and quicker, and perspiration profuse: I, therefore, tied up the arm.

26th, Seven, A. M. He had a good night. The pulse was active and 92, the skin hot and dry, the tongue slightly furred and moist, the thirst inconsiderable, and the pain in the forehead much abated. The bowels had been moved three times yesterday. The perspiration which broke out so freely after the bleeding last evening, did not continue more than half an hour.

Half-past Nine, A. M. I was sent for to him, in consequence of a violent pain in his stomach extending across the epigastrium. His extremities were cold, his face pale, and his pulse intermitted every three beats.

R, Tincturæ Opii, minima viginti.

Ætheris Rectificati, minima quadraginta.

Aquæ puræ, drachmas decem. Misce, fiat haustus, statim sumendus.

In fifteen minutes he vomited, and brought up a great quantity of fluid. The pulse immediately became regular and active, beating 94. By way of further encouraging the vomiting, or procuring a free evacuation by stool, I gave him half a pint of warm water with six drachms of sulphate of magnesia dissolved in it. This was directly ejected, and the vomiting continued with little intermission for two hours. The fluid cast forth was of a greenish colour.

At this time, during an intermission from vomiting, I gave him the following bolus :—

Rj Hydrarg. submuriatis, scrupulum unum.
Opii pulvere, granum unum. Conf. Rosæ q. s. fiat Bolus.

The vomiting did not return, and he had a stool about an hour afterwards.

Eight, p. m. The sweating was profuse; the pulse 94, and soft. There was no tenderness of the abdomen.

Rj Pulv. Ipecacuanhæ comp., scrupulum unum.
Hydrarg. submuriatis, grana quatuor. Misce, fiant pilulæ iv. Sumat unam 4tis. horis.

27th. The perspiration had continued through the night. He had slept at intervals. He had one stool in the night, and another in the morning: they were thin, copious and of a greenish colour. The pulse was 80, and full; the tongue moist and cleaner; the thirst trifling, and he was free from pain.

Rj Decocti Cinchonæ, uncias octo. Cujus sumantur cochlearia tria larga 3tis horis.

Eight, p. m.—The pulse was 100, and stronger; there was slight tenderness of the epigastrium, and the cough had returned. He complained much of thirst. He had one evacuation at noon. From the symptoms which now presented themselves, I thought it advisable that more blood should be taken from him and bound up his arm for that purpose, when immediately a most profuse perspiration broke out about his forehead, and his pulse rose ten beats. He expressed a strong aversion to bleeding. Under these circumstances, with proofs of the circulation being so easily

affected, I abandoned my intention, and ordered a blister to the epigastrium and the following pills:

R, Pulveris Ipecacuanhæ, grana quindecim.
Hydrargyri submuriatis, grana quinque.
Opii pulvere, grana dua. Mucilaginis q. s. fiant pilulæ
decem, quarum sumatur una 2dis. horis.

I found he had only taken two doses of the bark. There had appeared in him all along a remarkable degree of stupidity. The aversion to blood-letting was occasioned, as he told me, in consequence of having had six pounds taken from him when last in this climate, and his suffering much from weakness. He was 33 years of age, and had been four years in this climate, during a service of twelve in the Royal Navy.

28th. He was so stupid this morning that he would not answer my questions, till they had been repeated three or four times. He had one stool, but took only three of the pills. The tongue was furred and moist. The blister had not risen sufficiently to be removed.

Eight, p. m. He had three stools rather copious, and of a greenish colour. He felt better, and was less stupid. The pulse was 94, and soft; the tongue moist and furred, the pain in the forehead now only slight, and the perspiration was confined to that part.

R, Hydrarg. submuriatis, grana quindecim.
Opii pulvere, grana dua
Pulveris Antimonialis, grana tria. Conf. Rosæ q. s.
fiant pilulæ tres, quarum capiat unam sextis horis.

29th. He was certainly better, and had three stools during the night. The pulse was soft and 88,

the headache relieved, and he expressed a wish for food : sago was given to him.

Eight, P. M. He had not eaten the sago. There was now manifest tenderness about the right hypochondrium. The pulse vibrated at 96, the tongue was foul and moist, the gums red and slightly tender : he had two dark green evacuations since the morning. He said he was entirely free from pain in the head.

R, Liq. Ammon. Acetatis, uncias duas.

Sp. Ætheris Nitrici, drachmas tres.

Aquæ fontanæ, uncias quinque cum semisse. Misce, fiat
mistura, cujus sumat cochlearia tria larga 4tis. horis.

Applicetur hypochondrio dextro Emplastrum Lyttæ.

30th, 8 A. M. On going round in the morning, I found him in a profuse perspiration about his head, neck, and chest ; but gradually subsiding towards the extremities, and leaving the legs perfectly dry and hot. I was not surprised that he did not answer the first question put to him ; but on my repeating it several times, and no notice being taken, I then endeavoured to rouse him by every possible means. It was all to no purpose : he continued deaf to our enquiries, and insensible to our efforts. He was lying on his back with his eyes open, and the pupils dilated ; but they contracted slowly on the approach of a lighted candle. He breathed easy ; the pulse was small, and 120 ; he had taken off the blister in the night, before it had risen.

With a view to obtain a more perfect knowledge of the state of the blood and general circulation, and of completely satisfying myself that no imposition was

practised, I opened a vein in the arm. The blood was of a good colour, and flowed languidly. I therefore secured the orifice before he had lost two ounces. The poor fellow made no resistance, nor took the slightest notice.

Nuchæ applicetur Emplastrum Lyttæ.

At the expiration of half an hour the extremities had become moist.

Noon. He still continued in the same state of insensibility. For the purpose of rousing him, I poured into his mouth a little wine and water, which he swallowed; and after a wine-glass full had been taken in this manner, he threw up a quantity of greenish fluid, evidently bilious. I directed the wine and water to be repeated, and it was occasionally continued for two hours, but followed by vomiting and bringing up a quantity of the same coloured fluid.

At Three P. M. a clyster was administered, consisting of half a drachm of camphor diffused in thick gruel.

Four, P. M. He remained nearly the same, except making a continued moaning noise. At Six, P. M. the pulse was quicker and intermitted; and he was rapidly sinking. At half-past Eight, P. M. he died.

Post mortem appearances.—The colon down to the sigmoid flexure was remarkably distended with flatus. On my cutting into it, thin yellowish fœces were seen adhering to its inner surface. The liver was healthy, but the gall bladder was filled with dark coloured bile.

The spleen was half as large again as its natural size, and full of dirty grumous blood.

The Brain.—On taking off the calvarium, the vessels of the dura mater appeared gorged with black blood. The tunica arachnoidea was much inflamed, as was also the pia mater. In cutting down the hemispheres, so as to form the centrum ovale, dark spots of blood frequently exuded from the medullary substance. The lateral ventricles contained twice their natural quantity of fluid; and the plexus choroides was much thickened, and had the appearance of being knotted. The vessels in the base of the brain were much distended.

Remarks.—It will be observed in this case, that there was an aggravation of symptoms on the alternate days, immediately preceded by some remission; and that the principal feature in the attack was such a determination to the brain as to produce functional derangement in that organ. When I began the bark on the 27th, it was with a view to prevent the recurrence of the paroxysm on the 28th; but from the symptoms which arose on the evening of the 27th, I did not think it proper to continue it, and then placed my chief reliance on mercury. The result, however, was not favourable.

Nov. 30. JOHN ELDRIDGE, had complained, for two days, of loss of appetite and slight derangement of the bowels, and had taken a dose of calomel and jalap with much relief. In the morning I was sent for and found he had just emerged from the cold stage of fever. He complained of pain and tenderness across

the epigastric region, and pain in the forehead. The skin was dry and hot; and his pulse 100. I waited till the complete establishment of the hot stage, and then opened a vein in the arm. When fourteen ounces of blood had been taken, the pulse became fuller, and moisture began to appear on the surface. I then gave him the following:—

R, Magnesiae sulphatis, drachmas sex.
Antimonii tartarazati, granum unum.
Aquæ callidæ, uncias octo. Misce, et bibat statim.

This vomited him a good deal, and he brought up a quantity of greenish bitter fluid. He felt much relieved and perspired freely.

Eight, p. m. The pulse was 90, and thin; the tongue clean, and the perspiration had been profuse during the day. The pain in the forehead and epigastrium was diminished, and the tenderness of the region of the latter was now principally confined to the right hypochondrium.

Dec. 1st. Eight, a. m. The symptoms just now enumerated were still decreasing. The pulse was 80; he had had no stool since the medicine yesterday. I prescribed—

R, Hydrarg. submuriatis, grana octo.
Pulveris Antimonialis, grana decem.
Ipecacuanhæ Rad. pulv. grana tria. Conf. Rosæ q. s.
fiant pilulæ iv. Capiat unam tertiis horis.

Eight, p. m. In the course of the day he had four thin stools of a dark colour; but he complained

of thirst, and, upon the whole, was not so well. The pulse was 90.

Continuentur pilulæ.

2d, Eight, A. M. I found him much worse, and learnt from his messmates, that he had been delirious through the greater part of the night. He complained much of heaviness about his head, and breathed preternaturally quick. There was considerable tenderness of the right hypochondrium and scrobiculus cordis. The pulse was 120. I opened a vein in the arm, and when I had taken eight ounces of blood, he felt a little sick, and his pulse fell eight beats. I desisted, and gave him the following:—

R, Ætheris Rectificati, minima triginta.

Aquæ fontanæ, unciam unam. Misce, fiat haustus.

In half an hour, he was more comfortable; but as the sickness had not entirely left him, I ordered saline draughts to be taken in a state of effervescence every hour.

Noon. He was rather better, but had vomited twice.

Three, P. M. He having had no stool, a clyster of sulphate of magnesia in gruel, was administered, and a copious green evacuation, mingled with hardened fœces was shortly obtained; and he was much relieved.

Eight, P. M. He was evidently better, and had taken a little chicken broth. The pulse was 88, softer, and increased in volume. The perspiration was free

and copious. He had had another evacuation similar to the last, both in colour and consistence.

Rj Hydrargyri submuriatis, grana quatuor.
Pulveris Ipecacuanhæ, comp. grana sex. Conf. Rosæ
q. s. fiant pilulæ duæ. Sumat unam tertiis horis.

Rj Magnesiæ sulphatis, unciam dimidiam.
Aquæ fontanæ, uncias septem, cum semisse.
Sp. Ætheris nitrici, drachmas tres. Misce, fiat mistura,
cujus sumantur cochlearia duo larga omni horâ.

3rd. Eight A. M. He had a good night and was better.

Eight, P. M. I found that he had been using the bed-pan almost constantly since one o'clock, and suffering much from tenesmus. The evacuated matter was highly dysenteric; consisting of slime and bloody mucous. The pulse was 108 and vibrating, and his breathing was hurried. I gave him immediately, an ounce of castor oil on a draught containing forty minims of tincture of opium.

Ten, P. M. He had only used the bed-pan twice since my last visit. The pulse was small, and 120; the skin dry and burning hot; and the thirst excessive. He had vomited once, and complained of much pain in the forehead. The gums were swollen and tender. I employed venesection. When ten ounces had been taken, the pulse increased in volume; and therefore, I did not take more. Damp cloths, wetted with vinegar and water, were ordered to be constantly applied to the head and neck. They were very grateful to his feelings.

At Midnight I left him, (as he was then considerably better) with directions for a bolus to be given, containing a scruple of calomel, and half a grain of opium, should the vomiting or tenesmus again come on.

4th. The symptoms had not returned, and he had passed a good night, but did not take the bolus. Ptyalism was freely come on, and he had no other complaint.

5th. He was convalescent, with the exception of the ptyalism.

From this period he daily improved, and never had the slightest relapse. He suffered a little from sloughing of the mouth.

Remarks.—This was another instance of the efficacy of mercury in restraining the tenesmus attendant on dysentery, and subsequently in completing the cure. Before the establishment of ptyalism the mercurial excitement ran high, and therefore the repetition of blood-letting was required.

Having thus described the diseases which occurred during our stay in India, I shall now add a few observations on Chronic Dysentery, several cases of which happened amongst the Invalid Troops who were sent home in our ship from the Madras Presidency.

It is unnecessary to enter particularly into the symptoms of this complaint, since they cannot well be mistaken, by any professional reader. I shall confine

myself, therefore, to a brief account of that treatment which appeared most useful. Here again mercury stands pre-eminent, as the sheet-anchor of our hopes, and the main-stay of our success. For in all cases, where its specific action could be properly established, relief invariably followed. Upon the facility, therefore, with which this could be accomplished, depended the continuance of the disease. In two cases, which are fresh in my recollection, the use of mercury was persisted in for nearly two months, both internally and externally. The constitution, however, in both instances remained unaffected, and the termination of the complaint was fatal.

I have seen a single scruple dose of calomel, with one grain of opium, subdue the disease entirely; but in such cases, I have always observed the gums looked red and spongy, denoting the effect of the remedy on the system generally, and the susceptibility of the patient to its action. The calomel increases the number of evacuations for the first twenty-four hours. After which, a quiescent state of the bowels usually supervenes, and renders necessary the employment of some mild aperient. Castor oil should, I think, be preferred.

The vegetable astringents and calcareous earths have appeared to me of little or no use. Ipecacuan, in doses of two grains, in a solution of Arrow Root, seemed, in some instances, to be serviceable; and may therefore, as a palliative, be worthy of notice. The palliative, however, on which we placed our chief reliance, was opium. It was given in doses of one

grain, at intervals of eight, six, or even four hours, and proved a most valuable remedy.

In those unfortunate cases, therefore, where all our efforts to arrest the fatal progress of the disease are unavailing, it is gratifying that we have it in our power to alleviate the sufferings of the patient, and render easy the lingering approach of death.

Whatever sentence the experienced practitioner may pass on the contents of this little work, let me hope that the usefulness of it will be estimated by the corroborating testimony, which it gives, to the established and most efficient modes of practice, in those diseases of which it treats. For I do not pretend to have made any discoveries; neither do I think it essential to a medical work, that its principal feature should be novelty. Our remedies are already sufficiently numerous; but the great excellence of medical knowledge consists in their judicious and timely application.

I am perfectly aware how well the general properties of the diseases, here described, have been stated by abler authors; and I have carefully avoided invidious remarks on the opinions which they may have formed, and the method of treatment which they may have pursued. Neither have I increased the size of the pamphlet by quotations, which might appear unnecessary, if not ostentatious.

In the cases detailed, I watched the symptoms as they arose, and carefully committed them to paper, so as to be in no danger of mistake, from defect of

memory, or the intrusion of that extraneous matter, which now and then mingles with our recollections.

I am not presumptuous enough to imagine, that my authority can carry with it any weight; but the candid reader will pardon me for supposing it possible that some of the facts which I have recorded, may now and then suggest useful hints to my professional brethren; and happy should I be to find, that they afford them the smallest assistance, in their endeavours to mitigate those direful disorders, the treatment of which has been faithfully recited.



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