

**Observations on the means of preserving and restoring health in the West-Indies ... / [John Rollo].**

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From the Author



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LONDON MEDICAL  
OBSERVATIONS  
ON THE  
M E T H O D S  
O F  
PRESERVING and RESTORING  
H E A L T H  
IN THE  
W E S T - I N D I E S.

---

Ye guardian Gods, on whom the fates depend  
Of tottering Albion !

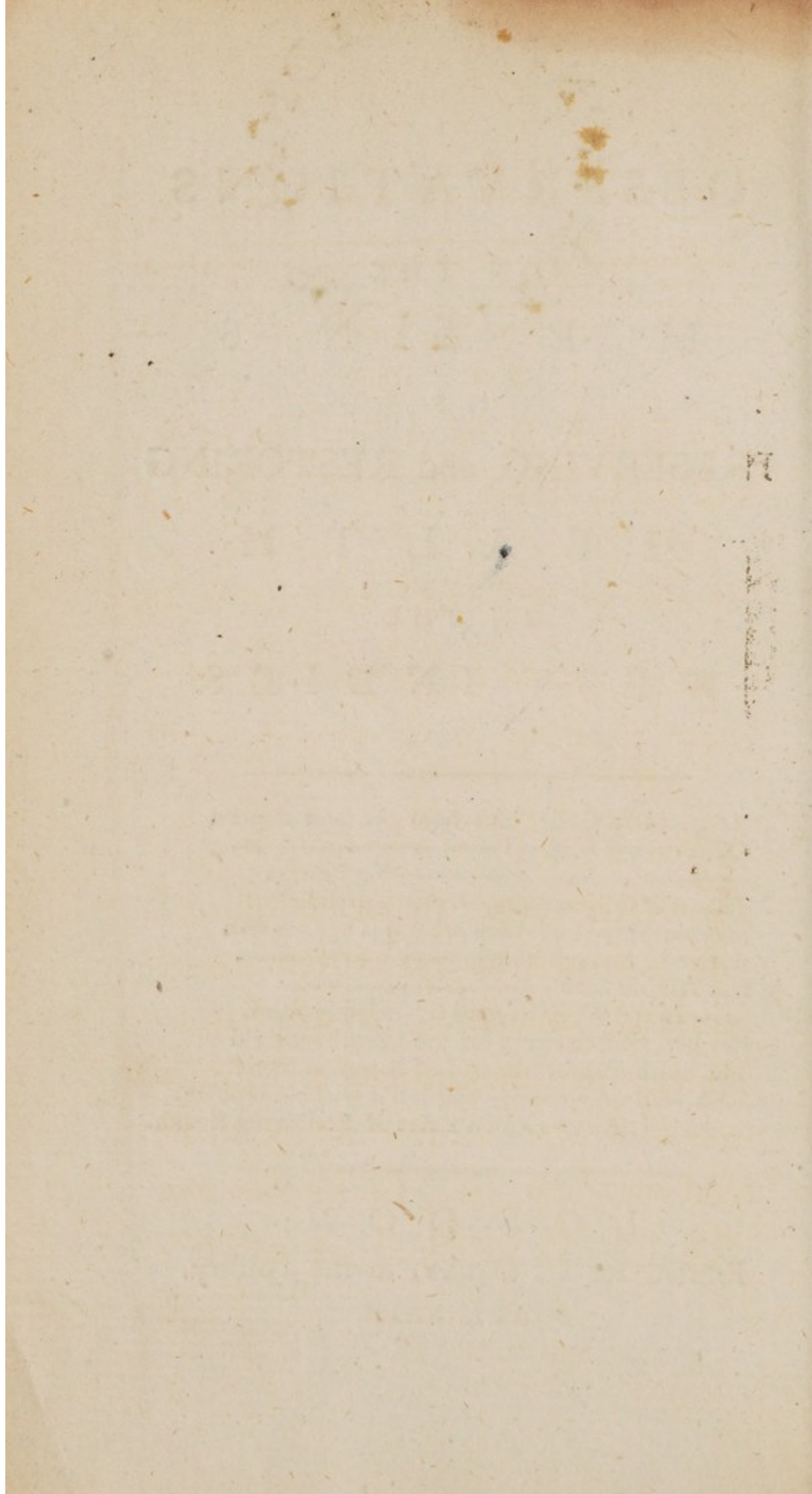
Ye Powers  
That o'er th' incircling elements preside !  
May nothing worse than what this age has seen  
Arrive ! Enough abroad  
Has Albion bled.

In the West, beyond th' Atlantic foam,  
Her bravest sons, keen for the fight, have dy'd  
The death of cowards and of common men ;  
Sunk void of wounds, and fall'n without renown,  
ARMSTRONG'S Art of Preserving Health.

---

L O N D O N :  
Printed for C. DILLY, in the Poultry.  
MDCCLXXXIII.





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TO THE  
OFFICERS of the ARMY  
IN THE  
WEST-INDIES.

GENTLEMEN,

**I** Attempted, in a very short  
Address to the Officers who  
arrived in the West-Indies  
about the beginning of Janu-  
ary 1781, to point out the most  
obvious causes which produce  
the diseases in those countries ;



and to shew that, by a regularity of conduct, it was in their power to avoid many of them, or to render them less active. The Observations I then made are now to be repeated; at the same time they are to be enlarged and confirmed. The frequent occasion I have had of regretting the want of attention and care in the periods of recovery, induces me to point out the most eligible steps to be taken to accomplish the restoration of health.

THESE Observations, Gentlemen, are addressed to you  
in

in two capacities ; as individuals, and as men having the direction of others. As individuals, your feelings and discernment will surely lead you to give a ready compliance with those things recommended to you. As men having the direction of others, your good-sense and humanity must force you to obtain a compliance in them. The soldier under your command is an object worthy of the most serious attention, and you are bound by every tie to give it. On your military behaviour

A 3                      depends,



depends, in a great measure, particularly in the West-Indies, the preservation and continuance of his health.

IN the course of these Observations, many things will be applied to the private soldier, which in some instances will be applicable to you : when these happen, I trust your superior knowledge will render any direct repetition unnecessary ; it is therefore avoided.

I FEEL it necessary, Gentlemen, to solicit the protection  
 3 of

of that candour and urbanity which so eminently distinguish your character. I feel likewise an earnest desire to persuade you, that the only motive I have in the publication of these Observations, is the firm belief I entertain of the great influence your own conduct has in the business of preserving and restoring health, in yourselves, and in the men under your command.

AND here I beg leave to acknowledge the obligations I lie under to many Gentlemen in the several departments of  
the



the Army for the assistance they have given me. To Mr. STEWART, Director and Purveyor of his Majesty's Hospitals in the Caribbee Islands, I am particularly indebted: but his professional abilities and extensive liberality place him beyond any effort of mine to make his virtues more conspicuous. I also confess my debts to other men, who, though remote from my personal acquaintance, are well known by their literary works; a confession which will be often repeated, as I shall carefully

fully mark, whenever I have  
recourse to their sentiments.

I now take the liberty of  
subscribing myself,

With the greatest Respect,

Gentlemen,

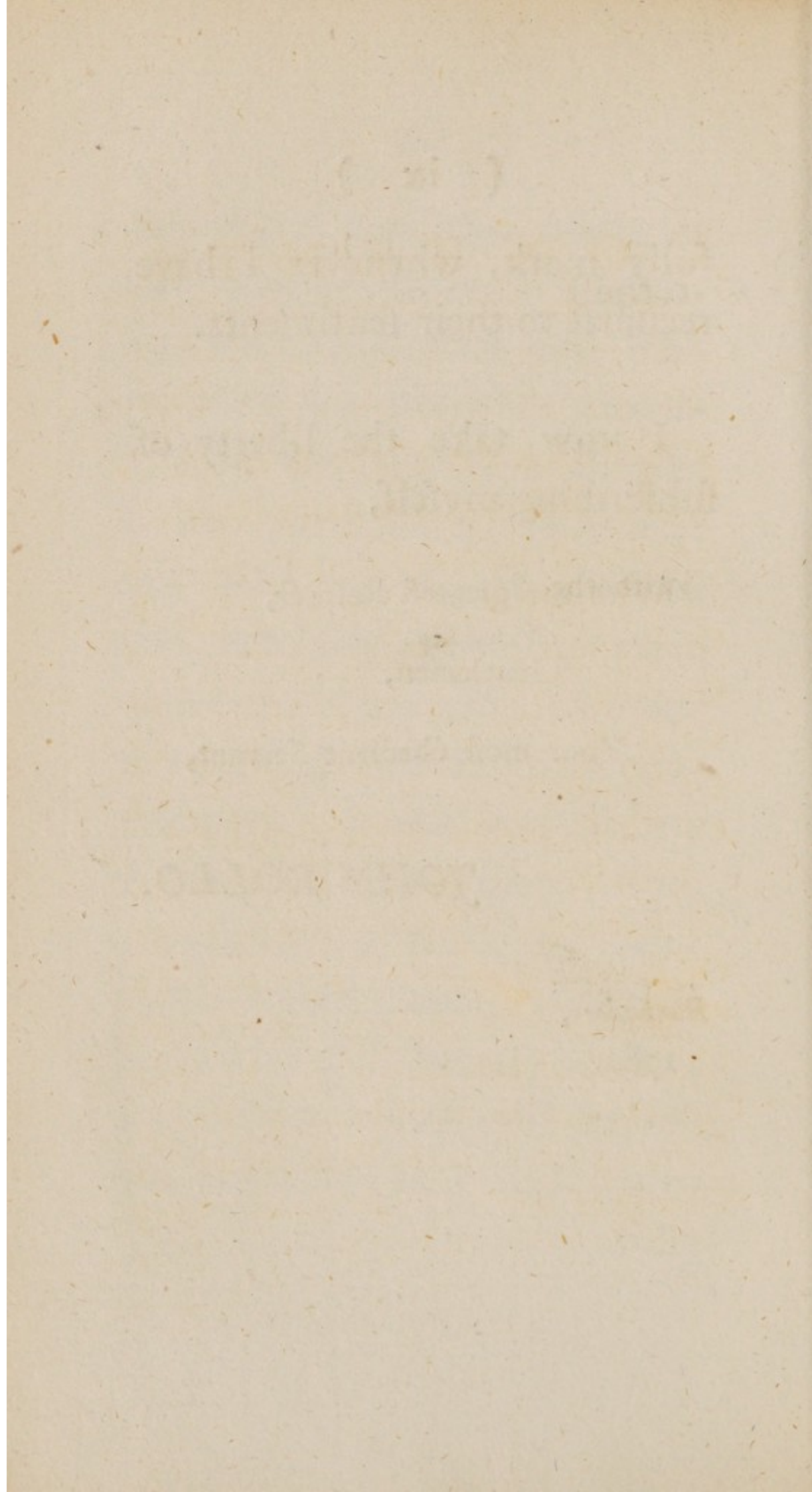
Your most obedient Servant,

JOHN ROLLO.

*Barbadoes,*

1782.





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O B S E R -

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OBSERVATIONS  
ON THE  
MEANS of PRESERVING HEALTH  
IN THE  
WEST-INDIES.

EXPERIENCE has sufficiently shewn, that the diseases which appear in the West-Indies, whether considered as peculiar to them, or as proceeding from causes prevalent in any country, are in general of a very dangerous nature, and are always of an uncertain and precarious termination.

B

If



If we take a view of the diseases as they arise in the Army, we shall find that they chiefly originate from causes often within our power to prevent, or to render less active. In the West-Indies an army is subject to diseases of a different class, if we determine this from their severity and fatality, from those with which natives, or even Europeans who are fixed in any constant situation, are affected : and this must proceed from causes peculiar to the Army. A soldier is liable to be removed from place to place, to be exposed to the inclemencies of the weather, and to be employed in every species of hard labour ; besides, he has no variety of diet, no choice of situation, and

and he must comply with whatever is directed. Even this is not all : a soldier, in an individual capacity, has frequently bad inclinations, which cannot be intirely restrained ; he has feelings and views peculiar to himself, which are difficult to be regulated. These traits of a soldier's character in the two views in which I have presented him, as complying with his military duty, and as acting in a private capacity, account for the difference of his diseases, respecting severity and danger, from those of other men. Officers can by strict discipline prevent irregularity, and a too frequent indulgence of vicious inclination ; they can also, by an attention to cleanliness, to



regular and well conducted mecting, and to sobriety, abate the rapid and mortal tendency of those diseases to which soldiers are more immediately liable.

FROM a superiority of rank and circumstances, officers can regulate their own diet ; they can often make a bad situation comfortable ; and they can avoid many exposures which it is impossible for a soldier to shun or to guard against. However, I am too sensible that there are many officers who are not always able to conduct themselves as their knowledge and prudence would direct. These gentlemen, particularly in the West-Indies, require an indulgent attention from  
Govern-

Government ; and they undoubtedly merit a double exertion from those more immediately connected with them. A commanding officer has it always in his power to act the father and the friend to the virtuous subaltern. By watching and directing his behaviour in health, it is probable he may preserve it ; by a kind attention to him in the hour of disease, he gains the esteem of all around ; and he feels the inexpressible satisfaction which constantly attends the exercise of humanity.



*Of the CLIMATE.*

**A** Country differs in climate from the sun's influence, from rain, and from peculiarities of soil and situation. The West-India climate is different from that of Great Britain and North America, from the rays of the sun being more vertical and constant; from having in general more rain; and from marshes, woods, or uncultivated ground. From some of these circumstances, Islands in the West-Indies, though at a trifling distance, vary considerably in climate, and in respect of health. Barbadoes and Antigua may be said to have a different climate from  
that



that of St. Lucia and Tobago. The two former, comparatively speaking, are as healthy as any spots in Europe; and the two latter are quite the reverse: the difference arises from rain, marshes, woods, and uncultivated ground. Heat therefore, even although produced by the vertical rays of the sun, is not the principal cause \* of

\* It may be doubted whether the sun's heat is a cause of any disease except a temporary head-ach, or what is called the "coup de soleil." Dr. Monro observes, in his Treatise on the Diseases of Soldiers, vol. I. page 4, That mere heat of itself is not such an enemy to health as is generally imagined. This the troops experienced at Coxheath in the summer of 1778, &c. Dr. Naesmith says, he observed the same thing in voyages to the East-Indies, which afford the fairest trials of this kind.—Dr. Lind's Essay on Preserving the Health of Seamen, 2d edition, note to page 5th.



the unhealthiness attributed to the West Indies. The circumstances I have mentioned as producing the sickly alterations, we have in our power to remove ; at any rate, to alleviate or resist. The quantity of rain can be lessened by clearing and cultivating the ground ; marshes may be drained ; and if this is not practicable, we can select a situation on which they have no effect. Necessity may expose us to rain, and to the vapour of marshes ; but even then we can by a guarded conduct partly resist their injurious impressions.

IN order to be more explicit respecting the climate of the West-Indies, I shall consider separately the

the effects of the sun, night air, rain, and situation, with the best and most probable means of lessening the prejudicial consequences of each.

---

### *Of the* S U N.

**T**HE human body is possessed of a considerable power to resist the effects of heat or cold. Philosophical experiments have demonstrated that we are capable of enduring a degree of heat beyond what our feelings could possibly suggest. The application, however, of artificial heat differs considerably from that of the sun,  
from



from its being more equally applied. This is evident in the “*coup de soleil*,” where the sun’s rays are supposed to act in a direct and partial manner. The effects of artificial and natural heat may be said to resemble each other in one respect—that if we divert the vertical rays of the sun, and have only an equal heat derived from the warmth of the surrounding atmosphere, nearly the same feelings will be produced ; as languor, or an universal weariness, an increase of perspiration, and perhaps a slight head-ach.

It is seldom we cannot divert the vertical rays, and bring the heat of the sun to almost the same  
mode

mode of application and effect as the heat raised by common fires ; therefore, we may take advantage of the power which our constitution possesses of resisting heat, and of preventing any bad effects from the sun's particular influence by a constant attention to the common means employed. An umbrella is one of the first things which presents itself ; and its use is attended with little trouble, though often neglected. The most proper umbrellas are those made of green silk, and of a large size. A considerable addition to their usefulness would be soon felt by a double covering of silk, or, what I prefer, a piece of thin dimitty, extending about twelve inches  
around



around the top on their inside. A handkerchief\* folded and put under the hat is not only a good substitute for an umbrella, but with many it answers better. I know gentlemen whom the use of the umbrella does not secure from the head-ach when walking or riding in the sun, yet are defended from attacks of this complaint in the same degree of exposure merely by the use of a handkerchief. The umbrella and handkerchief may be used at the same time. A very thin silver plate extending over the inside of the hat, and covered with dimitty or any cotton body, is likewise found useful ; and

\* Black handkerchiefs are improper, and all silk ones are exceptionable.

it

it may be made to be transferred from one hat to another. Black hats are very improper in the West-Indies, although they are chiefly used. Soldiers ought to be allowed to wear white hats, which are procured with ease, and not at a dearer rate, I believe, than black. Those who are destined for the West-Indies may have their common regimental hats issued to them without the black dye; and when they are in the West-Indies, they may be supplied from home with the same kind. Dr. Lind \*, a gentleman to whom the military world is much indebted, observes, “ that the black hat, which con-

\* Essay containing Advice to Europeans in Warm Countries, page 250.

“ substitutes



“stitutes part of the regimental  
 “dress of an English soldier, is  
 “altogether improper in hot cli-  
 “mates ; as in those countries sol-  
 “diers are apt, in the heat of the  
 “day, to be suddenly seized with  
 “a species of apoplexy, occasion-  
 “ed by the scorching beams of  
 “the sun, darted on the head, and  
 “absorbed by the blackness of  
 “the hat ; to prevent which a  
 “white covering for that seems  
 “requisite.” If white hats can-  
 not be admitted, soldiers should be  
 directed to have the crown of their  
 hats externally covered with thick  
 white paper, and fastened by the  
 common hat-bands. If walking  
 and riding in the sun, or any kind  
 of exposure to him, cannot be dis-  
 pensed

penfcd with, the greateft attention fhould be paid to the hints I have given. In riding or walking, the lefs motion excited the better; for in proportion to that, the fun's influence will affect.

NATURE, as if confcious of the effects of heat, has in the Weft-Indies generously provided the refreshing breeze and acescent fruit. Art has likewise contributed to the fame purpofe by the well-adapted houfe. Thomson beautifully expreffes the fhelter Nature gives :

Bear me, Pomona ! to thy citron groves ;  
To where the lemon and the piercing lime,  
With the deep orange glowing thro' the  
green,  
Their lighter glories blend. Lay me, reclin'd,  
Beneath the fpreading tamarind, that fhakes,  
Fann'd by the breeze, its fever-cooling  
fruit.

Deep



Deep in the night the massy locust sheds,  
 Quench my hot limbs ; or lead me thro' the  
     maze,

Embowering endless, of the Indian fig ;  
 Or thrown at gayer ease on some fair brow,  
 Let me behold, by breezy murmurs cool'd,  
 Broad o'er my head the verdant cedar wave,  
 And high palmetos lift their graceful shade ;  
 Or, stretch'd amid these orchards of the sun,  
 Give me to drain the cocoa's milky bowl,  
 And from the palm to draw its freshening  
     wine,

More bounteous far than all the frantic  
     juice

Which Bacchus pours. Nor on its slender  
     twigs,

Low bending, be the full pomegranate  
     scorn'd ;

Nor, creeping thro' the woods, the gelid race  
 Of berries. Oft in humble station dwells  
 Unboastful Worth, above fastidious Pomp :  
 Witness, thou best anâna ! thou, the pride  
 Of vegetable life, beyond whate'er

The poets imag'd in the Golden Age :  
 Quick let me strip thee of thy tufty coat,  
 Spread thy ambrosial stores, and feast with  
     Jove !

WHEN a head-ach, thirst, or any uneasy feeling, arises from exposure to the sun, it may be generally removed by rest in the shade ; by abstaining from vinous and spirituous liquors ; and by the free use of lemonade, cream of tartar and water, the juice of oranges, or cold infusions of tamarinds. If, however, any of these complaints continue more than twelve hours, gentle evacuation, if not effected by the preceding drinks, will be necessary ; and that may be procured by a small quantity of Glauber salt.



## OF NIGHT AIR.

**B**Y night air I comprehend that diversity of air which occupies the space from the sun's quitting the horizon to his return in the morning.

THE night air in every country is deemed prejudicial to health, and by the prudent always guarded against. In elevated situations ; in abodes not infested by marshy exhalations ; and where the atmosphere is generally temperate and serene, fanned occasionally by cooling breezes, the night air is less hurtful and dangerous. But

in countries like the West-Indies, where the heat of the sun is intense, where there are frequent falls of rain, and where unhealthy situations appear, the nocturnal air is baneful, and ought to be shunned. Dr. Monro, who was a long time at the head of the hospital department in the army, observes \*, “ that nothing has been  
 “ found to be more productive of  
 “ diseases in warm climates than  
 “ exposure to the damps, especially lying on the ground after the  
 “ dews have fallen.” A soldier’s duty often exposes him unavoidably to all the extremes of the

\* Diseases of the Army, 2d edit. page 45.



night ; however, by an attention to a few precautions, any injurious effect may be in a great measure baffled. In all possible cases, soldiers on centinel or other similar duty should be sheltered by some proper covering—a house, compact hut, tent, or the boxes commonly used. Every soldier on exposed duty ought to be provided with a watch-coat, which may be very easily carried without obstructing his service ; likewise, woollen stockings, whole gaters, and thick shoes, are infinitely more proper than the trowsers now injudiciously in use : and I here prefer the thick waistcoat and breeches to those made with nankeen and  
linen,

linen, which are at present substituted. In the day-time a light dress is comfortable and beneficial; but it is quite the reverse in nocturnal duty. Soldiers should be allowed to take with them a small quantity of spirit, and encouraged to smoke or chew tobacco in every situation of night duties. Soldiers ought to be strictly ordered not to rest or lie down on the damp ground. Men upon outposts, when no disadvantage to the service can attend, would feel not only pleasing sensations, but likewise salutary effects, from collecting wood and burning it, which warms, and corrects the surrounding atmosphere.



IN the morning and evening, especially in the winter months, we are sensible of a degree of cold exciting chilliness : this, however, is remarkably different from those sensations induced by a cold air in a northern climate. In the West-Indies, it produces languid and disagreeable emotions ; in the other, cheerfulness and activity. These feelings point out the warm cloathing ; but officers in general, not aware of the pernicious effects of an air of that kind, mount guard, or do any other duty which exposes them to the inclemency of the night, with the same cloathing they wear when the sun is in his meridian. Instead of the whole gater recommended

commended for soldiers on night duty, officers, as they have it in their power, should constantly use boots.

THE preceding observations are applicable to rainy periods, as I shall immediately explain.

---

## Of R A I N.

THE rainy seasons have always proved the most unhealthy, not only in the West-Indies, but in every part of the world. Experience has told us, that even these periods may be



rendered less unsalutary, by an attention to our mode of living, cloathing, lodging, and situation. Our living should be free and generous, without intemperance and irregularity. Our cloathing ought to be of that kind which is best calculated to defend us from the rain, and beget a natural warmth which may prevent any disagreeable effect. Our house must not admit the rain, but be compact, warm, and dry ; and its situation must be out of reach of the noxious vapour of marshes, and of the air which passes through impenetrable woods. Part of what I have said, Dr. Armstrong elegantly comprehends in the following lines :

If



If the raw and oozy heaven offend :  
 Correct the soil, and dry the sources up  
 Of wat'ry exhalation.———

——At home with cheerful fires dispel  
 The humid air ; and let your table smoke  
 With solid roast, or bak'd, or what the herds  
 Of tamer breed supply.———

Generous your wine, the boast of rip'ning  
     years,  
 But frugal be your cups ; the languid  
     frame,  
 Vapid and sunk from yesterday's debauch,  
 Shrinks from the cold embrace of wat'ry  
     heavens.

THE directions I have given on  
 duty, under the article of Night  
 Air, are here equally introduced  
 and recommended. Soldiers when  
 they are relieved, after being ex-  
 posed to rain, should be ordered  
 instantly to their barracks or apart-  
 ments, whatever they are, to shift  
 themselves, and previous to going  
     into



into bed to kindle fires either within or at the doors of their habitations; and during this they may take a glass of spirit, and indulge in smoking or chewing tobacco. Dr. Monro says, “ that in wet  
 “ weather centinels, or men upon  
 “ outposts, should have a small  
 “ glass of pure spirit given them in  
 “ presence of the officer or serjeant  
 “ of the guard : fires in the rear  
 “ of the camp for men coming off  
 “ duty to warm and dry themselves  
 “ at, were found to be of great service.” Mindererus recommends\*, “ in wet, unwholesome  
 “ seasons, to make fires of wood

\* *Medicina Militaris*, chap. iv. English translation, page 23.

“ before



“ before the tents, and to burn  
 “ wetted gun-powder, to purify  
 “ the air :” and he observes, “ that  
 “ volleys of shot made mornings  
 “ and evenings in a camp, conduce  
 “ very much to the dispelling of  
 “ mist and qualifying raw air.”

IN the rainy seasons, and in the  
 night, every duty should be dis-  
 pensed with that is not absolutely  
 necessary, from the presence or  
 immediate apprehensions of an ene-  
 my. By attention to this circum-  
 stance alone in the West-Indies,  
 the lives of many soldiers may be  
 prolonged, to the important ser-  
 vices of their country. Of what  
 consequence is an officer's charac-  
 ter ? He is intrusted with the lives  
 of



of numbers, and is answerable for them ; if not ostensibly to the public, to the natural feelings of humanity. What a field opens to the benevolent and generous ! A constant opportunity is given for the liberal exercise of every tender suggestion. The man who saves one valuable life to his country, is a more respectable and worthy member of society than he who has destroyed any number of its enemies.

*of*

## Of SITUATION.

**O**N the choice of situation of the spot on which we fix our residence, though it be but temporary, principally depends the preservation of health in the West-Indies. All countries have their unhealthy places, and these observation has shewn to proceed from marshes, stagnating water, and woods. The most unhealthy country has its healthy situations : even the unfortunate Island of St. Lucia is not without them. But, as we have observed in another place, soldiers cannot always select the spots on which they may fix their



their abode. When active operations are carrying on, either in defence or attack, it is impossible that the healthy or sickly state of any situation can be attended to, every consideration giving way to security or success. The moment however in which we are free from danger, the health of the army becomes the principal object; and the first thing to be observed, is the particular parts where soldiers are to be encamped or stationed.

It will be unnecessary to prove that the neighbourhood of marshes and thick woods is dangerous, it being evident to every one acquainted with the West-Indies : I shall therefore content myself with  
specify-

specifying the healthy places, and marking the most probable means of preventing the effects of a bad situation, when necessity admits of no other.

DR. LIND \* says, “ experi-  
 “ ence fully confirms this truth,  
 “ that in such elevated and tem-  
 “ perate situations, where the  
 “ soil is dry and gravelly, and clear  
 “ from wood, shrubs, or stagnating  
 “ water, Europeans enjoy good  
 “ health in the hottest climates,  
 “ during all the seasons of the  
 “ year.”

\* Advice to Europeans in Hot Coun-  
 tries, page 219.

DR.



DR. MONRO † observes, “ that  
 “ the most healthy situations in  
 “ warm climates are those on  
 “ the sides of hills or mountains,  
 “ where the soil is dry, and clear  
 “ from woods and stagnating wa-  
 “ ter, and where there are no mo-  
 “ rasses within three miles.”

THESE quotations sufficiently  
 point out the places to be selected  
 for the residence of officers, and  
 for the encampment of soldiers.  
 I shall only add, that the wind-  
 ward parts of an island, and those  
 most exposed to a wind not inter-  
 cepted by woods, or impregnated

† Diseases of Soldiers, 2d edit. page 45.

with any thing from the land, are the most healthy situations.

AFTER a healthy place is found, and officers and men are fixed, I sincerely advise them not to go even on a visit, except obliged by the most positive duty, to an unhealthy spot. Dr. Lind mentions an instance of some officers whose usual residence was on Monk's-hill, from sleeping a night or two in English-harbour, Antigua, being attacked with a yellow fever on their return to that healthy eminence. More instances of this kind could be adduced, but the preceding one is sufficient; and I observe that this and all other similar cases are applicable to Morne Fortune and the town of Carenage, St. Lucia.

D

That



That Island has proved fatal to many officers and men ; and on, a close enquiry, we shall find the misfortune can with certainty be chiefly attributed to a wandering from a healthy situation to one perfectly opposite. Officers may trace sickness and death from the time spent in the Carenage, which is a collection of houses surrounded by mortality. Officers who have attached themselves to their home, while they lament the imprudence of others, feel the heart-felt satisfaction of a prudent conduct, and that good state of health which seldom fails to attend it. Here I remark, that the marsh surrounding one side of the Carenage, might be drained by cutting canals,



nals, &c. ; and I think this is a scheme which deserves the attention of a commander in chief.

WHEN the necessity of service deprives us of choice, and compels us to fix upon the most unhealthy situation, we are to make use of the means which are best calculated to prevent its unfalutary effects. When we are in the neighbourhood of marshes, and to leeward of them, we should have that side of the house or hut which faces them shut up as close as possible, and the door and windows made in the opposite side. If an officer has a marquee, the front of it should be placed from the marsh, and the back part towards it : the same



thing ought to be observed in the encampments of the men. In these situations, wood fires between the marsh and the hut or tent, twice or thrice a-day, particularly in the morning and evening, and frequently made during the night, would be attended with advantage : smoking or chewing tobacco is likewise found useful. An infusion of bark, snakeroot, or any bitter, in spirit, has been also recommended : a little of either by itself, or mixed with water, taken in the morning or when exposed in the night, may be used. If a bitter infusion cannot be procured for the men, a small quantity of common spirit should be given to them, under the inspection of an officer,



officer, or of a trusty non-commis-  
sioned officer. When guards are fix-  
ed on unhealthy situations, each man  
should take, on mounting, a large  
dose of powdered bark in water  
with a little spirit ; and this should  
be repeated when he is relieved.  
Every man coming from such situ-  
ations should be examined, and if  
he has the slightest head-ach or  
sickness, an emetic immediately  
given, and followed by two or three  
doses of bark, might prevent a  
serious attack of the disease. By  
attending to these things, the sur-  
geon's and officer's trouble will be  
amply rewarded. If the guard  
kept at the Carenage in St. Lucia  
was treated according to the pre-  
ceding rules, the danger which at



present attends that service would probably be obviated. These remarks, which I have made on the means of preventing the bad effects of an unhealthy situation, throw opportunities in the way of officers to shew the care and regard they have for the men belonging to them. Soldiers, however inattentive, are not insensible of kind offices ; they will repay their officers by fidelity and constancy in danger : at any rate, the pleasure of having merited them is impressed.

I SHALL add the sentiments of Dr. Lind \* respecting the prevention of disease from unhealthy situations.

\* Advice to Europeans in Hot Countries, pages 149, 151.

THE



“ THE best preservative against  
 “ the mischievous impression of  
 “ a putrid fog, a swampy or  
 “ of a marshy exhalation, is a  
 “ close, sheltered, and covered  
 “ place ; such as a house in  
 “ which there are no doors or  
 “ windows facing these swamps.  
 “ If, in such places, a fire be kept  
 “ either in the chambers, or at  
 “ the doors, or other inlets into a  
 “ house, (as is practised in some  
 “ unhealthy countries, during the  
 “ rainy or noisome foggy season)  
 “ these fires, together with the  
 “ smoke, prove an excellent and  
 “ effectual protection to those  
 “ within against the injuries of a  
 “ bad air. Swampy forests emit



“ putrid vapours, which are apt to  
 “ produce an immediate sickness,  
 “ a vomiting, and afterwards a  
 “ low nervous fever. In such cir-  
 “ cumstances, a vomit taken im-  
 “ mediately, and a change into a  
 “ pure air, will often prevent a fit  
 “ of sickness.”

ARMSTRONG says :

———— I praise the man who builds  
 High on the breezy ridge, whose lofty sides  
 Th’ ethereal deep with endless billows  
 chafes.

His purer mansion nor contagious years  
 Shall reach, nor deadly putrid airs annoy.  
 But may no fogs, from lake or fenny plain,  
 Involve my hill ! And wheresoe’er you  
 build,  
 Dry be your house ; but airy more than  
 warm.

——— On

————— On the marshy plains  
Build not ; nor rest too long thy wand'ring  
feet.

For on a rustic throne of dewy turf,  
With baneful fogs her aching temples  
bound,  
Quartana there presides.

——— Avoid the mournful plain  
Where osiers thrive, and trees that love the  
lake ;  
Where many lazy muddy rivers flow :  
Nor for the wealth that all the Indies roll,  
Fix near the marshy margin of the main.

*Of*



Of EFFECTS *peculiar to*  
*the* WEST-INDIA  
 CLIMATE.

STRANGERS after their arrival in the West Indies are liable to some complaints which may be said to be peculiar to the climate: and these do not seem to arise distinctly from any one of the circumstances which I have already considered; but they appear to proceed from a conjunction of some of them, or rather from something not well ascertained. Every person, however guarded and cautious even in those places deemed the most healthy, is subject to the complaints alluded to, and seldom or ever escapes an attack of them. They are, however, more troublesome than dangerous,



rous, yielding always to a mild treatment, and I may say never proving fatal, if early and judiciously attended to.

**HEADACH** with sickness or loathing of food, a bitterish taste, costiveness, and a high-coloured urine, are among the first things which affect Europeans. These soon go off by confinement, an abstinence from the usual diet and liquor, and a free use of lemonade, cream of tartar and water, or tamarind beverage. If they should continue after this twenty-four hours, gentle evacuations, &c. will be necessary; but here recourse must be had to the surgeon.

**ERUPTIONS**, as the prickly-head, and another kind generally taken for  
for



for musquetoe bites, are the constant attendants upon all new-comers.

THE prickly-head is not altogether confined to strangers, it visits some of the natives annually : it is a mere external eruption, and not connected in itself with any other affection. It is a vulgar idea that it is a salutary appearance, and is thrown out from the blood ; it affects only the skin, and is produced, I think, principally by the action of heat upon it. What has given rise to its being a more serious thing, is the common observation, that when it disappears a head-ach, &c. attend. This is not always the case ; and when it does happen, the headach and other complaints generally precede its disappear-



disappearance, which is only produced by the intervention of an accidental disease, that diminishes or contracts every exterior part. A variety of external applications are recommended, but I never saw one of them repay the trouble accompanying its use. A light cool dress and patience are the only things I advise.

THE other kind of eruption, which is often taken for musquetoe bites, requires more attention; for it is frequently accompanied with fever, generally with head-ach, which in many cases is attended with an inflammation of the eyelids. This eruption commonly appears first on the legs and thighs, then on the arms, neck, and  
rent



face, resembling bumps of different magnitudes, from the size of a pea to four times its bigness: they have an extensive base, and protrude above the skin, terminating in an apex or point. They itch exceedingly, and it is next to impossible to refrain from scratching, which is sure to make them bleed, and increase the inflammation and pain. They continue for some days, then gradually disappear, and are succeeded by a new set; which is in many instances again repeated. If a headach and inflammation of the eyes, or any mark of fever attend, directions should not be trusted to, but medical assistance be called in. For the eruption itself, all that is necessary consists in a moderate and light diet,



diet, a plentiful use of lemonade or tamarind drink, which keeps the belly gently open, and in refraining from scratching as much as possible.

DR. HILLARY, who treats of the diseases of Barbadoes, takes notice of both these eruptions, and gives an accurate description of them. He observes, that they often appear at the same time, by which every symptom is more troublesome. He condemns the use of external applications, particularly in the prickly-head, which he supposes may repel it, and produce dangerous effects. It is immaterial, in common directions, whether we say external applications repel the prickly-head, and bring on more serious diseases ; or that they  
are



are more troublesome than useful, therefore may be altogether laid aside.

I SHALL here introduce a method, which I am confident, if it was strictly followed, would be attended with the best effects, in preventing soldiers from being attacked with disease on their arrival in the West-Indies. I tried it on a detachment of the Artillery, consisting of twenty men, who came from England, after they were landed at Barbadoes ; and I am certain, advantage was the consequence. The trial must, I allow, be carried further ; and it may be extended to other situations, which I shall point out. The method is not my own ;



it comes from respectable authorities, but it is not prosecuted; at least, if it is or has been in the West Indies during this war, the practice must be partial, and not so generally used or known as its importance merits. The whole business is comprehended in giving the men a certain quantity of Peruvian bark once a day, and repeating it for a few more; then leaving it off two or three days; commencing again, and continuing it for three or four days longer; after which it is to be discontinued. Each man in this way is supposed to take about two ounces of the bark, which to a regiment consisting of six hundred men will amount to seventy-five pounds weight. This quantity of

E

bark



bark given in the manner I direct, will probably save more than three times the weight.

THE Artillery men on whom I began this practice at Barbadoes, were paraded in the morning about eight o'clock; their number was twenty. I mixed in a vessel forty drachms, which is equal to five ounces of powdered bark, with four pints of common water, and half a pint of rum. Of this mixture, I gave out of my own hand to each man nearly one gill, which disposed of the whole quantity. This was repeated at the same hour for two or three mornings, then discontinued; renewed again in three or four days, and continued until each soldier had taken two ounces of bark, when it was entirely left off.



BEFORE I attempted this practice, the men began to complain daily of bilious affections; but after they had taken the bark, those complaints ceased, and the men continued in tolerable health, although they were unavoidably put upon fatigue in disembarking and arranging ordnance stores. During the preceding exhibition of the bark, the greatest attention was given to regularity and cleanliness, and the men who had no complaint bathed in the sea every morning before the hour of parade. But of these I shall hereafter have occasion to make more particular mention.

If the practice I have recommended was rigidly attended to in more unhealthy islands than Barbadoes,



the advantages would be more conspicuous, and fully repay any expence or trouble. It must appear at first view, that the medical character is not altogether the acting one, here ; the officer holds a distinguished part, and without his assistance very little can be done or expected. Soldiers do not consider themselves under the surgeon's direction until they are sick ; here only men in health are concerned ; therefore the officer must interfere, and inspect the taking of the medicine. This is a duty of humanity in which all the generous feelings are interested ; the officer will therefore exert his influence. In the West-Indies we must go hand in hand ; for to me it is scarce  
a mat-



a matter of doubt, whether the officer is not more concerned in the prevention of sickness among the soldiers, than the surgeon.

It will be unnecessary for me to point out from what source the bark is to be supplied, or to mark the particular modes which corps may adopt in giving it, these naturally occurring to those of whom it is required. I humbly solicit the attention of the commander in chief, the commanding officers of regiments, and the gentlemen at the head of the hospital department, to what I have taken upon me to recommend ; and I also beg a continuance of it, to the observations which immediately follow.



As it is certain that some of the islands in the West-Indies are more healthy than others, is it not to be presumed that eminent advantages would accrue to the service, if soldiers, on their arrival in these countries, were stationed for some time in the most healthy islands, before they were sent to those which are deemed more unhealthy? In the one situation, they have only the effects which I have marked as peculiar to the West-India climate to encounter; in the other, they have these united with causes that never fail to produce dangerous diseases.

IMMEDIATELY after a man's arrival in the West-Indies, if he is placed on an unhealthy spot,



spot, he is attacked with a bilious complaint, which in a healthy situation would not be dangerous ; but here it becomes so, because it renders the body accessible to the effects of the unhealthy spot on which he is fixed. If this man on his arrival in the West-Indies was placed on a healthy situation, he would probably have an attack of bilious complaint, but such a one as would soon leave him. After this, 'tis fix to one if a removal to an unhealthy situation would produce another visit of the bilious complaint ; for which reason he will not be so liable to be affected by the causes of disease that surround him. However, I by no means advance, that such a man will not have a dangerous dis-



ease in the unhealthy situation ; I only infer, that the probability on the other side is in his favour.

FROM what I have said I wish to convey this observation, that all regiments or detachments of men from Europe, on their arrival in the West-India Caribbee Islands, should be stationed in Barbadoes or Antigua until they are habituated to the nature of the climate ; then they may be sent to more unfavourable situations, being previously relieved by a similar set from England, or by men from that place to which they are destined. By this step two purposes are answered : Men have a fairer chance of resisting the diseases in the West-



Indies ; and men who have been some time in an unhealthy situation, and very likely nearly worn-out by disease, are relieved, and have a prospect of once more enjoying tolerable good health.

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### *Of* LODGING.

**I**HAVE already observed the bad effects of the West-India climate under the circumstances of the sun's influence, night air, rain, and unhealthy situations, which sufficiently point out the kind of lodging most suitable to prevent them.



them. I shall therefore only further observe, that after a choice of situation, it ought to be the next object with the commanding officer, to see that his inferior officers and men are comfortably sheltered in cool and dry lodgings. Here I might summon the attention to prove the prejudicial consequences which follow a leaky roof, and a damp floor; but it will be quite enough to sound the fatal name “St. Lucia!” It is impossible to direct our eyes towards that unfortunate island, without lamenting the fate of many valuable lives, which have fallen sacrifices to an ill-concerted œconomy, or some other mistaken system. Well may  
we

we at this day adopt the language  
of Armstrong—

Albion's———

—— bravest sons, keen for the fight, have  
dy'd

The death of cowards and of common men ;  
Sunk void of wounds, and fall'n without  
renown.

AFTER comfortable and well-placed lodgings are provided, the next thing which occurs is the management and behaviour of soldiers in them. Soldiers are apt to lounge and loiter in their barracks, which never should be permitted, as indolence is not only prejudicial in itself to health, but more so by begetting dirtiness and filth. Certain regulations should be adopted, to keep, on pain of punish-



punishment, the lodgings clean and dry, and free from incumbrances. If possible, nothing ought to be admitted within the barrack but what is absolutely necessary : all spare cloathing and accoutrements should be some other way disposed of. A soldier may be allowed to eat his victuals there ; but after doing this, the place ought to be carefully swept, and the utensils of the mess quickly cleaned and put away. Washing the face and hands and linen, combing the hair, brushing cloaths, cleaning belts and firelocks, are to be forbidden, except in circumstances where it is impossible to avoid doing these things within the barrack ; and then double care should be bestowed in sweeping,



fweeping, and preventing a retention of moisture. The bedding, of whatever kind, must be aired every dry day ; and if it consists of any thing that can be washed, it ought to be washed once or twice a week. Any difficulty of having these things strictly performed, lies only in appearance ; on trial, it immediately vanishes, depending entirely on orders being given and obeyed, which every officer can always accomplish. I have purposely omitted saying any thing about necessary-houses, the propriety of having them in the rear of lodging or encampment, and of keeping them clean, being obvious to all.



*Of* DRESS.

CLEANLINESS is not only pleasing, but comfortable ; it is salutary and beneficial. A soldier cannot be too rigidly attended to in point of dress ; for the one who is constantly neat and clean, is neither indolent or lazy ; two things which I have observed are prejudicial to health. In the Army, every thing ought to be done by rule. At an allotted period, soldiers should comb their hair, wash themselves, and put on their cloaths ; and these are to be performed under the inspection of non-commissioned officers ; and if they  
require

require notice, this is a duty not beneath a more elevated character. In the day-time soldiers may be indulged in the choice of what kind of waistcoats, breeches, trowsers, and stockings, they will wear ; but in night duty, or in cases of exposure to rain, they should be only permitted to wear the regimental waistcoat, breeches, and stockings. No material inconvenience can arise from the change of dress which here takes place. Dr. Monro says, “ Soldiers should be  
 “ obliged to keep themselves neat  
 “ and clean ; to comb their hair,  
 “ and change their linen often ;  
 “ and if the camp be near the sea  
 “ or a large river, they ought to  
 “ bathe themselves early in the  
 “ morning,



“ morning, as the service will  
 “ permit.”

BATHING in cold water in the West-Indies being followed by cheerfulness and activity, becomes very necessary, besides its being conducive to cleanliness. Officers in any situation can have almost every advantage to be derived from plunging in the sea, by having two or three pailfuls of cold water thrown over them by a servant early in the morning ; or if convenience will allow, the shore bath may be adopted. Soldiers ought not to have a discretionary power to bathe, because they are liable to abuse it, either by chusing an improper time, or being in a state  
 in



in which it may prove hurtful. If regiments or detachments were paraded at a selected hour, and marched off to bathe under the direction of officers, those men whom the surgeon judged to be improper subjects being previously excluded, then the good effects of bathing, without its inconveniences, might be expected. The detachment of Artillery formerly mentioned as having bathed while they were using bark, immediately after their arrival at Barbadoes, went into the sea two hours before the morning parade ; which made the hour of bathing to be about six o'clock, the period I judge most proper.

THE circumstances which render bathing improper, are in-  
 F disposition



disposition of any kind, except arising from weakness, (but here the surgeon interferes, and must determine) headach, and the presence of eruptions.

SOME doubt arises whether the prickly-heat makes bathing dangerous. I have already said, that I consider the prickly-heat to be a mere affection of the skin, unconnected with any other bodily indisposition; therefore, I can see no injury arising from bathing with it. I have known many bathe with the prickly-heat, and never saw any inconvenience arise, except its becoming more plentiful and troublesome. However, bathing with the prickly-heat is seriously condemned by many medical gentlemen in the  
West-



West-Indies ; Drs. Hillary and Monro forbid it ; therefore, I would by no means particularly recommend or advise it. One criterion may guide us—that if we bathe with the prickly-heat, and find it followed by any thing disagreeable, we can desist ; but if it is succeeded by only an increase of the eruption without any complaint, I think we may safely continue.

IN this place I cannot omit acknowledging, besides what I have elsewhere declared, and which I must always repeat from the constant occasion given, the attention of Major WILLIAMSON, command-



ing the Artillery in the West-Indies.—Ever ready to direct what is necessary, and to comply with what is pointed out for the advantage of his men, he has become the father of the soldier, and the valuable officer of his country.

WHILST I do justice to this character, it is impossible to refrain from paying a like tribute to Col. CUYLER, who commands the 55th regiment. This regiment, for management and discipline, gives the model which every other corps should imitate. The conduct of soldiers in barracks, in point of dress and regularity, and the mode of bathing, are here inculcated to us by an invariable practice ; and the practice

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tice has been repaid by a superior degree of healthiness. From this I by no means infer, that all other regiments are inattentive to regularity and discipline ; I am persuaded of the contrary : however, I do not hesitate to say, that more attention might be paid to them in every corps in the service.



*Of* D I E T.

**T**HE diet of officers may be conducted by the following line —

Live well, and live regularly.

Living well and living regularly are far from being incompatible. A tasty and nourishing diet, even a generous allowance of wine, may not only be used, but are absolutely necessary to answer the purposes of health \*. The moment,

\* Dr. Wind, in his notes to a translation of Dr. Lind's Essay on the Diseases incidental to Europeans in Hot Countries, observes, that at Middleburgh, the capital of



ment, however, we go beyond the cheerful glass, that instant we expose ourselves to every cause capable of producing disease.

FROM a comparative view of the different degrees of health and sickness among those who have lived in conformity to the maxim stated, and in a manner diametrically op-

of West Zealand, in the month of August, after the rains which happen in July, intermitting fevers prevail: he says, such as live well, drink wine, and have warm cloathing and good lodgings during the sickly season, do not suffer so much as the poor people. Dr. Knox told Dr. Monro, that last war, in the Guadaloupe expedition, he observed that those who had opportunities of drinking Madeira and claret, and used those liquors in moderation, were less liable to dysenteries and bilious fevers than others.



posite, the beneficial consequences of the one and the pernicious tendency of the other are well ascertained. A vigorous and active constitution has the greatest probable chance of resisting the causes of disease, in any possible situation ; therefore, whatever gives and secures that constitution, is best calculated to preserve health.

A REGULAR and temperate mode of life, a comfortable lodging, a cheerful state of mind, and a generous diet without the smallest degree of excess, constitute the essential parts of the system which seems to me best adapted to secure health in the West-Indies. This will appear more just, by a review of the effects of a different manner of life.

EXCESS



Excess of any kind, but more particularly of drinking, produces a certain disposition of the body favourable to the operation of the causes of disease which I have pointed out, and against which I have endeavoured to put you on your guard, viz. the sun's influence, night air, and unhealthy situations. These causes seldom act alone ; they are generally conjoined, and assist one another ; and they require a certain state of the constitution, before they can produce any severe or fatal effect. This constitution is a relaxed and weakened deviation from the natural state, and is always attended with a lowness of spirits, particularly when it is induced by intemperance



perance and irregularity. These are truths well known to those who indulge in excesses of that kind ; for they are constantly the morning visitors after a debauch. A person with these morning feelings, if exposed to rain, or to the vapour of marshes, it is exceedingly probable will be attacked with a fatal fever. To make these observations more convincing, I shall insert the sentiments of men always credited.

DR. LIND says \*, “ that excess-  
“ five drinking, and every species  
“ of intemperance, dispose the

\* Advice to Europeans, page 8.

“ constitu-

“ constitution, more especially in  
 “ hot climates, to the attack of the  
 “ epidemic diseases of the coun-  
 “ try.” In another place \* he  
 observes, “ that in an air noxious  
 “ from marshes, or in the unheal-  
 “ thy season, any debauch or  
 “ drunkenness will often give a  
 “ fever, which in less than forty-  
 “ eight hours will terminate in  
 “ the death of the patient. Ex-  
 “ cesses either in eating or drinking,  
 “ in hot countries, are extremely  
 “ prejudicial to the constitution.”

DR. MONRO † is of opinion,  
 “ that nothing has been found to

\* Advice to Europeans, pages 186 and 187.

† Diseases of Soldiers, page 45.



“ be more productive of diseases  
“ in warm climates, than indulg-  
“ ing freely in the use of spirits and  
“ other strong fermented liquors.”  
Hence he recommends temperance  
in drinking, and particularly  
condemns the too liberal use of  
wine. But

We curse not wine ; the vile excess we  
blame,  
More fruitful than th' accumulated board,  
Of pain and misery.—

ARMSTRONG.

EVEN although conscious of the impropriety of intemperance, it will happen sometimes that the most vigilant will be surpris'd into it; for when we chance to fall into a friendly and social circle, animated by the mirth and good-humour



mour which reign around us, we are apt to forget usual restraints, and pass imperceptibly beyond the limited glass. In cases of this kind, when headach and dejection of mind are the consequences, and continue longer than usual, with the accession of other marks of indisposition, it may with great probability be suspected, that a disease is forming, from a co-operation of the causes of disease I have formerly enumerated ; therefore, the surgeon should be immediately consulted ; and if any delay occurs from distance or otherwise, an emetic of ipecacuanha will be proper, which all gentlemen on separate duty ought to have in possession : for diseases in this country are often prevented by an early exhibition



hibition of a medicine of this nature, and a suitable restriction in point of diet.

It is a good rule, to take the morning succeeding a debauch, two tea-spoonfuls of powdered bark in water, which may be repeated once or twice in the course of the day ; but this is only to be done when there is little headach, or apparent reason to think neither that or any other uneasy feeling will continue.

I CANNOT omit here condemning, as big with the most serious consequences, the idea of keeping off a disease by launching into an extreme of excess, particularly in the article of drink. If this conduct



duct does not answer the intended purpose, the uneasy feelings which induced it increase, and form disease; and this disease, instead of being of a milder kind, will undoubtedly prove of a more dangerous nature than it otherwise would have assumed: whereas, if a suitable restriction is made, the disease may be either prevented from forming, or, when formed, have its usual severity abated.

THESE observations respecting intemperance and irregularity are applicable to soldiers, indeed more so than to officers; for having less variety of diet, no choice but a devoted ration, they are more exposed to the consequences. Besides, soldiers probaby have a  
more



more indifferent and less comfortable lodging, and from duty and other circumstances are more liable to suffer from the inclemency of weather, or unhealthiness of situation. From all these considerations they ought to be particularly restrained from indulging in excesses of any kind.

THE effects of too great a quantity of wine are less hurtful than of rum : the latter, besides the general bad consequences of drunkenness, acts in a most injurious manner on the delicate fibres of the stomach and bowels. I knew a young man of the Artillery at St. Lucia, of a gay and lively disposition, who joined in the practice of drinking a little pure rum in the morning : this he continued,



continued, increasing the quantity, until he was carried off by fever and looseness. On dissection, his stomach was found ulcerated, and otherwise very singularly diseased.

RUM I conceive to be a very useful article in a soldier's allowance, particularly in the West-Indies; but he ought never on ordinary occasions to drink it unmixed. If men cannot be trusted, their rum should be served out, diluted with four or five times its proportion of water, according to the strength of the spirit. With respect to the quality of rum, the older it is the better; for in its new state it contains an acrid corroding principle, which in time evaporates and altogether disappears. This is evi-

G

dent



dent on examining the different ages of spirit : the new has a pungent smell, and a sharp disagreeable taste ; the old has a pleasing aromatic flavour, and a mild oleaginous taste. The rum supplied to the army, from what cause I do not determine, is generally of the most indifferent quality. Commanding officers can condemn injured provisions ; may not they equally set aside rum of a very new and bad quality ? Government gives every care to its soldiers, and grants every indulgence to them ; but by some fatality or other, its intentions are too often prostituted.

SOLDIERS have methods of procuring rum, above what their ordinary allowance (which is perfectly sufficient)



sufficient) entitles them to. These practices can be nearly removed by a regular and well-conducted messing: this attended to in one regiment, would give it a very great superiority over any other, and would be the best means of ensuring sobriety, decency, and health.

SOLDIERS, as it is the military practice, though not always strictly followed, should be divided into messes, each under the direction of a non-commissioned officer, or a selected private man, and the whole inspected by a commissioned officer. Dinner is the principal meal; therefore, the chief attention is to be bestowed on it. All men not on guard ought to have a stated hour, at which time the officer should go the

G 2                      round,



round, and see that every body is at dinner, and that the whole of the victuals are dressed and well-cooked. Those men who are on guard should have, if possible, their dinner sent to them, from the respective messes to which they belong. At first view this is a troublesome duty, but it is a standing order in the army, and may be executed in a few minutes. By this mode an effectual stop is put to the sale of provisions, too often practised, and which procures the baneful spirit.

THE articles that soldiers generally dispose of are the small species, as pease, oatmeal, or rice, which are very essential things in a ration; they are vegetable preparations, and are the best



best assistants with the bread to make the salt provision nourishing, and prevent any of its effects on the constitution which may otherwise follow. Would not an allowance of a small quantity of vinegar to each mess, particularly in the West-Indies, be useful? If a soldier is permitted to sell or exchange any part of his provisions, it should be with the consent of the person who directs the mess to which he belongs; and even then it ought to be only for vegetables, fish, or any thing fresh.

WHAT a pleasure it must give to an officer, to have presented to him so many occasions of being serviceable to men who are too apt



to neglect themselves ! The fine feelings and views of a gentleman, the benevolence and generosity which hold the first places in his character, the extensive liberality of sentiment, and the perfect knowledge of human nature, acquired by the best education, are all supposed to center in a British officer. He requires them all, and he will find in the performance of his duty constant opportunities of exerting them.

*Of*

## OF EMPLOYMENT.

**T**HE employment of officers, except in matters of duty, falls under their own direction; therefore they have it often in their power to regulate their actions, as far as these are concerned in the preservation of their health. The first thing which I point out to them is,

“ To go to bed early, and rise early.”

By a strict attendance to this rule, several of the causes of disease which I have marked are avoided. Besides, a principal intention of nature is fulfilled, by giving the



proper relaxation to our powers of action, which would otherwise be too much fatigued, and in time rendered defective in performing their ordinary motions. This is the chief reason late hours are improper, even though not accompanied with intemperance ; for whatever weakens or lessens the vigour of either body or mind is prejudicial, because it makes it more liable to be affected with other causes of disease. An officer on duty cannot attend to the preceding injunction ; but unless that is more severe than usual in the West-Indies, he can comply with it three nights out of four ; and by doing so he is better enabled to resist any inclemency of night duty, when it does occur.

ALL



ALL kinds of exercise are peculiarly necessary in the West-Indies ; however, it is so unfortunate, that we have it but very seldom in our power to select the most useful kind, or even to have an opportunity of using any. The mornings and evenings are the fittest periods, and they give only a small proportion of time. Riding and walking are the two modes of exercise those countries afford, and they can be used only with propriety in the periods I have marked. Bathing in cold water, if duly prosecuted, greatly supplies the place of exercise :

It is the purest exercise of health,  
The kind refresher of the summer heats.

THOMSON.

But



But of that I have already taken notice, under the article of Drefs.

As the greatest part of a West-India day must be spent in the house, every thing should be exerted to engage the attention of the mind, and maintain a rational gaiety and cheerfulness. Here an officer enjoys the fruits of a good education. If there is nothing around to afford him entertainment, he can take an inward survey, and find the most satisfactory amusement in the contemplation of himself, of his views and intentions. Books are naturally pointed out, but a selection is not always to be met with ; for being a heavy part of baggage, they are seldom carried.



carried. If a small and well-chosen library was procured in each regiment, by the subscription of its officers, and put under the quarter-master's care, with the stores of the regiment, every officer would be supplied with books, and without any trouble or incumbrance; by which satisfaction and pleasure might be always at hand.

It may be said, that the frequent changing of officers in a regiment, makes such a scheme impracticable. Not at all; for it is only paying (by the person who keeps the accounts of the library, and whom I suppose to be either the paymaster or quarter-master) an officer on his leaving the regiment the money he subscribed, and getting the  
same



same sum from the person who succeeds to his place. Besides the original subscription, there should be a small annual sum to repair the library and procure new books,

IN such confined scenes as the West-Indies exhibit, how enviable are the feelings of an agreeable acquaintance, and of friendship !

————— social friends,  
Attun'd to happy unison of soul ;  
————— Whose minds are richly fraught  
With philosophic stores, superior light ;  
And in whose breast, enthusiastic, burns  
Virtue.

Among these we are to expect

The full free converse of the friendly  
heart,  
Improving and improv'd'.

THOMSON.

SOLDIERS



SOLDIERS never should be exposed, except on unavoidable duty, to the sun, or to fatigue during his scorching heat. The hours of parade, of manual exercise, and of relieving and mounting guard, ought always to be those in which the sun has the least influence. About sunset I take to be the best time for relieving guards, for this reason ; the men mount refreshed, after the repose of a day, and will from that be watchful and alert in the night : whereas they who enter upon the duty in the morning, are fatigued upon the approach of night ; therefore are apt to slumber and be careless ; by which the service is not only endangered, but the men are more liable



liable to suffer from night air, or unhealthy situations. Besides, the men relieved in the evening, have the advantages of a natural night's rest to fit them for the duties of another day, whilst the other men are under the necessity of sleeping in the day, which never affords equal refreshment. I mean here those guards which are only relieved once in twenty-four hours.

IF from the circumstances of service, soldiers are required to carry their provisions to any distance ; or if they are under the necessity of repairing roads, of building huts, working at batteries, or of undergoing any fatigue whatever ; the cool hours of the day should be chosen.

From



From what I have seen, and collected from the observation of others, I am confident that soldiers might be excused from any of these severe duties which I have specified. Where the country does not give negroes or labourers for such purposes, it is the interest of Government to supply them.

HERE again I will mention St. Lucia. I am convinced that the fatigues imposed on the soldiers in that island, have proved more destructive to them than its natural evils; for these alone could not have produced such general fatality, if they had not been assisted by the effects of the horrid services in which the men have been employed.

DR.



DR. LIND \*, after giving some instances of the fatality attending the employment of Europeans in hot countries in laborious work, particularly that of cutting down wood, &c. subjoins the following very striking observation, which I here beg leave to adopt: “ It  
 “ does not seem consistent with  
 “ British humanity, to assign such  
 “ employments to a regiment of  
 “ gallant soldiers, or to a company  
 “ of brave seamen.”

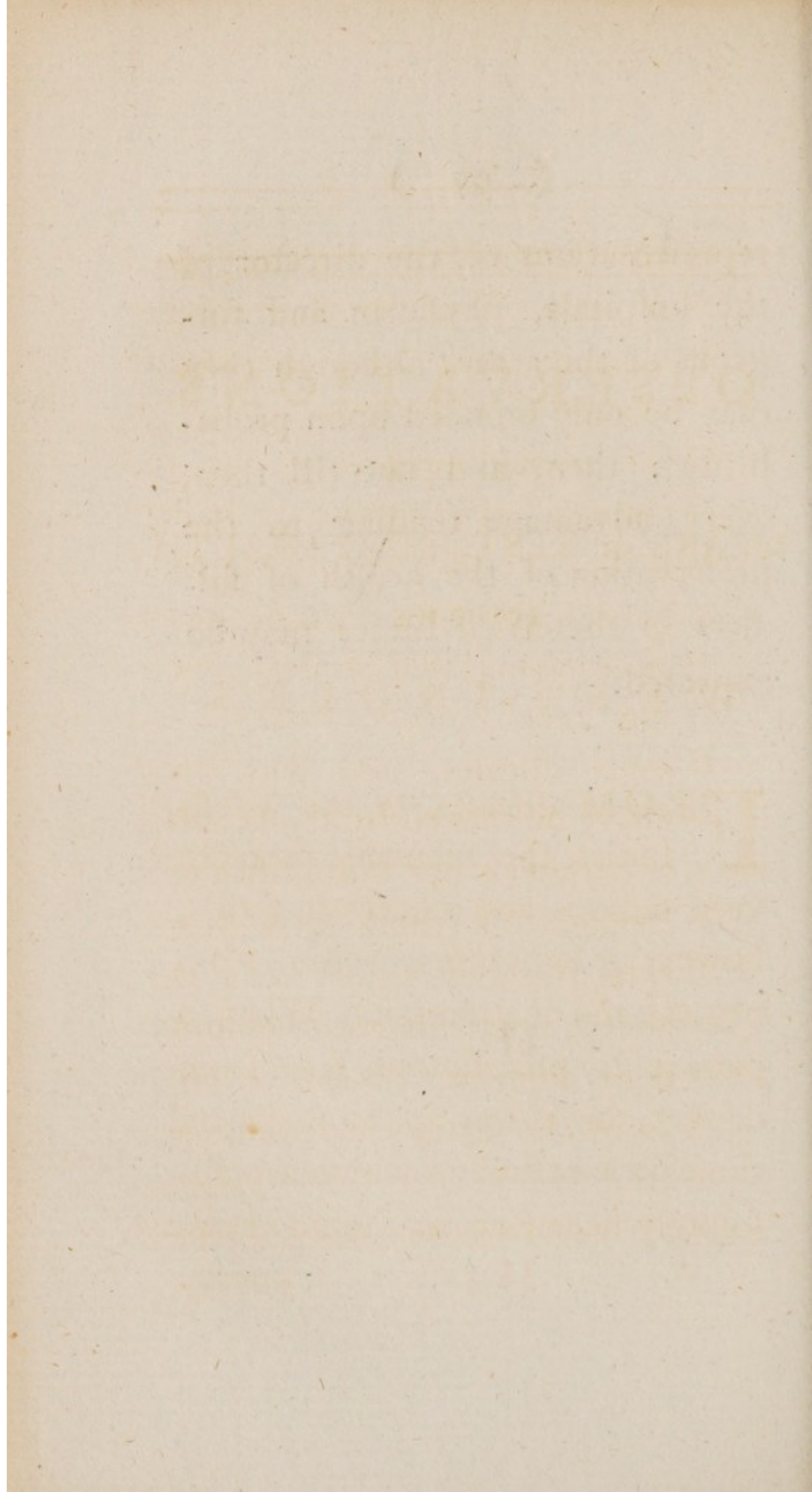
WHEN the commander in chief, and all other commanding officers, give the proper attention to the

\* Advice to Europeans, page 145.

represen-

representations of the director of the hospitals, physician and surgeons of the army, although they may be only founded upon probability : then, and not till then, every advantage tending to the preservation of the health of soldiers in the West-Indies may be expected.





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OBSERVATIONS  
ON THE  
MEANS of RESTORING HEALTH  
IN THE  
WEST-INDIES.

**F**ROM diseases in the West-Indies the recovery is often very tedious and uncertain : this, however, sometimes arises from neglect and inattention. When a patient is pronounced free from danger, he is too apt to shake off those little restraints which are absolutely necessary to secure a recovery

H 2                      recovery



covery and prevent a relapse. I have frequently had occasion to lament the injudicious and careless conduct of many, even although repeatedly warned of the consequences. I have seen men on the recovery—I have seen them relapse, and fall sacrifices to imprudence and folly.

AFTER the termination of a disease, there is a great deal remaining to effectuate a perfect restoration of health. Every disease leaves a debilitated, weakened, or relaxed state of the constitution; and if this is not removed by the natural and artificial efforts for that purpose, a dropical, pectoral, or some other complaint, if not a relapse

relapse into the former disease, will certainly follow. The artificial efforts in restoring a weakened constitution, receive but a trifling aid from the province of medicine ; they consist chiefly in personal attention to good nursing, activity, and cheerfulness, but, above all, to a change of air.

It will be unnecessary to adduce instances in support of these observations, as persons recovering from disease are persuaded of the truth of them, but want fortitude and resolution to comply. However, I flatter myself, by pointing out the steps to be taken in the stages of recovery for the re-establishment of health, mark-



ing occasionally the disadvantages of a different system, that every one will allow the attention and compliance he may feel himself interested to give. What I have to recommend will be comprehended under the following articles—Change of Air, Diet, Dress, and Employment ; to which I shall subjoin a few rules of conduct from Dr. TISSOT's ingenious “ Advice to the People.”

BUT before I proceed further, I must again excite the feelings of officers, by declaring, that even in the recovery of health, as well as in the preservation of it, soldiers have a great deal to expect from their care and assistance.



The measures of the surgeon must be countenanced and enforced; and whatever is wanted and recommended should, if possible, be granted. When men are discharged from the hospital, it cannot be supposed that they are entirely restored to their natural strength: That remains to be perfected by a regulated proportion of usual exercise and employment; and here they must trust to the knowledge and humanity of their officers. In circumstances of this kind, the generous and benevolent will always give every allowance; will procure necessary indulgencies; and in all possible cases will find out, and endeavour to obtain, a change of situation.



WHERE officers have it in their power to be of use to soldiers in the periods of recovery, will be ascertained in the course of the succeeding observations. I can here frame in my own mind a part of that satisfaction and pleasure which officers will receive, in knowing that there are other occasions besides those an enemy gives, of displaying a wish to promote the interests of their country.

CHANGE

CHANGE *of* AIR.

**T**HE advantages of a change, particularly from unhealthy situations to others of a superior degree of healthiness, are not confined, but arise and are evident in all countries. While a disease exists, good effects are often derived from a change of situation, even although considered in only an equal degree of health from that which has been forsaken. These good effects are more certain, if the disease has been produced by causes peculiar to the situation—such as the vapour of marshes : in this case, every advantage



vantage may be expected from a change to a situation where these causes do not appear.

As I do not mean to extend my observations to the effects of a change of air in the removal of diseases, I shall go no further in the preceding explanation, but proceed to consider its effects on patients recovering from disease. However, I may previously remark, that if a change of air can produce the best effects, in certain circumstances, on patients labouring under a disease; it is reasonable to expect equal and more permanent effects from it, in those cases of which I am to treat.

IN what manner a change of air, even to an air of no sensible difference, acts in promoting a restoration of health, will be unnecessary to investigate. Indeed, it would prove a subject infinitely above the reach of any exertion I could give it : besides, it is only of importance to ascertain by facts, how far the salutary effects of a change of air are to be depended upon, and in what cases these effects will be most probably produced ; I shall therefore confine myself entirely to this latter enquiry.

THE good effects of a change of air on persons recovering from  
disease,



disease, are amply proved in those patients who remove from St. Lucia and Tobago to Barbadoes. I have seen repeated instances of persons with quotidian, even remittent fevers, and many others, who have been so much debilitated as to make their landing attended with danger, recover beyond conception, and regain almost an European degree of health : and, what may appear singular, I know cases where even a change from Barbadoes to St. Lucia, has been followed by recovery and restoration of health.

WHEN every change of air which the West-Indies can afford has been unsuccessfully tried, a trip to the continent of America, or, what is preferable, to Europe,



Europe, has in several instances effectuated a recovery ; whilst a continuance in the West-Indies, in all probability, would have proved fatal.

MORE limited changes of air than either of those I have specified, have often been followed by advantage. Persons who are attacked with diseases in the Carenage at St. Lucia, or in any situation near it, find benefit from removing to situations about Soufrier, and to windward of it, and about Gros Islet. The 46th regiment lay for a considerable time on board of transports in Carenage bay, and became very sickly ; but on removing to Gros Islet bay, the sickness decreased, and the sick men gradually got better. The  
crews



crews of the Ajax and Vigilant line-of-battle ships likewise were exceedingly sickly in Carenage-bay ; but on removing to Gros Islet bay the sickness abated, and the men very soon recruited.

At Barbadoes, the inhabitants of Bridgetown, on recovery from disease, find it their interest to go into the country ; particularly that part of it called Scotland, which is a hilly ground, has its air chiefly from the sea, and is fanned by a constant wind. In Antigua the inhabitants also recover much sooner, by changing their situation into more elevated and exposed ones.

IN those changes of air, as from St. Lucia to Barbadoes, a great deal is attributed to the passage. The happy effects which generally accompany the sea-air, or the agitation of the vessel, have long been demonstrated; and I readily grant that the passage, though short from one island in the West-Indies to another, may have a considerable share in the recovery which is afterwards perfected. I was very sensible myself of the benefit of a voyage, after my leaving St. Lucia, in the month of July 1779. Besides my own case of a bad state of health, I had with me about twenty Artillery-men, slowly recovering from disease. From St. Lucia we passed by St. Vincent, lay one day off Grenada, then steered



steered for St. Christopher, which, until our arrival at that island, took up about fourteen days : during the passage, the weather was clear, and we generally had a good breeze of wind. Before we landed at St. Christopher, I perceived the happy effects of the voyage, and we were all in a short period restored to very good health.

As the good effects of a change of air, and of a sea-voyage, are placed beyond a doubt, they should in all possible cases be attempted. If a disease is formed by causes peculiar to any situation, a removal from it ought to take place immediately, without regarding the state of the disease, or the period of recovery.

DR.



DR. LIND says \*, that “ pre-  
 “ fervation and certain recovery  
 “ depend upon an immediate  
 “ change of air, when seized with  
 “ the prevailing sickness of the  
 “ country.” He goes on : “ I assert  
 “ it as a certain truth, which I  
 “ have had the most ample means  
 “ of knowing, that persons labour-  
 “ ing under fevers, fluxes, and  
 “ other diseases, may with great  
 “ safety be moved from one place  
 “ to another ; nay more, that by a  
 “ removal of them with proper  
 “ care, from an impure to a pure  
 “ air, such patients received imme-  
 “ diate benefit. Remove them  
 “ from the main cause, and per-

\* Advice to Europeans, page 179 and 180.



“ haps the only source of their  
 “ sickness ; that is, from the land  
 “ air”.

IN unhealthy islands, the Army would derive many advantages from being provided with places fixed in the most healthy situations, when the necessity of service obliged it to occupy those parts, perhaps the most unhealthy. If a provision of this sort was made, which with very little trouble might in almost every case be done, the sick would be removed, and have a better chance ; at any rate, places for convalescents should always be selected. In such an island as St. Lucia, which has a variety of bays, of different degrees of healthiness, and seldom destitute



tute of Government transports ; it would prove a step of the highest utility, to have some of those ships fitted up and stationed in the healthiest bay, which we suppose to be that of Gros Islet, for the reception of the sick of the army ; at least, of its convalescents.

IN a former place I mentioned the probable good consequences which would accrue from placing men, immediately after their arrival from Europe, in the most healthy islands, before they were sent to those deemed very unhealthy ; and I here repeat it, because it gives a body of men impaired by disease an opportunity of being relieved, and removed to a more



healthy situation, by which they will enjoy the effects to be expected from a voyage, and a change of air.

OFFICERS who can obtain leave to go from one island to another, should delay no time, but immediately adopt a change of air. There are many cases where officers by delay have suffered, and there are many cases where they have narrowly escaped death. In the presence of fever, if its nature and the want of conveyance will not allow a change of air, the earliest opportunity after should be embraced. An officer ought not to be refused leave to remove to any proper place for the recovery of  
of



of his health. The commanding officer who objects, from any pretence whatever, is truly chargeable with every consequence. An officer during sickness cannot do his duty ; give him then every chance to recover, and he returns with cheerfulness and gratitude. If, however, he is detained, and unfortunately dies ; the man who was the cause of it, has many heart-felt reflections to encounter. I have reason to believe these considerations to be rather impertinent, for I speak of a British commander : however, the concern I feel in the distant thought that it is possible a refusal might be given, is the only apology I offer.



AN officer, when he obtains permission to change his situation for the recovery of his health, ought, if it is confined to the same island, to select that place esteemed the most healthy by the inhabitants ; and this may be determined also from those circumstances marked in the Observations on the Preservation of Health under the article of Situation. If the leave extends to a removal to another island, as from St. Lucia to Barbadoes, the most healthy situations of the latter should be likewise undoubtedly selected ; but it often happens that patients are contented with the mere change to that island, and fix themselves in Bridge-town, the most unhealthy part of it.

PERSONS



PERSONS very much debilitated by disease must be cautious of chusing too elevated and exposed a situation, where the air may be piercing and cold. In this case, the sheltered situation open to the south is the most commendable ; and as recovery advances, a keen air may be less guarded against. Every degree of air should be gradually received, until the constitution is enabled to feel with advantage and safety the most penetrating state of it which the West-Indies afford.

It has been often found, that all the changes of air obtainable in any part of the West-Indies, have proved ineffectual in procuring a re-establishment of health.



Experience, as we have already observed, has demonstrated, that a return to Europe has completed the recovery, which had baffled the most salutary influence of those countries. Officers therefore, after a fruitless trial of removing from one neighbouring place to another, should make a more distant change, and have leave of absence to return to their native shore ; and it would not be incompatible with the service to extend this leave to the soldier. Soldiers who continue long in a convalescent or recovering state, contract pectoral complaints, swellings of the legs, &c. : these, however, may be the causes of an  
uncertain



uncertain and tedious recovery, as well as the consequences of it. In any of these cases, there is very little probability of a cure being effected in the West-Indies; the only chance is in a return to Europe, which I think may be accomplished with ease, and without the smallest detriment to the service; on the contrary, the most certain advantages would result from it.

A REGIMENT may have permission to send once a year those men who are deemed by the surgeon irrecoverable in the West-Indies to England; not as invalids or garrison men, but as men who may recover and return to their  
corps



corps, or be drafted into other regiments, as circumstances may point out. By this method many men would be annually saved, and the strength of each regiment be better ascertained.

THERE are regiments which return from five to six hundred men, and out of that number more than one hundred are probably marked Convalescent, Consumptive, or Sore Legs ; and in this case the regiment is defective in that number in strength, besides the incumbrance given in case of service : whereas, by sending these men home, the regiment stands the chance of receiving drafts or recruits from England ; by which means it would  
be

be always really strong, instead of being nominally so; and a number of brave men would be saved, and restored to the service of their country. Sore legs in the West-Indies, in whatever manner they may be produced, are very troublesome, baffling every effort that can be made to heal them; and the hope of their cure can be built only on the return of the patient to Europe.

DIET.



## D I E T.

**N**EXT to a change of air, a great deal may be expected, and certainly obtained, in effecting recovery, from a proper attention to what is comprehended under the article of Diet. On recovery, the appetite becomes keen, and not to be very easily satisfied ; and if this is indulged, which is frequently the case, the recovery is retarded, and probably a particular weak state of the stomach with other complaints supervene. The smallest degree of excess in eating, drinking, or in any other thing, is always accompanied with the  
most

most eminent risque of producing a relapse, or laying the foundation of chronic diseases ; it therefore requires a constant perseverance in a regulated diet, and a forbearance from every irregularity, to ensure the restoration of health.

While the vital fire  
Burns feebly, heap not the green fuel on ;  
But prudently foment the wandering spark  
With what the soonest feels its kindled  
touch :

Be frugal even of that ; a little give  
At first ; that kindled, add a little more ;  
Till, by deliberate nourishing, the flame  
Reviv'd with all its wonted vigour glows.

ARMSTRONG.

IN the periods of recovery, those articles of diet of the most easy digestion, and which afford the best nourishment, should be selected.



selected. Even these are to be taken in small quantities ; and it ought to be an invariable rule never to take a full meal, but always to desist from eating before the appetite is satiated. In the first dawn of recovery, the diet should consist of liquids or spoon-meats, as broths, preparations of milk, &c. taken in small proportions, and frequently repeated. As recovery advances, those solids the nearest, with respect to digestion, to spoon-meats, may be used ; as jellies of the vegetable and animal kinds, young animal meat, and some species of fish. From these we go forward gradually, using substances more solid, and of less easy digestion, until we arrive  
at



at our ordinary quantity and kind of food, when recovery is perfectly effected.

I SAW a gentleman at Barbadoes who came from St. Lucia for the recovery of his health ; he was very much enfeebled and reduced by a long-continued attack of fever. For the first eight days after his arrival, a sensible change took place for the better. During that time he was confined to the house, except in the evening, when he took a short airing in a chaise ; and he used a diet which had been recommended to him. Feeling his health and spirits so quickly returning, he became less attentive ; and one day, being the  
tenth



tenth after his landing, he eat a hearty meal, and drank three or four glaffes of wine : in the evening he took his ufual ride, but complained of a diftention of his ftomach. In the night he felt fick, and vomited what he had eaten at dinner ; this was attended with headach ; and the next day he had a return of his fever, which continued for fome time ; and with much ado he was refcued from death.

ANOTHER gentleman, in much the fame fituation, but more weakened and reduced, who gave every circumfpection to his conduct, gradually recovered. He prudently declined, and had the

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refolu-



resolution to abstain from, excess and irregularity ; the consequence of which was, that he was soon restored to a state of health as vigorous as he had ever enjoyed in Europe.

I COULD give a minute detail of many cases of recovery, in order to demonstrate the pernicious tendency of an unguarded indulgence in point of diet, and the happy effects of a different system ; but I presume that what has been specified, and the observations which every one has had opportunities of making, will render it unnecessary : I shall therefore proceed to give a few directions respecting the diet of those whose

K recovery



recovery is accompanied with some particular complaint.

THERE is always a general feebleness and weakness of the body, which continue some time after a fever has disappeared; and these are in proportion to the nature and duration of the disease. It often happens that the general weakness remarkably affects some particular parts, and none so commonly as the stomach and its dependencies. As a weak state of the stomach undoubtedly renders digestion defective, and nutrition imperfect, it is impossible the general strength can be restored whilst that complaint remains. In cases of recovery therefore, where it occurs,  
the



the principal aim should be to remove it. This weak state of the stomach produces other circumstances, which, united, occasion a very tedious and troublesome recovery : these are, acidity or sourness, and flatulence or wind. Here the assistance of medicine must be called in : bathing and exercise will likewise contribute their share. But in all cases requiring the use of medicine, the surgeon should personally direct ; and I reserve to a subsequent place the consideration of bathing and exercise.

IN weak stomachs it is a standing rule, to eat little at a time and often, and to let what is eaten be of the most easy digestion and



the most nourishing nature. In cases of this kind, if the stomach is too much distended, its weakness is increased, and every other attendant complaint is aggravated. Milk ; broths ; eggs taken warm from the hen, and eaten either raw or soft-boiled ; preparations of well-fermented bread ; vegetable and animal jellies, as sago, salep ; calves heads and feet stewed ; turtle soup, &c. are nourishing, and of easy digestion. As the stomach regains its tone, more solid substances may be used, making a gradual progress, as I observed before, until its natural state is restored.

SOURNESS



SOURNESS and wind, in weak stomachs, are produced by an imperfect digestion and assimilation of the food ; therefore, the means of removing them are those which give the usual powers to the stomach. When this impaired digestion is accompanied with these circumstances, all vegetable acids, and bodies readily producing acidity, should be avoided. Animal preparations of every kind are the least liable to give acidity. Dr. Arbuthnot, in his Treatise on Aliments, points out the following vegetables as anti-acid, viz. cabbage, turnips, carrots, onions, leeks, radishes, and mustard. Rum mixed with water makes the best common liquor. Wine in



every case of weakness is one of the most effectual articles we are possessed of, if used moderately and without intemperance \* : however, in weak stomachs the greatest delicacy is required in using it, for it sometimes produces sourness. Red-wines are the most unexceptionable, and Port the least so of any. Tea, or indeed any warm infusion, is hurtful to weak stomachs; every thing liquid should be taken cold : and as a substitute for tea, I would recommend a cold infusion of chamomile flowers, sweetened, and coloured with milk, which after short use becomes agreeable.

\* Vide the first part on Diet.

COSTIVE-



COSTIVENESS is frequently troublesome in the periods of recovery ; and if there is no acidity in the stomach, a vegetable diet is the most commendable. Figs, raisins, pruens, grapes, oranges, tamarinds, honey, and cream-tartar, and water, may be occasionally used. In cases of acidity, a teaspoonful or two of magnesia will produce an effect. If these however fail, recourse must be had to more active laxatives.

LOOSENESS sometimes retards recovery. When it is slight, and proceeds from too great acidity in the stomach, abstinence from vegetables, and small draughts of lime-water, or a little magnesia,



taken occasionally, will in general remove it. Looseness is a complaint that often continues, and proves dangerous; therefore, in all cases where it remains more than twenty-four hours, application should be made for medical assistance. In cases of costiveness, white-wines are the best; and in looseness, the red-wines, of which Port is the most astringent, are recommended.

A SWELLING of the legs and ancles generally attends recovery, in a greater or less degree, according to the state of weakness and relaxation; it goes off as recovery advances, and disappears when that is perfect. The feet and legs  
should



should be frequently rubbed with a flesh-brush ; and if the swelling is considerable, and gives pain, a little oil with camphor or spirit of hartshorn may be used previous to the friction. If this swelling is attended with a more extensive dropfical disposition, the assistance of medicine becomes necessary.

THERE are other complaints besides those I have mentioned, that follow the diseases of the West-Indies, and make recovery from them tedious and uncertain : but as they always require personal examination and advice, I omit giving any description of them.

THE preceding observations on Diet are principally directed to officers ; but from them several things



things may be selected, as applicable to the foldier. Convalefcents, or recovering foldiers, continue under the direction of the furgeon; but when he thinks it proper to difcharge them from the hofpital, they muft not be fupposed to be perfectly reftored to their former ftrength. The entire reftoration of their health remains to be effected by a gradual return of their ufual mode of life, which it is to be prefumed undergoes the regulation and infpection of their officers.

CONSIDERABLE advantage, I think, would result from claffing the men difcharged from hofpitals into feparate meffes, and beftowing  
more



more particular attention on their diet. If fresh provisions cannot be obtained, the salt beef should be soaked in warm water; which, frequently repeated, would extract its saltiness, and make it more easily assimilated to the purposes of nutrition: and instead of boiling it in the common manner, it should be cut into slices, and stewed with mucilaginous vegetables.

SOLDIERS for some time after their removal from the hospital, should have an allowance of wine instead of spirit, and in every possible case fresh meat. Government, besides permitting this alteration in diet, would find advantage in giving a pint of porter per day to each man  
in



in the situation I have specified; and I venture to assert, that the increase in the pecuniary charge of the ration, would be very trifling, by honest management. In recovery, porter is a pleasant and useful liquor, and may be taken in moderation at any time when wished for; unless it disagrees with the stomach, which it sometimes does in cases of acidity.

## DRESS

DRESS *and* EMPLOYMENT.

**D**URING the day, the dress of persons recovering from disease may be loose and light ; but where the weather is damp, rainy, or variable, woollen cloaths are the best. Persons much enfeebled receive very great advantage from a flannel shirt worn next to the skin : at first this may feel disagreeable, but a few days wearing will reconcile it. By wearing a flannel shirt, a thinner exterior cloathing can be used, which otherwise would be improper : besides this, the flannel has the effect of retaining natural heat,



heat, the smallest degree of which, in cases of recovery, is valuable. It has another advantage, of preventing the unpleasant effects of perspiration, which linen always imparts.

SOLDIERS, after their dismissal from the hospital, should be for some time permitted to wear only their regimental waistcoats and breeches, with woollen and cotton stockings; and this ought to be more particularly attended to in night duty, or in any other exposed situation. There may be a necessity for putting soldiers too early on duty after their recovery: in such cases, considerable benefit would be derived from, and bad consequences prevented by, the use  
of



of the flannel shirt, which ought to be provided at the expence of Government ; but if that cannot be granted, commanding officers would find advantage from making it an individual expence, rather than it should not be obtained.

I AM aware of the objections which have been made to the flannel shirt, from the supposed danger of changing it, or leaving it off altogether ; but this will be found, upon trial, only imaginary. Weakness characterises recovery, which advancing the constitution regains its natural strength. When the constitution is perfectly restored, no prejudicial consequences will follow the laying aside of the flannel shirt : until that, however, is effected,  
it



it may be proper to retain it. I have seen good effects in the cases I have mentioned from the use of it; but I have never been able to observe any bad effects from its disuse, after recovery was completely effected.

SOLDIERS should have more attention paid to them, to cleanliness, and neatness of dress, after they are discharged from the hospital, than at any other time; because diseases are apt to leave a languor and lowness of spirits, which beget, if not prevented, dirtiness and indolence.

THE observations under the article of Employment, on the means of preserving health, may be partly introduced here;



particularly those which relate to going to bed early, and rising early, and to maintaining an active and cheerful state of mind. In every case of recovery, good and well-timed sleep affords sensible advantage : indeed, we can from the soundness of sleep often date the certainty of recovery, and even the period when that will happen. By it all the natural powers are strengthened ; being relieved from their ordinary action, they return to it with an increase of vigour. From rising early, the pleasing sensations of a cool air, and the proper time of exercise, are obtained ; besides, the bad effects of morning sweats are prevented. There is nothing that retards recovery more

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than



than profuse perspiration ; it not only proves the degree of relaxation and weakness, but always increases it. This injurious perspiration most frequently occurs early in the morning ; in which case, it should be an invariable rule to forsake the bed instantly, and have the skin well rubbed with a dry cloth, or a flesh-brush. It is best to rise, be it ever so early ; even though, by doing so, it may be necessary to lay down for a short time, some hours after.

EXERCISE of every kind is an essential circumstance in effecting recovery, and it should be proportioned to the feelings and state of strength. The mornings and evenings are the only proper periods  
of



of using it. The sun should make his appearance, before riding or walking is attempted, and either may be continued one or two hours; and the evening exercise should commence about two hours before his setting, and terminate almost immediately after it. By this mode you avoid the damp atmosphere of the morning and evening, which ought always, but more particularly in cases of recovery, to be shunned and guarded against.

SOLDIERS who cannot use the most eligible exercise, have a good substitute in the morning and evening manual manœuvres. Soldiers when they are discharged from the hospital should be marched out, and



exercised every dry morning and evening, until they have entirely regained their former state of health. They should not be sent too early on any exposed duty ; the commanding officer can always employ them in some way in which they will not feel the vicissitudes of weather.

In every period of recovery, and particularly in the early stages of it, exposure to the sun, except at the hours I have mentioned, should be carefully avoided ; but if necessity will not allow this indulgence, the directions for preventing its effects ought to be more punctually attended to. I have often seen relapses, and even death, follow an



imprudent continuance and exercise in the sun, in cases of recovery.

BATHING in the sea, in rivers, in domestic cold baths, or by the simple process of having two or three pailfuls of cold water thrown upon the body, is of the highest importance in facilitating recovery. In the first stages of recovery, the surgeon should be consulted ; for there are certain circumstances which may render bathing improper, or require a great deal of circumspection in its use. If medical assistance cannot be obtained, it should be a rule never to bathe in cold water, whilst any particular complaint exists : for example, a



breast or bowels, or any similar affection. After bathing, if any disagreeable feelings arise and remain, it ought to be discontinued : but if it is followed by active and cheerful sensations, evidence is given that the best effects may be expected from it. Early in the morning is the fittest period to bathe, and I would prefer the shore-bath, or the throwing two or three pailfuls of water over the body. The shock by these methods is greater than by the others, and it may be increased or diminished at pleasure. When a chilliness continues some time after bathing, it shews that the shock has been too great ; in which case it will be proper to lie down in bed, and



drink of any warm liquid. The pleasing glow which succeeds the healthy bathing, may be generally obtained by the preceding mode of returning into bed and drinking something warm, or by rubbing immediately after bathing with a flesh-brush. In all cases where bathing is used, I recommend rubbing with a brush, or a piece of flannel, until the external part of the body becomes agreeably warm.

SOLDIERS, during recovery, never should be permitted to bathe without the direction and inspection of the surgeon; and when they return to duty, they ought to do it under his eye, or the prudent and watchful conduct of their officers.



THE diseases of the West-Indies are always accompanied with a particular depression of mind, which is very apt to continue, and will certainly retard recovery. An anxious and low state of the mind is always produced by, or connected with, a weakness, or an impaired frame of the body ; and this situation of the mind, instead of being merely an effect or attendant of the valetudinarian habit, becomes an active cause and strong support of it : it therefore should be a constant aim to be lively and cheerful

OFFICERS are apt to indulge the wish of getting to Europe ; and if they solicit for permission and are refused, they become dejected and  
fretful



fretful, circumstances which oppose the restoration of health. On such occasions, that manly fortitude and perseverance which are the characteristic qualities of a soldier, should be peculiarly exerted. The conversation of a friend, the sprightly humour of a social company, and the virtuous indulgence of that inclination which leads the British officer into the female circle, ought to be alternately adopted,

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I AM now to subjoin, with occasional Notes, a few Observations and Rules selected from Dr. TISSOT's ingenious "Advice to the People ;"



People ;" published and translated by Dr. KIRKPATRICK, in the year 1771.

THE term of recovery from a disease requires considerable vigilance and attention, as it is always a state of feebleness, and thence of depression and faintness. The same kind of prejudice which destroys the sick, by compelling them to eat during the violence of the disease, is extended also into the stage of convalescents, or recovery ; and either renders it troublesome and tedious, or produces fatal relapses, and often chronical distempers. Whenever the fever is compleatly terminated, some different foods may be entered upon : so that the patient



tient may venture upon a little white-meat, provided it be tender ; some fish ; a little flesh soup ; a few eggs at times, with wine properly diluted.

It must be observed at the same time, that these very proper aliments, which restore the strength when taken moderately, delay the perfect cure if they exceed in quantity, tho' but a little ; because the action of the stomach, being extremely weakened by the disease and the remedies, is capable only, as yet, of a small degree of digestion ; and if the quantity of its contents exceeds its powers, they do not digest : frequent returns of the fever supervene.

EVERY



EVERY bad consequence is prevented by the recovering sick contenting themselves, for some time, with a very moderate share of proper food. We are not nourished in proportion to the quantity we swallow, but to that we digest.

A PERSON on the mending hand who eats moderately, digests it, and grows strong from it. He who swallows abundantly, does not digest it; and, instead of being nourished and strengthened, he withers insensibly away.

RULES.

R U L E S.

1. LET those who are recovering take very little nourishment at a time, and take it often.

2. LET them take but one sort of food at each meal, and not change their food too often.

NOTE. This rule I think too absolute ; a person in recovery may with care indulge his taste of variety in substances of easy digestion, and of a nourishing quality.

3. LET them chew whatever victuals they eat very carefully.

4. LET



4. LET them diminish their quantity of drink. The best for them in general is water, or toast and water, with a fourth or third part of white wine. Too great a quantity of liquids at this time prevents the stomach from recovering its tone and strength; it impairs digestion, &c.

NOTE. An exception may be made to one part of this rule respecting wine, as in cases of looseness, and where an acidity or sourness prevails, in which I would recommend red in place of white wine; and in every case I think a glassful of pure wine may be ventured upon, and repeated according to the degree of recovery.

5. LET



5. LET them go abroad as often as they are able, whether on foot, in a carriage, or on horseback. This last exercise is the healthiest of all. If exercise is taken soon after a meal, it impairs digestion.

NOTE. The first part of this rule, relating to the mode of exercise, must be conducted in the West-Indies with the greatest circumspection and care; and the periods for exercise which I have formerly pointed out should be chosen.

6. As people in the state of recovery are seldom quite as well towards night, in the evening they should take very little food. Their sleep will be the less disturbed for  
this,



this, and repair them the more and sooner.

NOTE. This is a very important rule, and ought to have every compliance given to it. Light suppers in a state of health are only commendable in the West-Indies.

7. THEY should not remain in bed above seven or eight hours.

8. THE swelling of the legs and ancles, which happens to most persons at this time, is not dangerous; and generally disappears of itself, if they live soberly and regularly, and take moderate exercise.

It

9. IT is not necessary in this state that they should go constantly every day to stool ; though they should not be without one above two or three days.

10. SHOULD they, after some time, still continue very weak ; if their stomachs are disordered ; if they have, from time to time, a little irregular fever ; they should take some doses of bark daily, which fortifies the digestions, recovers the strength, and drives away the fever.

NOTE. This is a rule that does not come within the limits of my Observations ; it relates to the use of medicine, the consideration of  
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which I have all along avoided; because I advise the surgeon to be consulted in every case where that becomes necessary,

11, and last. THEY must by no means return to their labour or usual employment too soon.

THE END.

