The seaman's medical companion: being a guide to detect and treat those diseases to which mariners are most generally liable: with some useful hints on diet, cleanliness, and clothing / by P.J. Murphy.

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MEDICAL COMPANION.

By P. J. MURPHY, M.D.,

Licentiate of the Royal College of Surgeons, Ireland,

PRICE, FIVE SHILLINGS

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SEAMAN'S

MEDICAL COMPANION;

BEING

A GUIDE TO DETECT AND TREAT THOSE DISEASES TO WHICH
MARINERS ARE MOST GENERALLY LIABLE;

WITH

SOME USEFUL HINTS

ON DIET, CLEANLINESS, AND CLOTHING,

AND THE BEST MANNER OF PREVENTING MANY MALADIES TO WHICH THE SEAMAN'S VOCATION EXPOSES HIM.

By P. J. MURPHY, M.D.,

LICENTIATE OF THE ROYAL COLLEGE OF SURGEONS, IRELAND.

" Illi robur et æs triplex Circa pectus erat, qui fragilem truci Commisit pelago ratem Primus:"

Liberpool:

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PREFACE.

THE life of a sailor is particularly hazardous, his occupation constantly exposing him to dangers both of accident and disease, while his situation in a majority of cases, by removing him from the sphere of professional assistance, considerably tends to augment these dangers. The consequences of such a position are daily exemplified by a succession of melancholy cases, too frequently presented to the observation of the medical practitioner. Indeed, such instances may be easily conjectured as of certain occurrence, when the too common situation of a mariner, suddenly afflicted during his voyage, is remembered. The ship may be provided with its medicine chest, and this adequately stocked with the drugs necessary for practical assistance, yet, without the experienced eye to distinguish the disease, and the guiding hand to regulate the dose, the use of the medicines must not only be problematical in its applicability, but hazardous in its

adoption. A charitable shipmate may attempt to quell the fever, but without the necessary authorised direction of experience, his endeavours may not merely be frustrated, but with the instruments of life and death at hand, and yet without the power of discriminating between them, he may, at the very moment he is emulating the good Samaritan, become the innocent cause of protracted misery or lingering death, to the object of his benevolent solicitude. To supply the professional guidance required at such a critical juncture, and to convert the medicine chest from an agent of empirical abuse to an instrument of real practical utility, has been the object of the following pages. The unostentatious garb in which they appear will, I hope, be regarded as typical of the manner in which I have attempted to execute the self-imposed task. My desire has been to render their contents practically useful, and my mode of endeavouring to attain this end, has been by describing in the simplest and plainest terms the subjects would admit, the various symptoms by which the different complaints might be recognised, and the peculiar signs by which they might be distinguished at their commencement. The treatment described for each disease, will be found to be the simplest that could be adopted, and at the same time, the safest that could be employed under the disadvantageous circumstances attendant on illness at sea. The few prescriptions given in one part of the work are such as are easily prepared, if only proper attention be given to the directions there insisted on. The acknowledged influence exerted over the body in sickness or in health by the diet, clothing, and cleanliness, has induced me to introduce a few observations on the importance of attending to these particulars. As with those diseases purely medical or requiring internal treatment only, so with the surgical, have I been particular in pointing out the simplest modes of treatment, and careful in avoiding to recommend too much, lest by too great interference the intention of the operator be frustrated.

I have designedly omitted many diseases which might be regarded of some interest and personal consequence to those suffering under such maladies, as cancer, consumption, gravel, &c., but individuals labouring under ailments of this chronic nature, ought not to venture on the active and precarious duties of a sea life; and should such diseases make their appearance during the voyage, they will make as is their nature but slow progress, and it will generally be found a safer plan than tampering with these maladies, to wait until the termination of the voyage will afford an opportunity of having professional advice. Some injuries requiring surgical treatment are

also omitted, because it would be perfectly absurd to attempt to impart, through this limited channel, that amount of knowledge which alone could prove safely and serviceably available in their treatment. It must, of course, in considering these omissions, be borne in mind, that I have only given those directions which I have thought might be intelligible, and be safely adopted by the non-medical at those moments of emergency when the health or life may depend upon the timely assistance of art, but when the scientific artisan is not present to supply it. The same reply I would make to those who may contend that popular treatises on medicine are degrading to the character of the author, and dangerous in the hands of the public, that this little work was written solely for those who are completely deprived of the services of a physician, and if it prove useful to them by abbreviating their long tedious hours of pain and suffering, the intervals afforded by my professional engagements, will have been satisfactorily occupied in its publication.

^{2,} Upper Parliament-street, Liverpool, 25th Jan. 1836,

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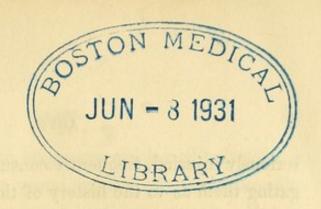
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MEDICAL DIRECTIONS

FOR

SEAMEN.

AGUE; OR, INTERMITTING FEVER.

To this disease sailors are very much exposed, as there are few ports at which they touch where it does not prevail during some part of the year. It frequently visits the whole line of the extensive coasts of North and South America: is seldom absent from the Carribbean Islands, St. Domingo, Jamaica, &c.; exists in a severe form on the African and East Indian coasts, and occasionally prevails at several of the European ports. I may here observe, that physicians, and intelligent captains of vessels, are well aware that peculiar diseases are to be met with according as they approach to, or recede from, the Equator; and that even the same disease will assume a mild or malignant form according to the degree of latitude in which it is found. It may easily be conceived, that a disease appearing, as ague does, in such different atmospheres, must suffer considerable modification, as well from the variation of climate, as from the difference of constitution on which it acts. Seamen, whose constitutions are

seriously injuried, frequently consult me, and on interrogating them as to the history of their illness, they designate it by the name of fever and ague, or describe it as having commenced with an attack of yellow fever, ending in ague. The diseases most prevalent in the neighbourhood of the Equator, are yellow fever, sometimes attended with the black vomit, agues, dysentery, cholera, and typhus fever; one, two, or even three, of these diseases occasionally existing together.

Were the agues of the tropical climates as simple in their form, and as distinctively characterized as those of our country, they could be easily detected and readily cured; but as such is not the case, we must endeavour to explain, as intelligibly as possible, how the existence of the disease may be be known in its more disguised mode of aggression, and what is then the most appropriate treatment to be adopted.

When the paroxysm (or fit of shivering, &c.,) once displays itself, there is no further doubt of the disease. The paroxysm is known by the following symptoms; intense coldness of the whole surface, shivering of the body, gnashing of the teeth, sickness, and vomiting; this is the cold stage: next follow, heat of skin, hurried breathing, great desire for cold drink, sleepnessness, headache, and sometimes delirium, all of which are removed by a profuse sweating, and a calm sleep that restores the patient to comparative health, until recurrence of the next paroxysm, which may take place on the following day, or day after, or may even occur twice on the same day. But there is an irregular form of ague which may exist for months with symptoms of the following kind; headache, pains of limbs,

AGUE. 3

thirst, want of appetite, languor, a quickened pulse, and a white tongue. Those symptoms are often mistaken for simple fever, and aggravated by the treatment. But, if the person be closely watched, he will be found to have a slight chill daily, or every second day, and that about noon. The disease may be cut short in this stage, by exhibiting one scruple of the powder of Ipecacuanha as an emetic, allowing, at the same time, plenty of warm drink, confining the patient to bed while the emetic is acting, so that the perspiration which it will produce may be freely encouraged. When the stomach is settled, the bowels are to be well opened by the following medicines:

Take of—Calomel, 10 grains, Conserve of Roses, sufficient to form a mass.

In two hours afterwards, a wine glassful of the following mixture should be taken and repeated every three hours;

Epsom Salts, 1 ounce,
Peppermint Water, 8 ounces,
Powdered Rhubarb
— Jalap, of each 20 grains,
Calcined Magnesia, ½ drachm.

Medicine will fail to cure unless the most particular attention be paid to the diet, which should consist only of gruel, panado, sago, arrow-root, cocoa, stale bread, &c., no wine, ale, acids, or spices can be taken without aggravating the complaint. When the fever abates, which is easily known by the tongue becoming cleaner, the pulse less quick, (80 beats in the minute,) and the heat of the skin less intense; the treatment, both as to diet and medicine, must be changed. First, meat, with ale, porter, or even wine, may be given, at first very moderately; but should no increase of fever follow, they may then be more freely used. The quinine mixture, No. 3, may also be given,

which is seldom found to fail in restoring the strength of the convalescent. Should the fever return and be permanent, the first treatment must be resorted to, and on its ceasing, the full diet and quinine may be resumed: but if the fever be present only for a few hours in the twenty-four, no change need be made, merely avoiding giving the quinine or heating food, during the continuance of the hot fit.

If the ague be regular, i. e. coming on in paroxysms daily, or every second, third, or fourth day, leaving the person comparatively well in intervals, the treatment should then be employed only during the period when the patient feels comparatively well, that is, during the intervals between the attacks. After opening the bowels by a pill, similar to the one already described, the person may commence with the quinine mixture, taking three table spoonfuls instead of two, three times a day, or every two hours, during the intermission of the fever. At the same time, the diet should be generous, with the addition of a little wine. If, after a week or ten days' perseverance in this plan, the disease should appear obstinate, the quinine may be given in doses of five or ten grains every three hours. The disease will seldom resist this more energetic treatment, but still, should disappointment follow, then a trial may be made of mercury, in the following form:

Take of—Blue Pill, 2 scruples,
Calomel, 12 grains,
Opium in powder, 6 grains -divide into 12 pills.

Give one night and morning, until the gums are slightly sore 5 during the use of this medicine, the night dews should be avoided, and the surface of the body clothed in flannel.

AGUE. 5

The fit may sometimes be checked by giving the following draught a short time before the usual period of the attack, or even during the cold stage:

> Take of - Laudanum, 50 drops, Æther, 30 drops, Peppermint Water, 1 ounce.

Should the mercury not produce the desired effect, which, when it does, is shown by the soreness of the gums, and should the fit therefore continue to occur without the fever being lessened, the following pills may be substituted in stead of those already used:

TAKE OF—Calomel, 2 grains, Ipecacuanha, I grain,

Opium, one quarter of a grain, made into a pill, with Conserve of Roses, which may be repeated thrice a-day—or a powder, three times a-day, composed of

Calomel, 2 grains, Dover's Powder, 6 grains—mixed.

When the gums become tender, these medicines must be omitted: a few words more of advice may be found useful. The cold stage of ague has been known to prove fatal; this danger may be suspected should its continuance be long, the respiration very difficult,* and the pulse begin to fail. Under such circumstances, an attempt must be made to bring on the hot stage by covering the sufferer well, by introducing hot bricks or bags of warm salt under the bed clothes, placing them opposite the stomach, heart, and between the legs, by friction of the hands and feet; the free use of brandy, a tea spoonful of æther in a glass of wine, or half a tea spoonful of cayenne pepper.

^{*} In this stage, bleeding from the arm is recommended, but I am opposed to it from my own experience, and it should not be practised without the direction of a physician.

An attempt might be made to excite vomiting, by filling the stomach with warm fluid, and then putting a feather, or the finger, down the throat. It will not be safe to give an emetic unless one of sulphate of zinc, (20 grs.) When the pulse rises and the skin becomes warm, the danger may be considered as warded off for the present.

The hot stage may also be fatal; should the patient become quite delirious, the countenance flushed, the eyes red, accompanied by a constant watching and restlessness, this result is to be apprehended. In this case, the treatment must be varied; blood should be drawn freely from the arm, the head shaved, and bathed with cold vinegar and spirit, a very slight covering only allowed on the body, fresh air admitted, and nothing allowed as drink but cold water. After the subsidence of either the hot or cold stage, the treatment recommended above may be very advantageously adopted.

Ague is oftentimes complicated with some of the following diseases:

With jaundice: in the hands of non-medical men, the treatment however, need not, on this account, be varied.

With dropsy; which may depend either on obstruction in the liver, or the debility induced by the disease. In the former case, mercury is to be given as directed; in the latter, sulphate of quinine, ale, wine, porter, and animal food will remove this complaint.

Cough, is also a troublesome attendant on ague; if accompanied with a spitting of blood, bleeding from the arm may be resorted to, a blister applied to the chest, and spirituous liquors refrained from.

Relapses are common from any error in diet, from

fatigue, or exposure to cold, especially to eastern winds. Hence the sulphate of quinine should be persevered in, for sometime after the disease is removed, and a generous diet allowed.

ABSCESSES, OPENING OF.

There are some parts of the body in which abscesses arise, which should not be opened unless by an experienced surgeon; such as in the throat, the arm-pit, the groin, and the neck. The reason is, that diseases, almost similar to abscesses, appear in those parts into which if a lancet were plunged, death might ensue, as ruptures, bloody tumours, (aneurisms,) &c.

When an abscess exists and requires opening, there is in general, a good deal of redness of the surrounding skin, the part is painful, particularly on pressure, the centre is more prominent than any other part, of a lighter colour, and yields to the pressure of the finger, returning to its original form on the pressure being removed. A small opening should first be cautiously made with a large needle, and if matter escape, the opening may then be enlarged with a lancet.

APOPLEXY.

Is a disease belonging rather to advanced age, than to middle life, therefore it is not frequent amongst mariners, as they generally forsake the ocean before old age arrives. When it does attack seamen, it is almost always attributable to intoxication. Apoplexy attacks suddenly: the

person, if sitting or standing, falls to the ground insensible and motionless, breathing slowly and with difficulty, and sometimes snoring as if in deep sleep. The eyes are not affected by light, so that a lighted candle may be brought close to them without causing inconvenience.

Treatment.—Let blood be drawn freely from the arm, give 10 grains of calomel mixed in treacle, and administer a strong purgative enema, such as

Common Soap, 4 ounces,
Tepid water, 1 pint,
Castor Oil, 2 ounces,
Oil of Turpentine, 1 ounce—mixed.

Let the head be shaved, and then bathed frequently with equal parts of spirits, cold water, and vinegar. Every article round the neck should be loosened. If, however, the face be pale, the hands and feet cold, and the pulse weak, bleeding cannot be ventured on in such a case. The other remedies abovementioned may be used with the addition of friction to the feet and hands. Bags of heated sand or salt, or hot bricks, may be applied to the extremities, and between the thighs. Should the patient recover his senses, and the power of using his limbs, it will be sufficient to keep his bowels open with castor oil, salts, rhubarb and magnesia, while his diet must be plain without without much liquids, viz. rice puddings, arrow root, sago, bread, and potatoes.

Flesh meat may be gradually allowed, but spirituous liquors, at this period, are decidedly injurious. If recovery takes place, the use of one side of the body is generally lost, forming what is called paralysis, which, so far as regards treatment, need not be separately mentioned.

BATH. 9

BATH, SLIPPER.

During a long voyage, when the wants are many, and the comforts but few, perhaps there is not one article more essential towards the preservation of health, the mitigation of suffering, or the cutting short of a disease, than that of a slipper-bath. Even as a luxury, its cheapness and readiness are powerful recommendations. Many and various are the diseases, which its timely use at once relieves. If it be so useful on shore, where medical advice can be so easily obtained, how much more so must it be at sea, where such facilities are rarely possessed, and where it is so necessary to use every precaution against the occurrence of disease? The chief diseases in which benefit may be derived from the early use of the warm bath, are those ordinarily the result of cold, and which, when neglected, run into the various inflammations of the lungs, bowels, throat, &c.; also, rheumatism, croup, dysentery, coughs, &c. A few rules for the advantageous employment of the bath, may prove not altogether unprofitable.

It never should be used where there is a tendency to apoplexy, nor when the head is much affected, particularly if there be a disposition to raving.

Nor, when the weakness is so great that the person is liable to faint, on raising the head above the level of the body.

Nor, will its use be prudent, when the skin is very hot and dry, attended with thirst and loss of appetite, nor when any of the inflammations are so far advanced as to be attended with a quick pulse, heat of skin, and thirst. Great benefit may be expected from its use, if exposure to cold or wet, be soon after followed by chilliness, languor, depression of spirits, and a pulse not above 70, although a headache may be also one of the symptoms. In every stage of simple dysentery or bloody flux, it will be found a most useful and grateful remedy. In the commencement of that dreadful disease, the Asiatic cholera, the timely use of a warm bath, has frequently placed the sufferer in a few hours out of danger. In almost all eruptions of the skin, its employment is very beneficial. In rheumatism, without fever, the warm bath alone, every night, is sometimes a sufficient remedy.

How to be used.—The bath should be near the bed, so that the person may go at once from one to the other. The water should be as hot as can well be borne, and sufficient to cover the whole body, excepting the head, salt water being preferable. The person should remain in it not less than fifteen, or more than thirty minutes, unless fainting or raving occur. On coming out of the bath, the whole body is to be quickly dried with a coarse towel, by an assistant, and he should instantly go to bed, be covered with sufficient clothes, allowed plenty of warm drink, and not be permitted to rise for some hours after the perspiration, which is most likely to follow the use of the bath, has ceased. If a thermometer be convenient, the proper heat of the water may be at once determined; the temperature for a warm bath being from 92° to 98°, and for a hot bath, from 98° to 102° Fah. In case there be no thermometer at hand, the best method of trying the heat of the water, so as to prevent it exceeding a comfortable temperature, is to put the bare elbow into the bath, which will indicate the degree of heat endurable.

Bathing of the feet.—Place the legs in water, as hot as can be well borne, as far as the knees; let them be retained there from ten to twenty minutes, unless fainting be apprehended. The temperature of the water should be kept up during its use. The legs and feet should then be well dried.

A cask will form a bath.

BLEEDING.

The patient, if possible, should be placed in the sitting position, when going to lose blood, as by this means fainting will come on before too much blood has been removed. The apparatus required for this operation are, a bandage, a lancet, a basin, and a compress. The lancet should be what is technically called broad shouldered, very sharp, and used for no other purpose. The bandage may be made of broad tape, garters, or, what is preferable, of calico. Several of these should be ready in the medicine The compress may be made of lint, folded several times to a requisite thickness. The arm is to be held at full length from the side, while the bandage encircles it about one inch above the bend of the elbow; the hand is to be firmly clenched, when the veins will swell, unless the bandage be too tight, which may be known if the pulse cannot be felt; the lancet is to be passed slantingly into the vein for about half an inch, and brought out perpendicularly, so as to enlarge the wound. Should the blood not flow, either the vein has not been pierced, or the bandage may be too loose or too tight. Should the vein be pierced, some blood will escape to at least a spoonful; if the blood gushes out and then ceases, it is a proof that the vein has been opened, and that some other cause prevents its escape. If the veins appear flaccid, tighten the bandage; if on the contrary, the pulse cannot be felt, let the bandage be loosened. If these means fail, another vein on the same arm, or on the opposite one, may be opened. It frequently happens, that the blood will not flow because the patient is faintish, and here the pulse cannot be felt, but the method of distinguishing between these two cases is this; that if it be impeded by faintness, the pulse cannot be felt in either wrist, while if it arises from a tightened bandage, the pulse of that arm alone is affected.

The quantity of blood necessary to be drawn will vary according to the complaint, and will be mentioned in another place. The necessary quantity having been obtained, the bandage is to be loosened, the finger is to be placed either on the orifice, or a little below it, the compress is now to be placed over the wound, and the bandage is to be made to cross it several times, making the knot immediately on the compress. The choice of the vein to be opened is of the utmost consequence, as an artery lies under the most prominent vein; should the artery be felt beating under a vein, that vein must be avoided. The vein that lies in the middle of the fold of the arm should, as the safest, be preferred by the inexperienced, although one in the habit of performing this simple operation, may select any with equal propriety.

BLEEDING FROM THE NOSE,

Seldom proceeds to such an extent as to endanger life, and should not be too early checked. However, if the person begins to be enfeebled by the loss of blood, the following treatment should be adopted. With a probe, push high up into the nostrils, small pieces of lint moistened in vinegar, alum and water, or turpentine; let the nostrils be completely filled; blood should be drawn from the arm; let the feet be bathed in warm water; keep the head raised; let the outside of the nose be kept constantly cold by bathing it with spirits and water, or vinegar, and give either of the following prescriptions:

Take of—Laudanum, 2 drachms,
Elixir of Vitriol, 1 drachm,
White Sugar, 1 ounce,
Water, 7 ounces—mix.

Take two table spoonfuls every third hour; or,

Take of - Opium, in powder, Sugar of Lead, of each 6 grains.

Make into twelve pills, with Conserve of Roses; take one every third hour.

BLEEDING FROM LUNGS, OR SPITTING OF BLOOD,

Is sometimes the forerunner of inflammation; if there be fever present, a pint of blood should be taken from the arm, and the remedies mentioned under inflammation of the lungs, made use of; if no fever be present, let the person cease from bodily labour, avoid speaking, singing, &c.; and take one of the following pills, every third hour:

Take - Sugar of Lead, 3 grains,
Ipecacuhana, in powder, 6 grains,
Opium, in powder, 2 grains.
Make into twelve pills, with Conserve of Roses; or,

TAKE - Ten drops of Elixir of Vitriol, every third hour, in half a wine glassful of water.

BLEEDING FROM THE ANUS OR FUNDAMENT,

May be the consequence of piles, flux, or scurvy, which see.

BLISTERS.

Blistering plaster is an indispensible article in the medicine chest; it is usually made up into rolls, and when used, needs merely to be softened by moulding it in the hands, or by beating it with a warm body, care being taken, that the heat is not great, as its virtue is much impaired by high temperature. It is then to be spread with the thumb, on adhesive plaster, soft leather, strong paper, or coarse linen; leather is preferable. The shape and size of the blister will vary according to the part on which it is to be applied. The necessary thickness of the plaster will be attained, provided the material employed be completely covered. For pleurisy, or inflammation of the chest, it may be placed transversely, and should be large; to the neck it should be applied transversely; to the windpipe and spine, longitudinally; to the throat, as in sore throat, it may reach from ear to ear; it should be circular for the head, and sufficiently large to cover it entirely. For the joints, it should be circular for the hip, shoulder, and knee, and may be made so as to completely envelope the wrist, elbow, and ankle. One good general rule is, to cover the pained part. It should remain on from 16 to 24 hours, and should be kept close to the part by a bandage. On removing the plaster, should the *blisters* not have broken, they are to be opened with scissars or a penknife, and spermaceti ointment, spread on lint, daily applied; should the part become very painful and inflamed, a poultice of bread and warm water may be advantageously applied, three times a day, until the pain be removed, when the spermaceti ointment may again be used. If it be intended to apply a blister to any hairy part of the body, this should be first shaved. Should it be necessary to keep the blistered part open, it may be dressed daily, with the following:

1 part of Blistering Ointment, Do. Spermaceti Ointment—mixed.

BLOOD, VOMITING OF,

Differs very much from spitting of blood, as, in the one instance, the blood proceeds from the stomach, in the other, from the lungs. Vomiting of blood arises from various causes, but I need only mention a few which are curable; the other not admitting of relief. Blood ejected from the stomach is generally mixed with some of its contents, is rather blackish when first thrown up, is not attended with cough, comes away in large quantities, and is usually preceded by sickness of the stomach. Amongst seamen, the chief causes are, 1st, habitual drunkenness; 2d, scurvy; 3d, the swallowing of poisonous substances; and, 4th, blows over the stomach.

For the 1st, the remedy is strict abstinence. As long as the bleeding continues, scarcely any food should be taken into the stomach, and that merely cold water, ice toast water, cold barley water; ice may be applied over the stomach; quietness observed; and two table spoonfuls of the following mixture taken every third hour:

Laudanum, 2 drachms,
Elixir of Vitriol, 40 drops,
Treacle, 1 ounce,
Peppermint Water, 7 ounces—mixed.

For the 2d, the proper remedies will be found under the head scurvy.

For the 3d, the treatment will of course vary with the description of the poison employed.

The 4th, may be cured by a bleeding from the arm, allowing of lemonade, fomenting the stomach, and placing the feet in warm water.

Persons affected with this disease should use no laborious exertions.

BOWELS, INFLAMMATION OF,

Is rather a rare disease.

Symptoms.—Pain of the bowels, increased on the slightest pressure; constant vomiting; bowels confined; thirst; foul tongue; pulse quick, but feeble; anxiety of face; hiccough; hot skin, &c.

Treatment.—Let blood be drawn, until fainting is induced; if in three hours the pain be not relieved, repeat the bleeding. Foment the bowels with very hot water. Give three of the following pills for the first dose, and one every third hour afterwards, until the pain abates, or salivation comes on:

Opium, 9 grains, Calomel, 24 grains; made into 12 pills, with Cons. of Roses. The drink should be toast water, in spoonfuls only. This is a very dangerous disease.

Causes.—Cold, injury to the belly, by blows, cuts, &c.; all the symptoms may arise from a rupture, which may require a surgical operation.

BURNS AND SCALDS.

The best application for scalds, provided the skin be not broken, is a mixture of equal parts of vinegar, spirits and water. This should be applied instantly, and continued for about twenty four hours, when the pain will be found to have abated, and very little danger of the skin rising. If, however, the skin be broken, cold water simply must be used, until the pain is dissipated. If an arm or leg be the part scalded, it may be placed in a vessel of cold water, which may be frequently changed. Should much redness of the skin and pain follow, a warm bread poultice should be applied, until both are gone; and then the following ointment spread on lint may be daily applied:

Spermaceti Ointment, 1 ounce, Prepared Chalk, ½ ounce—mixed.

Burns should be poulticed as soon as possible, and this remedy continued until the great pain abates; the ointment as above prescribed may then be used. If the part be black, it is a sign of mortification, and the poultice must be continued until the parts separate. As long as the pain and redness continues, the diet should be low and unirritating. Salt food is particularly injurious when there are sores on the body. The bowels are to be kept open by Epsom salts, and about 40 drops of laudanum may be taken, whenever the pain is severe.

CATHETER, OR BOUGIE, INTRODUCTION OF.

For the purpose of introducing a catheter into the bladder, the patient should be laid on his back; let his head and shoulders be raised; while, at the same time, his knees are drawn up towards the belly. The catheter is to be well oiled; the penis steadied between the left forefinger and thumb, and the point of the instrument is to be passed into the orifice, or opening of the urethra; the instrument must now be held in the right hand, with the concavity towards the abdomen, and gradually pushed forward, while the penis is kept stretched; after having passed some distance, an obstruction is met with, which may be overcome by depressing the handle, when the catheter generally slips suddenly into the bladder, and the urine gushes out, During the operation, the person should be kept warm. The forefinger passed into the fundament, will sometimes guide the instrument. Further directions would only tend to confuse.

Bougies are almost similarly introduced; begin with one of the smallest size, and use a larger one every third day. They may be allowed to remain in the urethra as long as pain is not felt. No man suffering from stricture should venture to sea, without having a surgeon on board, or without being perfectly familiarized in the use of these instruments.

CARBUNCLE

Begins like a common boil. A small red pimple first appears, which grows gradually larger. The surrounding skin becomes red, painful, and hard; in a day or two, the

central part becomes black, which is mortification. This complaint is rather rare, and generally attacks those of enfeebled constitutions; or it may appear as a symptom of plague, or follow a tedious fever. At its commencement, a large warm poultice should be applied, and renewed every six hours; five grains of calomel may next be given, followed, in four hours, by the aperient mixture, No. 2. The diet should be low. When mortification is noticed, make two incisions crossing each other, thus + about half an inch deep, through the whole part which is hard and red, allow it to bleed for some time, and then apply the poultices as before. When the mortified part comes away, the sore may be dressed with spermaceti ointment, provided it appears of a healthy red colour; and that the redness and pain of the neighbouring part has disappeared. When mortification appears, the diet must be generous; a pint of porter allowed daily, and the quinine mixture, No. 3, is also to be given.

This disease appears chiefly on the back and chest.

CHOLERA (ENGLISH.)

Symptoms.—Frequent purging and vomiting, sometimes attended with cramps of the legs and feet, and occasionally of the hands; thirst, hot skin, &c.

Treatment.—Take of—Opium, 9 grains,
Calomel, 12 grains, form a mass with
Conserve of Roses, or Treacle—divide into 9 pills.

Three to be given for the first dose, and one every hour afterwards, until the vomiting and purging cease.

No solid food should be taken while the disease continues, and the drink should be barley water, rice water, gruel, or cold water. The greatest care must be taken to avoid acids, or vegetables, for some days after a cure has been effected. The disease is not contagious. When we find the evacuations from the bowels similar to rice water, that the cramps are very general, and at the same time, attended with a cool skin, and depression of spirits, it is a most dangerous complaint, the Asiatic cholera.

CHOLIC

Is a violent pain in the stomach and bowels, without fever; the pain not being increased by pressure, and is sometimes attended with vomiting.

Treatment.—About 60 drops of laudanum, in half a glass of brandy, may be given at one dose. The bowels should have flannels, wrung from hot water, frequently applied to them; or bottles of hot water, bags of hot salt or sand, may be substituted. Spirits of turpentine may also be freely rubbed, over the whole of the belly, Should the pain not be relieved by these means, the warm bath may be used. One pint of blood from the arm; and an injection of one pint of gruel and 2 ounces of castor oil exhibited.

CONTUSIONS, OR BRUISES.

The dangerous effects to be apprehended from a bruise, will depend on the degree of force with which the blow may be given, and on what part of the body it has been received. A blow on the head may injure either the coverings of the bone, the bone itself, the brain, or even altogether. If the covering, or skin over the bone, be the only injuried part, the symptoms are generally slight,

and differ very little from a bruise, on any other part of the body. In some constitutions, however, erysipelas and deep-seated inflammations are apt to follow blows on the head. The former has its appropriate treatment laid down in another part of this work; the latter is sometimes a dangerous disease, and it is known by the violent pain of the head, the high attending fever, the not being able to bear the slightest pressure over the inflamed part; but especially, by the swelling of the whole head, when it extends down the forehead and eyelids, so as to close up the eyes. These symptoms should be remedied as soon as possible, by bleeding from the arm, purging with calomel and Epsom salts; by low diet, and the following diaphoretic, or sweating mixture:

Take of—Mindererus's Spirit, 3 ounces,
Treacle, or White Sugar, 1 ounce,
Sweet Spirits of Nitre, ½ ounce,
Tartar Emetic, 1 grain,
Water, pure, 4 ounces—mixed.
Two table spoonfuls to be taken every third hour.

If relief be not obtained in 48 hours, and if the pain become excessive, a lancet must be pushed down to the bone, in two or three places. The incisions are to be made where the pain and swelling of the head is greatest, and one incision should always be made in the bruised part. Although no matter should follow the incision, great relief will be obtained. If any part appears more prominent, i. e. pointing, that should be the spot preferred for the incision.

There can be no hesitation in making those incisions, as no danger can follow; the temporal arteries may be cut, and perhaps it would be better to avoid this accident, but even should this happen, the bleeding will soon stop. The temporal arteries run along the temples, and can be easily detected, by placing the finger on the temples, when they will be found beating like a pulse. The lancet may then be introduced, at some distance from that part.

CONTUSIONS.

Chest.—If the exterior part only of the chest be bruised, it may be easily cured by bleeding, purgatives, fomenting with hot stupes, and rest; but if the interior be injured, it is a most serious accident. The lungs may be bruised by a blow or fall, or a rib may be broken and driven inward, so as to wound the lung. The symptoms of an injured lung are difficulty of breathing, spitting of blood, pain of the part, increased in drawing in the breath; and, if not very speedily relieved, the inflammation of the lungs will soon become severe. The treatment may be the same as in inflammation of the lungs. If a rib be broken, and the pain be increased on every motion of the chest, a broad roller of linen, calico, or flannel, should be passed round the chest, or a large pitch plaster applied; it will sometimes happen, that by the lungs being torn by a broken rib, air will escape, and get through the whole surface of the body, swelling the person to an enormous size; this is not usually a dangerous symptom. A few punctures, about an inch deep, ought, in such cases, to be made with a lancet, in various parts of the chest, so as to allow of the air escaping.

Abdomen, or Belly.—Life may be at once extinguished, by a blow in this part, particularly if received over the stomach; this often occurs in quarrelling. A blow on the abdomen may rupture some of the bowels, by which internal bleeding may take place, and become the cause of death. Internal bleeding may be suspected if, soon after the blow, the face becomes pale, the lips livid or whitish, the pulse almost ceases to beat, the whole surface feels cold, and a disposition to fainting takes place, on raising the head. The best treatment will be to allow the sufferer to lie quietly on his back, with his head low; to give him wine and cordials every fifteen minutes, to keep the extremities warm, and to give him one grain of opium every third hour, until three grains have been taken; a recovery, which is very rare, is known to be taking place when the pulse rises, the heat of the body returns, and the voice becomes stronger. The cordials must now be administered cautiously, as inflammation will almost certainly take place; for the treatment of which, see inflammation of the bowels.

Spine.—Contusions of this part of the body are known by the loss of sensation and motion, of all that part of the body below the part injured. The person is unable either to expel his urine or stools, for the first few days; but afterwards, they escape from him unconsciously.

The treatment must be to place the sufferer on his back; apply a large blister along the back bone. Give him 30 grains of jalap, and 60 of cream of tartar, every three hours, until purged. Draw off the water with a catheter. Clysters will also be found useful. Recovery seldom takes place.

COUGH, OR COLD.

A cough, when proceeding from cold, and not attended with fever, may be cured in a few days by abstinence, keeping the bowels well open, bathing the feet in warm water, and taking some of the following mixture, which will be found almost a specific:

Take of—Laudanum, or Tincture of Opium, 1 drachm,
Tartar Emetic, 1 grain,
White Sugar, 2 ounces,
Sweet Spirits of Nitre, ½ ounce,
Linseed Tea, (thin,) ½ pint—mix.

A table spoonful to be taken every three or four hours, and two table spoonfuls at bed hour.

If the cough be attended with much spitting, or a pain in the side, blood may be drawn from the arm, and a blister applied to the chest.

CUPPING .- LEECHING.

In giving directions for the treatment of several diseases, in which drawing blood directly from the affected part, is one of the most powerful means used in their cure, it may seem surprising that I have mentioned neither leeching nor cupping. As to the former, it would be useless; the care and attention necessary to preserve leeches alive, would never be bestowed, and as to the latter, I have never seen or heard of any merchant vessel, having a cupping apparatus attached to the medicine chest. There is an idea amongst the captains of vessels, that it is a purely surgical operation. To remove this erroneous idea, I will merely say, that it requires less knowledge than

that of bleeding. In drawing blood from the arm, some injury may, and is sometimes inflicted, but in cupping, the most careless or ignorant can do no harm. I would, therefore, strenuously recommend to every captain of a vessel, to be provided with a cupping apparatus; the method of using it can be easily learned from the surgical instrument maker. That its expense may be no hindrance to so essential an apparatus, becoming a part of the medicine chest, I would recommend that the scarificator and exhausting cup only be provided, without spirit, mahogany case, &c., which only add to the expense, and are by no means actually necessary. The following directions can be easily comprehended if the apparatus were once seen. Having set the scarificator, place it firmly over the part to be cupped; on touching the spring, the lancets penetrate the skin, but as much blood would not flow by this means, it becomes necessary to use the exhausting cup, by placing which over the site of the puncture, and drawing the handle up two or three times, the blood is made to flow into it. When full, it is to be emptied and immediately re-applied, until a sufficient quantity be obtained, When the operation is finished, the mere application of dry lint will be sufficient dressing. If a cupping apparatus be not convenient, the following plan may be substituted:

Hold a lancet between the thumb and forefinger of the right hand, at about half an inch from its point, plunge it seven or eight times into the skin of the affected part; let the punctures be so close to each other that all of them may be covered by a drinking glass. A small quantity of spirits of wine is to be rubbed with the finger

round the inside of the glass; the spirits is to be set on fire by a lighted candle, and before the flame is extinguished, the mouth of the tumbler is to be placed on the scarified part, which will quickly rise into the vessel, and gradually fill it with blood; when full, the glass is to be removed, and another, prepared in the same manner, instantly applied.

DIARRHŒA, OR LOOSENESS.

Is not always to be considered a disease, as it is sometimes evidently an attempt on the part of nature to cure one, and therefore ought not to be checked suddenly, especially if fever be present. There is no mistaking this disease, as it is simply that the bowels are too loose, producing debility, and being unattended with pain, griping, or needing, which are the symptoms of a different disease, viz., the dysentery or flux.

Treatment.—Take of—Magnesia, 2 drachms,
Tinct. of Opium, 1½ drachm,
Tinct. of Rhubarb, ½ ounce,
Peppermint Water, 8 ounces.—mix.

Two table spoonfuls to be taken every third hour.

The surface of the body should be kept warm, and the diet may be good and generous, viz., flesh meat, broths, biscuit, arrow-root, and a glass of port wine, two or three times a day, may be allowed. As it is one of the first symptoms of Asiatic cholera, it should be immediately attended to when it occurs, during the prevalence of that disease, and ought to be treated with somewhat more energetic means, as by placing the patient in a hot bath, and letting him have 30 drops of laudanum, 20 drops

of spirits of hartshorn, and I drachm of sweet spirits of nitre, every hour in water, until it is checked. Should it arise from any indigestible substance, one table spoon ful of castor oil is to be given every 3 hours, until it operates; or, 20 grains of rhubarb, 15 of magnesia, I drachm of tincture rhubarb, in I ounce of peppermint water, every three hours. Should it resist the above remedies, let him have the following mixture:

Take of—Magnesia, 2 drachms,
Laudanum, 1½ drachm,
Powdered Ipecacuanha, 8 grains,
Peppermint Water, 8 ounces.

Two table spoonfuls every third hour, until the purging ceases.

DISLOCATIONS.

Almost every joint of the body is subject to dislocation; but I will lay down rules for the treatment only of a few, as some require the skill of the most eminent surgeon. The shoulder joint is that which is most frequently dislocated; it is known by the great pain, increased on motion, by the arm being lengthened, and sticking out from the side, and by inability of moving it as before the accident. The simplest and easiest method of reducing it, is to place the person sitting in a chair; to pass a sheet round the upper part of the body, as high as the arm-pit, and make it fast to a post. A towel is to be fastened round the arm, above the elbow; the arm is now to be pulled in a slanting direction, outwards and downwards, slowly, but powerfully, until the bone is returned. If the bone be not very long out, it can be easily reduced; the reduction is generally proved to have been effected by the sudden snap that is heard.

A dislocation of the elbow joint is soon detected and easily reduced. Bend the elbow, so that the fore-arm may almost form a right angle with the arm. The arm being maintained firmly in this posture, the fore-arm should be steadily drawn forward, until the bones are found to have resumed their natural situations, which will be known by the noise which commonly attends the reduction.

DROPSY.

There are several varieties of this disease, each arising from different causes; the discrimination of these varieties, depends much upon the detection of their respective causes; and as this requires the utmost tact of the accomplished physician, I shall not here mislead the non-professional, by appearing to give directions, by which they might expect to exercise such skill. This is also of the less importance, as these forms of dropsy generally require a considerable period for their development, and so incapacitate the patient during their progress, for active service, that is highly improbable that cases of this kind, will be out of the reach of medical assistance. There is however, one species of dropsy, which, originating in cold, comes on suddenly, and is marked by fever, cough, thirst, the voiding of little urine and swelling of the different parts of the body, either confined to the legs and thighs, the belly, &c.; or universally diffused over the body. This form of dropsy may be speedily cured.

Treatment.—Take one pint of blood from the arm, and then give the following mixture:

TAKE OF—Epsom Salts, 1½ ounce,
Peppermint Water, 8 ounces,
Powdered Jalap, 1 drachm,
Sweet Spirits Nitre, ½ ounce.

Mix-one wine glassful every three hours, until the bowels are well purged.

The warm bath may next be used, and perspiration encouraged, by drinking freely of warm drink, taking at the same time, one of the following powders, every three hours:

Compound Powder of Ipecacuanha, 10 grains, Calomel, 1 grain - mix.

If the fever continue, the bleeding may be repeated; but if not, the surface of the body may be well rubbed daily, with oil, and one of the following pills given three times a day, with one tea spoonful of sweet spirits of nitre.

> TAKE OF-Calomel, Ipecacuanha, of each 1 grain.

Make into a pill with Conserve of Roses. The diet should be moderate. Cream of Tartar water, or Imperial, may be drank freely.

DROWNING.

The peculiar nature of the seaman's life must render him particularly obnoxious to this accident. Provided the person has not been under water for a longer period than fifteen minutes, an attempt must be made for his recovery. For this purpose, he should be carried into a room moderately warm, and laid upon his back, with his head raised; two or three assistants should be employed in diligently rubbing his hands, feet, and chest, with spirits of turpentine or brandy; a mustard poultice may

be applied over the head, the nostrils may be tickled with a feather, and strong spirits of hartshorn held to them frequently. But the most essential means, is that of inflating the lungs, for this purpose, let the nostrils be closed by the fingers of an assistant; introduce the pipe of a bellows into the mouth, and at the same time press that part of the throat, vulgarly called Adam's apple, backwards, to prevent the air getting into the stomach. Respiration must now be imitated, by blowing the bellows, so as to send the air down into the lungs, and then pressing on the chest to expel it; this process should be persevered in, for at least, half an hour. If the face be purplish, and the eye balls prominent, some blood should be drawn from the arm. If the power of swallowing return, spirit and water should be given. An enema, or injection of brandy and water, may also be exhibited.

DRUNKENNESS.

Relieved from the constraint of confinement, and the labour of performing the duties attached to their vessel, rejoiced at again meeting with their friends and acquaintances, and afforded the opportunity of indulgence by the accumulation of their wages—more excuses may be made for sailors indulging in this vice than for any other class of men. My intention is to speak not of the moral, but of the physical evils, which spring from this source. Diseases originating from drunkenness are manifold, the most frequent are brain fever, liver complaints, dropsy, sudden deaths, &c.; other evils are accidents, such as drowning, contusions, fractures, and dislocations. Still,

I do not mean to say, that spirituous liquors should not be used on board a vessel, or elsewhere; I only wish to contend against their abuse. On reaching a very warm climate, spirituous liquors should be drank very sparingly, if at all. I am convinced, that if this advice were more attended to, the diseases of warm climates, would attack fewer seamen, and, in case of their invasion, that the symptoms would be milder, and the disease altogether more manageable. To those, on the contrary, voyaging in cold climates, especially when engaged in the whale fishery, in the frigid zone, spirituous liquors are indispensable, and have often, no doubt, saved the lives of those who have fallen overboard, or been otherwise long exposed to the effects of intense cold. The colder the country, the more freely may spirituous liquors be drank without injury. A Russian sailor, can drink a quart with impunity, an English sailor about a gill, while the same quantity would be soon fatal to a native of the torrid zone. symptoms of excess in drinking, are nearly those of apoplexy; viz., lying in a state of insensibility, motionless, the face flushed, and snoring, as if in a deep sleep. This is a very dangerous state, and may terminate fatally, if not soon relieved. For this purpose, the stomach should be emptied by means of 20 grains of ipecacuanha, and one grain of tartar emetic, mixed in a small proportion of water, or 20 grains of sulphate of zinc may be given; a feather, or the finger (guarding against the closing of the teeth) should be thrust down the throat, moving it backwards and forwards, or rather from side to side, so as to excite the vomiting, which is very difficult; the head is to be kept elevated and cool, cold water may be dashed over the whole body, particularly on the head. One pint of lukewarm water, in which two table spoonfuls of common salt are dissolved, may be used as an injection. If the power of swallowing remains, salt water may be freely given to encourage the vomiting, and when the stomach is settled, one ounce of castor oil, or a dose of jalap and cream of tartar, may be given so as to open the bowels freely. When vomiting can be produced, it is a favourable symptom; but in case it cannot, and that the symptoms enumerated remain, blood should be drawn either from the arm or temporal artery, to the extent of a pint or more, and another emetic then exhibited. The stomach pump is the speediest and safest remedy, but can be used only by a medical man.

DYSENTERY, OR FLUX.

This disease, from which seamen oftentimes suffer severely, may arise from three different causes. 1st, from the perspiration being suddenly checked; 2dly, from unwholesome diet; and 3dly, from some peculiar atmospheric influence: from whatsoever it may proceed, the treatment need not to be varied. If the following directions be carefully attended to, the disease will soon be removed. The diet should be exceedingly mild and simple; thin oatmeal gruel, weak broths, arrow-root, and toast water only, should be allowed for the first few days, or until the purging and severe pain of the bowels have ceased, afterwards, and until convalescence be fully established, stale bread, fresh meat, tea, and coffee, should constitute the whole diet; on no account should spices, salt meat, new milk, or

spirituous liquors be used. Without a careful observance of the above rules, medicine will not be able to exert much influence; the disease may harass the patient for a length of time, and, in warm latitudes especially, may even sometimes prove speedily fatal. The treatment by medicine is simple. Mix 12 grains of powdered opium, 6 grains of ipecacuanha, and 20 grains of conserve of roses into a mass and divide the whole into 12 pills. Let one pill be taken every third hour, until the griping pains and purging cease. A pill three times a day will then suffice, which may, in a few days, be omitted. The warm bath will be found a most agreeable and useful remedy; but if not convenient, the abdomen should be fomented with hot water; or warm bricks, bottles of hot water, or hot sand in bags, should be placed near the pained parts.

This disease cannot easily be mistaken for any other. Its symptoms are, a frequent purging, a griping pain in the lower part of the belly, just previous to the bowels being moved, a straining and an uneasy feeling, as if the bowels were not sufficiently emptied. The evacuations are very trifling in quantity, and consist of mucus, sometimes streaked with blood; blood, in large quantities, is sometimes lost, but this is rare, and is to be looked upon as a dangerous symptom.

Bleeding piles is the only disease it is likely to be confounded with; but in piles there is generally a swelling of the fundament; pain does not always exist, and when it does, is permanent, and confined to the situation of the piles.

EAR, INFLAMMATION OF.

The interior of the ear is sometimes affected with inflammation, which produces a most painful and distressing complaint. The symptoms are, excruciating pain in the ear, and on the same side of the head, deafness of the affected ear, a high degree of fever, attended sometimes with raving or delirium.

Treatment.—Bleed freely from the arm, foment the ear every three hours with hot water, and immediately afterwards apply a linseed or oatmeal poultice, every four hours. The aperient mixture, No. 1, should be given as directed; after the bowels have been freed, give a pill of

Opium, ½ grain, Calomel, 2 grains.

Made into a mass with Conserve of Roses, every three hours, until the pain be abated, or salivation be produced.

Let the head be kept raised; the diet should be low; when the fever subsides, a blister may be applied to the back of the neck, or behind the ear.

This disease, if not well attended to, may prove fatal.

ENEMAS, OR CLYSTERS.

These remedies are sometimes absolutely necessary, and will afford relief when others fail. An enema syringe should be always an indispensable article in the medicine chest, as the bag and pipe are tedious, difficult, and disagreeable. The quantity of fluid to be injected should be about one pint, and its temperature lukewarm, or of a

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blood heat. The syringe (a self-injecting) is to be filled, the tube or pipe to be well oiled, and introduced gradually into the fundament, in rather a straight direction, but inclining backwards; the handle of the syringe is then to be depressed slowly but firmly, until its contents are expelled. A fold of linen should be held to the seat, for about a quarter of an hour, if it be dreaded that the injection will escape too soon. Should the person himself operate, a sitting posture may be chosen; but, if otherwise, and the patient be not debilitated, the best position is on the hands and knees, next on the side, and lastly on the back.

EYES, INFLAMED.

When the eyes become red and painful, with the pain increased by their exposure to the light, they are said to be inflamed.

Treatment.—A pint of blood should be taken from the arm. The bowels are to be well opened by 2 pills of calomel, 5 grains in each, succeeded in a few hours, by repeated doses of the aperient mixture. Warm fomentations of decoction, made by boiling a handful of chamomile flowers, with two poppyheads bruised, in a quart of water, or warm water, simply, are to be frequently used. A warm bread poultice, placed between the folds of fine linen, should be applied every two hours. After the bowels are freed, one of the following pills is to be taken every third hour:

Take of - Opium, 6 grains,
Antimonial Powder,
Calomel, of each, 12 grains.
Make into 12 pills, with Conserve of Roses.

Should the pain not be very much relieved by the following day, the bleeding ought to be repeated, the bowels again well purged, and the calomel pills continued. A third bleeding may be used if necessary.

A few days after the subsidence of the pain, the poultice may be discontinued, and a green silk shade worn; the other remedies may be laid aside, and the following wash applied three times a day:

> Take of-Sulphate of Zinc, 20 grains, Cold water, boiled, ½ pint-mix.

The diet should be low while the pain is severe, and wine, spirits, &c., scrupulously avoided, until the recovery is complete.

FEVER BRAIN; OR BLUE DEVILS.

This disease is very commonly the effect of intemperance, and is better known by the name of blue devils. It is so easily recognised when far advanced, that I will briefly state what are its symptoms at the commencement. There is a feeling of despondency, frightful dreams, sighing, loss of appetite, and an inclination to vomit; the tongue is foul, and trembles on being put out; the skin is not hotter than usual, nor the pulse much quicker; but there is a clammy perspiration on the surface, with trembling of the hands. If not now checked, it goes on until the intellect becomes quite confused, the patient becomes intolerant of restraint, fancies that some great misfortune is about to befal him, and seems to be surrounded by spectres, from which symptom it has acquired its vulgar name; if the disease threaten to terminate

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fatally, the sufferer becomes weaker, lies in bed, pulls at the bed clothes, the pulse becomes very quick, and a convulsion may terminate life. By strictly adhering to the directions here given, the disease may almost always be checked. No diet should be allowed except oatmeal gruel, arrow-root, cocoa, chocolate, barley water, linseed tea, or toast water. If, on pressing the pit of the stomach with the finger, much pain be felt, a blister is to be applied over that part. The bowels are to be freed by two table spoonfuls of castor oil, every second hour, or the aperient mixture, No. 2. An enema of about one pint of warm water, may be given daily, and after the bowels have been freed, the following mixture:

Take of—Laudanum, 2 drachms,
Treacle, 1 ounce,
Sweet Spirits of Nitre, 1 drachm,
Peppermint Water, 8 ounces—mix.
Two table spoonfuls to be taken every third hour.

Every weapon must be removed, to prevent the possibility of the patient injuring himself or others, and a careful person should be placed to attend him, as well as prevent him escaping from bed, and throwing himself overboard. If possible, forcible or violent restraint of any kind, particularly the strait waistcoat, is to be avoided, as I have seen many die in their exertions to release themselves.

Brandy punch is a very useful remedy in this complaint, but it is particularly dangerous at the commencement of the disease, and is only allowable when the weakness has become so great as to compel him to lie on his back in a state of stupor. 38 FEVER.

Bleeding is too dangerous a remedy to be ever resorted to, unless under professional superintendence. When convalescent, it will be necessary to keep the bowels open, and to enjoin a very gradual return to the usual food.

FEVER, SCARLET,

Which is commonly considered to be contagious, is rather a complaint of childhood, than of manhood. symptoms are fever, soreness of throat, and a redness of the skin, similar to that of a boiled lobster; although a disease frequently fatal to childeen, it is seldom so to adults. When commencing, an emetic may be given of 20 grains of ipecacuanha, and 1 grain of tartar emetic, assisting its operation by copious draughts of warm fluid. When the stomach is settled, a mixture of Epsom salts, &c., or the aperient mixture, No. 2, may be given. Should relief not be obtained, about one and a half gill of blood (12 ounces) may be taken from the arm; the mouth may be held over the steam of warm water, and a warm poultice applied frequently outside the throat. For the first few days, the diet must be low, consisting principally of barley water, gruel, &c., Should the symptoms increase, the bleeding may be repeated, and the throat will be benefitted by a gargle of honey and water, to which a small portion of alum may be added. In general, bleeding should be resorted to, as otherwise the convalesence will be slow and tedious.

If gargles of cayenne pepper be used, at the commencement of the disease, the inflammation of the throat will be increased. Blisters have a tendency to produce mortification, and therefore should not be applied.

FEVER, TYPHUS.

Symptoms.—Commences with chilliness, languor, headache, pain of back and calves of the legs, loss of appetite, thirst, heat of skin, nausea, and sometimes vomiting. These symptoms having continued for a few days, the invalid is compelled to take to bed, his feeling of weakness increases, the tongue becomes dry and brown, he raves occasionally, more especially when sleeping, the sleep being disturbed and unrefreshing, the pulse becomes very quick, varying from 110, to 120 or 140; if a fatal termination be likely to take place, the patient lies only on his back, in a state of insensibility, his stools and urine pass involuntarily; the gums and tongue become incrusted with a blackish covering, a rattling in the throat sets in, and death soon closes the scene.

Treatment.—At the commencement, no remedy equals an emetic of ipecacuanha, (1 scruple,) taken while in bed, followed by 10 grains of calomel, and the aperient mixture, No. 2, as soon as the stomach is settled. The diet must be low for a few days. These means frequently cut short the disease, especially in summer. If no relief is obtained by using those remedies, and if the person be young, and otherwise previously healthy, about 8 ounces of blood may be taken from the arm. He should confine himself to bed, keep his bowels open daily with salts and magnesia, have the head bathed with cold water and vinegar. The diet must be of the most simple quality, viz. gruel, barley water, and toast water; fresh air is to be admitted, and the strictest attention to cleanliness

observed. When the delirium comes on, the head should be shaved, and a blister applied to the back of it and down the neck. Five grains of calomel should be administered every night and one table spoonful of castor oil on the following morning. Should the calomel gripe the bowels, five grains of the Dover powder may be very advantageously added to each dose. If the pit of the stomach be tender on pressure, a blister may be applied over it. If he begin to sink, which is known by the brown tongue, the state of insensibility, and the unconsciousness of his urine and stools passing from him,-let him have three or four table spoonfuls of wine every hour, with as much porter as he can take; if the pulse become less quick, the wine will prove very beneficial. Recovery may be expected when the tongue becomes moist and clean, the pulse slower, with a cessation of the raving, and a mitigation of the other symptoms. Great care must be taken to allow him only a small portion of food at first, which may be increased daily if it do not produce a return of the feverishness. Buckets of cold water dashed all over the body, when the skin is very dry and hot, is a most excellent remedy; but should the patient object to this, the surface of the body may be sponged with cold water and vinegar.

The disease is contagious.

FEVER, YELLOW.

This disease has various names, as bilious fever, remittent fever, Bulam fever, black vomit, &c. Unfortunately for seamen, it is too well known, being very frequent and FEVER. 41

very fatal. It prevails along a vast extent of coast, being found along the whole length both of the northern and southern American coasts, the Spanish, Portuguese, Brazilian, and African coasts, and through the whole of the West Indian islands.

The symptoms of this disease are sometimes so mild as to be scarcely noticed, while at other times, they are most formidable. It commences with shivering, inclination to vomit, pain of the fore part of the head, the eyes become red and brilliant, pain of the knees and calves of the legs, tongue whitish, and pain on pressing the pit of the stomach; as the disease gains ground, the vomiting becomes incessant, the bowels are costive, the patient cannot be raised without fainting, and a burning sensation is felt in the stomach. If the eyes lose their brilliancy, the extremities and surface of the body become cold, no urine is passed, the features changed, a hiccough commence, and a black matter be vomited, a fatal termition may be apprehended; indeed, after this last symptom has shown itself, few recover. The yellowness of the skin, which gives name to the disease, appears about the third day, first about the neck, proceeding to the chest, then over the whole body, and lastly, becomes observable in the white of the eyes. The disease may be fatal in a few hours, yet it seldom has this termination until the fifth or sixth day. Sometimes it continues until the fourteenth day.

When blood flows from the nose and gums during the disease, it is to be looked upon as a very fatal symptom

Treatment.—Bleeding from the arm has been recommended, but it is found to be injurious unless the person be young, in previous good health, and the disease only commencing; but as this disease is modified by a variety of climate, as well as difference of season, bleeding may be useful in one place, or at one time of the year, and yet very injurious in another; on the whole, bleeding had better be avoided, epecially if the disease be known to exist in a severe form. If, however, a person insist on being bled, no more than 8 oz. should be removed.

Blisters along the whole length of the spine have been found very useful in allaying the vomiting. The head may be kept bathed with equal parts of vinegar, spirits, and water. If the skin be hot and dry, the whole surface may be sponged with cold water. As the vomiting will prevent the exhibition of opening medicine, a laxative enema should be given daily, and may be made from one ounce of castor oil and one pint of thin gruel. There is no remedy so powerful as one scruple of ipecacuanha, given at the commencement; should this fail to produce vomiting, it may be repeated in half an hour or twenty minutes. The person should be in bed, and drink at the same time plentifully of warm water. There is a great necessity for being in bed during the operation of the emetic, as a profuse perspiration generally succeeds, by which the disease is terminated. One ounce of castor oil may be given, when the vomiting has subsided, and a most rigid diet observed for a few days. However, when the disease has once fairly set in, mercury has justly been looked upon by medical men as the "sheet anchor." As the disease tends rapidly to a fatal termination, the remedy must be given in large doses, and at short intervals. Five grains of calomel should be given

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in treacle every third hour, until ptyalism or salivation is brought on.

If the bleeding from the gums be excessive, so as to weaken the patient, 10 grains of lunar caustic, dissolved in one ounce of water, and applied to them freely, will generally check it. The drink may be spruce beer, cold water, toast water, ginger beer, linseed tea, or sugar and water. There is a doubt as to its being contagious.

If seamen are moored where this disease is prevalent, it would be an excellent precaution to allow each man I grain of the sulphate of quinine, and two drops of aromatic sulphuric acid, or elixir of vitriol, mixed with a proportionate quantity of water, three times a day.

The allowance of spirituous liquors should be curtailed, or perhaps, altogether withdrawn, as it is known that those who indulge in those liquors are more predisposed to the disease, and when attacked, less capable of bearing up against it; but the allowance of food should be increased, and wine, porter, and animal food, should be freely used.

FITS, OR FALLING SICKNESS.

A liability to this complaint utterly disqualifies a man for a seafaring life. The danger of sudden death, which even on land is very great, rather from accident than the disease itself, is very much increased by the various circumstances and situations to which a sailor's occupation exposes him. A melancholy example of this fact I witnessed sometime since. A captain, being scarce of hands, took a few men on board, at Quebec: soon afterwards,

one of those going up aloft called out, that he would certainly tumble, and in a moment fell on the deck. He was dreadfully injured, his thigh-bone being fractured, and projected through the skin. Notwithstanding all the care and attention bestowed by the captain and men, he sunk daily, and an attempt having been made to raise him from his berth, for the purpose of conveying him on shore, he fell into a swoon, and expired before they reached the deck.

Symptoms.—The person falls to the ground, giving a peculiar scream; the eyes are fixed and staring; the hands clenched; the whole body works convulsively; the breathing is heavy, and the tongue is protruded from the mouth. Having continued in this state for some minutes, he sighs and falls into a deep sleep; on awaking he has no recollection of what has occurred, but feels heavy and stupid. During the fit, the head is to be elevated, cold water thrown on the face, and if it should be very severe, blood may be taken from the arm. The prevention of the disease demands the care of a physician.

FRACTURES.

Should one of the lower extremities be fractured, the person must be confined to his bed. A similar accident occurring to one of the upper extremities does not require such restraint. The most essential point is, that of keeping the fractured parts as motionless as possible. This is to be done by splints and bandages. The length of time necessary for curing of fractured bones is, for the thighbone, six weeks to two months; and for the others about

a month, The collar-bone is more subject to fracture than any other; it unites in about three weeks, and should be treated by bandaging the arm close to the side, placing a small cushion in the arm-pit. Those fractures are not attended with danger; but if there be a wound of the skin communicating with the fracture, it will require the greatest care to preserve life. The limb is to be kept perfectly motionless; a small piece of lint laid over the wound for a few days, the part kept continually bathed with cold water, and when pain and swelling comes on, it is to be changed for a poultice of bread and water. The patient should occupy the most healthy part of the vessel, allowing plain, good diet, forbidding spirituous liquor or wine, and keeping the bowels open with castor oil. If, however, the discharge be great and he becomes debilitated and emaciated, he should be allowed the most nourishing food, with wine, ale, porter, and quinine. Amputation, however, is frequently the only means of saving life.

GUM BOIL,

May arise from cold, decayed teeth, the use of mercury, or any injury to the part; it is frequently mistaken for toothache, but there is one symptom by which it may be easily discriminated, and that is the attending swelling of the face: this is sometimes so great as to close the eye of the affected side, and cause it to be suspected as the effects of erysipelas, On opening the mouth, and viewing the gums, a swelling will be found in the part where the gums and cheeks join, which, on being touched, will cause, much pain. Relief will not be obtained until the matter which it contains has escaped, therefore, the sooner the lancet be introduced the better. The formation of matter, and even the disease itself, may be checked by pushing a lancet into the swelling as soon as perceived; much relief may also be obtained by the frequent use of hot fomentations of chamomile and poppy-head water, followed by oatmeal or linseed meal poultices. The purging mixture, No. 1, should be used so as to open the bowels freely; a roasted fig placed immediately inside the mouth, on the swelling, has been found very beneficial in relieving pain, or a few chamomile flowers sewed up in a linen or calico bag, and heated by placing it in hot water, may be used as a substitute, if a fig cannot be procured.

INOCULATION.

On inoculation of the smallpox I will say a few words, as, under some circumstances, it may have become very necessary to have this simple operation performed on seaboard. For example, a captain of a vessel takes on board passengers or sailors from a country where neither vaccination nor inoculation is practised. Should the smallpox make its appearance, the others should be vaccinated, as it is almost impossible the contagion can be avoided, confined as they are to a vessel. The method—Scratch with the point of a lancet, until the blood flows, that part of the arm midway between the shoulder and elbow of the person to be inoculated; on the point of the same lancet take some matter from a smallpox pustule,

and insert it into the scratch, taking care it be not rubbed; on the fourth or sixth day the arm will inflame, and on the eighth, the smallpox will appear. The time for taking the matter should be on the eighth day of the disease, or the fourth of the appearance of the eruption. The matter when taken should be transparent.

THE ITCH

Is not a disease frequently met with on board of vessels, its appearance need not be described here, and its treatment may be comprised in a few words.

Treatment.—As much lard or oil may be added to sulphur, as will give it the consistence of an ointment, which may be rubbed on the affected parts night and morning. One tea spoonful of sulphur may also be taken every night in treacle, and Epsom salts twice a week, until the complaint be removed. Salt food should be avoided.

JAUNDICE

Is seldom an original disease, but rather the effect of some other; as, for example, it may arise from costiveness, liver disease, or may attend several of those fevers peculiar to warm climates. It is easily known by the yellowness of the eyes and skin; but it may be suspected to be approaching when the person feels languid, restless, having a bitter, disagreeable taste in his mouth, with loss of appetite, but especially if the urine be high-coloured, like porter, or stain the linen yellow. When it attends

a liver disease or fever, it must be treated with the remedies laid down for the cure of those complaints.

If no evident cause can be assigned, the best treatment will be the following: Give an emetic of ipecacuanha, (20 grains, or 1 scruple,) drinking plentifully of warm water, so as to empty the stomach completely. As soon as the vomiting has subsided, the aperient mixture, No. 2, or castor oil, may be given in sufficient doses to purge the bowels. A pill of 4 grains of blue pill and 1 grain of ipecacuanha may be administered every night until the mouth is slightly affected. The warm bath may be used every second night. The diet must be plain and generous. No wine, spirits, porter, salt meat, or acids are to be permitted; even coffee had better be avoided until the complaint is removed. Jaundice sometimes appears soon after a violent pain in the bowels; this is owing to obstruction of the gall duct by a gall stone. Emetics and purgatives as above are the best remedies; but should the pain return, blood may be drawn from the arm, a clyster of a pint of salt water used; and one grain of opium, or thirty drops of laudanum, should be given every two hours until the pain be abated.

LIVER, INFLAMMATION OF.

There are two causes which powerfully predispose seamen to this disease, viz., the excessive heat of the climates they visit so frequently, and their free indulgence in spirituous liquors.

Symptoms.—It commences with shivering, soon followed by a hot skin; the pulse becomes quick; there is thirst, a bitter taste in the mouth, occasional vomiting,

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and a difficulty of breathing; the urine is scanty and high coloured; a pain is felt on the right side of the body just below the margin of the ribs, and is increased by being pressed on, or by coughing. The cough is dry, and a pain is sometimes felt at the top of the shoulder.

Treatment.—Let the patient be bled while sitting upright until faintness is brought on. Ten grains of calomel should next be given, mixed in treacle or soft sugar. One wine glassful of the following mixture should then be given every third hour, until the bowels are well freed, viz.:

Take of—Epsom Salts, 1½ ounce,
Magnesia, ½ drachm,
Rhubarb, 1 drachm,
Peppermint Water, ½ pint.—mix.

After the bowels have been freely opened, one-fourth part of a grain of opium and two of calomel, in a pill, is to be given every third hour until the mouth becomes sore or salivated. If in six hours after the bleeding no relief be obtained, the bleeding must be repeated. Should the feverish symptoms and the pain of the side still continue, a third bleeding must be ventured on. If, however, the fever abates, but the pain of the side continue, a blister is to be applied to the side. This treatment generally succeeds in removing the disease, but should it fail, an abscess may follow, which is known by the following symptoms, viz.: night perspiration, shiverings, clammy skin, cold sweat, and fainting sensations. The treatment must then be changed.

One, two, or even three glasses of red wine may be given daily. Porter or ale may be freely used. The

strength may also be supported by strong broth, arrowroot, &c. It warm poultice may be applied to the
affected side and renewed four or five times daily.
Should the abscess point outwardly it will be preferable
to allow it to burst without interference, as the method
of opening it without doing mischief can only be understood by a surgeon. The quinine mixture will also be
found very serviceable.

LOCKED JAW AND TETANUS.

In warm climates, locked jaw is very apt to be produced by wounds, burns, or bruises. The necessity, therefore, of paying strict attention to those injuries is evident, for if this affection once arise, I fear that the chance of relief on board a merchant vessel is small. Even where the best medical advice can be had, the disease is almost always fatal. It is more likely to follow wounds of the extremities, than those of any other part of the body. When mortification follows a bruise or a burn, which, when coming away, leaves bare the tendons or sinews, every precaution must be taken, especially if the weather be warm. On no account should the sufferer be exposed to the effects of the night air, as the dew in warm climates, is worse than rain in our own country.

Locked jaw is only a milder form of tetanus. It begins with a sense of stiffness about the neck. The person next becomes incapable of opening his mouth, and if an attempt be made to swallow, violent spasms of the body are brought on, attended with a sense of suffocation.

In tetanus, the same symptoms are present, with the

addition of others most dreadful to witness. Spasms of the whole body take place, by which the head is sometimes drawn towards the heels, and at other times towards the knees. There is a violent pain of the stomach and the belly becomes flattened and hard. The urine is voided with difficulty, and the spasms recur every ten or fifteen minutes.

The treatment is very doubtful. If the person be able to swallow, calomel and opium pills may be given every hour. Mercurial ointment may be rubbed on the spine. The wound may be dressed with oil of turpentine. An injection of tobacco, made by infusing I drachm of the dried leaf, for ten minutes, in a pint of boiling water, may be given and repeated in a few hours, if no effect follows.

LUMBAGO, OR BACK-ACHE,

Is a painful rheumatic affection of the muscles of the loins, which sometimes comes on slowly, but more generally suddenly. A person, for instance, in perfect health, when stooping, finds, on attempting to straighten his back, that he has been struck, as it were, with a most excruciating pain, that is increased by every exertion of the loins. In such cases, a pint of blood may be drawn from the arm, or a dozen leeches applied to the part. 10 grains of calomel given, and a wine glassful of the following mixture taken every three hours, until the bowels are freely moved:

Take of—Epsom Salts, 1½ ounce,
Rhubarb,
Jalap, in powder, of each 1 scruple,
Tartar Emetic, 1 grain,
Peppermint Water, 8 ounces—mix.

The parts may be fomented with warm water, and if the pain be not so severe as to render the sufferer unable to get into a warm bath, its use would be found particularly beneficial.

Should it continue longer than a week, the part is to be blistered, the warm bath used twice a week, and one of the following pills taken every night, until the pain be removed, unless the mouth becomes tender:

Take of Opium,
Antimonial Powder,
Calomel, each, 12 grains,
Make into a mass with Conserve of Roses; divide into 12 pills.

MEASLES

Is a contagious disease, almost peculiar to childhood. The symptoms are languor, chilliness, loss of appetite, thirst, running from the nostrils, watery eyes, frequent cough, difficult breathing, sometimes vomiting, bleeding from the nose, and even convulsions. On the fourth day, small reddish spots, closely resembling flea bites, appear first on the face, and thence gradually spread over the body. This eruption disappears in about four days.

Treatment.—An emetic of ipecacuanha, 20 grains, should first be given, followed by the mixture No. 2, until the bowels are well freed. The diet should be low, the body preserved from cold, and the breathing narrowly watched. Should the breathing become hurried, about a gill of blood may be taken from the arm, a blister applied to the chest, and the following mixture prepared, of which one table spoonful may be taken every three hours:

Take of—Mindererus's Spirit, 3 ounces,
Sweet Spirits of Nitre, ½ ounce,
Laudanum, 1 drachm,
Tartar Emetic, 1 grain,
Water, 4 ounces.—mix.

Should this treatment be carefully pursued, the disease will in general be relieved; but if a cough, attended with fever, remain after the eruption has disappeared, great care must be taken to guard against an abcess forming in the chest. This serious effect is to be still more apprehended, when persons of colour are the sufferers. Under these circumstances, the best treatment will be to have about one gill of blood taken from the arm, to apply a succession of blisters, both to the fore and back part of the chest, to open the bowels every second morning, with the aperient mixture, No. 2, and to take two table spoonsful of the following mixture, every third hour:

Take of—Mindererus's Spirit, 1 ounce,
Tartar Emetic, 1 grain,
Sweet Spirits of Nitre, 2 drachms,
Laudanum, 30 drops,
White Sugar, 1 ounce,
Water, 6 ounces.—mix.

The diet should consist of bread, arrow-root, sago, coffee, fruits, &c.; refraining from spirituous liquors, wine, ale, flesh meat, and spices. Exposure to cold should also be most scrupulously avoided.

MEDICINE CHESTS.

Nothing can appear more awkward, or less adapted for the purpose of containing and dispensing medicines, than the "medicine chests" now in use. They are merely boxes, having partitions at the bottom, into which the

necessary medicines, either in papers or phials are thrown; and so constructed, that unless a person be well acquainted with the sight of each, he may find it necessary to disturb the whole of its contents, before he can find the one required. If, to the inconvenience of the shape of "the chest," we add the error of sending out medicines in paper, which, when once opened, is seldom if ever re-folded, and that in consequence, various medicines may, and do, become mixed together, so that it becomes necessary to reject them altogether; and that there is no slide attached, on which the scales may be placed, we can scarcely imagine any method of "fitting out a medicine chest," less proper. During the time that cholera raged in this town, it was my lot to be called on during the night, to visit many of the vessels. Notwithstanding the urgency of the symptoms of this disease, and the inconvenience and difficulty of obtaining medicines at such late hours, I could never venture to take any from the stock, so carelessly were they put up, and so much were they mingled together. In constructing a vessel, some special part should be adapted for a medicine chest, which is an indispensible article. It should be a fixture, in the fore cabin, having locks and keys, and made somewhat in the following manner:

The chest, instead of being horizontal, should be perpendicular; in height about four feet, in breadth three feet, and in depth about one foot and a half. It should have folding doors, having their insides fitted up with shelves and partitions, by which much room would be gained. The bottom part of the body of the chest might be appropriated for holding lint, bandages, the

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ointment pots, &c.; while the upper part would be best adapted for containing the scales and weights, glass measure, funnel, lancets, and catheter. It should have at least four shelves, both in the body of the chest, and inside the folding doors, and there should be partitions in every shelf for each phial or pot. The partitions should be at least nearly as high as the necks of the phials, so as to prevent them being knocked against each other in rough weather. In the book of directions, each medicine should be numbered, and this number as well as the name of the medicine, fixed on the phial or pot, which should be placed in a partition, over which the corresponding number should be also placed. For example, if in the book of directions, aloes were marked No. 1, the name and number should also be affixed to the pot, which should be deposited in partition No. 1. It would also be a great improvement and convenience, if it rolled on castors, when not fixed.

No medicine should, on any account, be sent out in paper. In a phial or jar, it may be preserved pure and good for years, while if in paper, it is soon either spoiled or lost. The name of the medicine both in Latin and English, should be written on each phial.

PILES,

When they become painful, are said to be inflamed, and in this state, are very troublesome. To obtain relief, the bowels must be opened very freely with castor oil, or one tea spoonful of sulphur, three times a day; the parts should be fomented with hot water, or the patient may sit over the steam of warm water, and a hot poultice

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of linseed meal, oatmeal, or chamomile flowers, applied every two or three hours. Should no relief follow this mode of treatment, let one pint of blood be taken from the arm, and one of the following pills given every third hour, until either relief be obtained, or salivation be produced.

Take of—Calomel, 6 grains, 1 pecacuapha, 3 grains, Opium, in powder, 6 grains,

Make into a mass with Conserve of Roses.

If the pain be not relieved after this treatment has been fairly tried, there need be no hesitation in plunging a lancet into the largest pile, and allowing it to bleed freely. If, however, piles were pushed up immediately after coming down, they would not become inflamed piles.

Bleeding piles is another form of this complaint, and sometimes proves fatal.

Treatment.—Let the bowels be opened as speedily as possible, with castor oil, and immediately afterwards the following lotion, applied several times daily:

Take of -Sugar of Lead, ½ ounce, Laudanum, 1 ounce, Water, 1 pint.—mix.

The recumbent position should be strictly observed, and the diet must be low; the following drops will also be highly useful.

TAKE OF-Laudanum,

Elixir of Vitriol, of each 1 ounce. - mix.

Ten drops to be taken every third hour, in a wine glassful of cold water; or,

Take of—Powdered Alum, 2 scruples,
White Sugar, 1 ounce,
Peppermint Water, 8 ounces.—mix.

Two table spoonfuls to be taken every third hour.

PLAGUE.

The countries where this disease is to be dreaded are few. In Egypt, it arises almost every autumn, and prevails until the beginning of June, in the succeeding year. The countries bordering on the Levant are also more or less subject to its attacks. The greatest fatality of the disease is about the period of the vernal Equinox.

Symptoms.—Those most usually observed, are an eruption on various parts of the body, consisting of buboes, pustules, carbuncles, &c.; either of a white, livid, or black colour, and attended by a low fever. It may attack however, in various ways, so severe as to kill in less than twenty-four hours, or so mild, as that it would not be suspected were there not buboes present. Buboes are enlarged glands, and are so called on whatever part of the body they make their appearance.

It generally commences like the common typhus fever of this country, viz., with coldness, shivering, vomiting, headache, &c.; in the course of the day, buboes may appear. These symptoms change on the second day, to heat of skin, dry tongue, pain about the heart, the eyes become muddy, and there is a disposition to rave. If a sweat takes place on the third day, it is a most favourable sign; however, the patient again becomes somewhat worse, but another sweat about the fifth day, places him out of danger.

Treatment.—At the commencement, when the symptoms are chiefly chilliness, languor, and heaviness, an emetic of ipecacuanha (one scruple) should be adminis-

tered, giving, at the same time, plenty of sweetened lukewarm water, to aid its operation.

The ipecacuanha may be repeated in half an hour if necessary, and the inside of the throat tickled with a feather, until full vomiting be excited. Two table spoonsful of castor oil, preceded by 10 grains of calomel, may next be given, and both repeated every second hour, until the bowels are well freed. In the meantime, the whole surface of the body should be well rubbed with olive oil, for above an hour, and repeated every third hour for four periods. Plenty of warm drink should be given, such as barley water, rice water, gruel, &c. If the patient becomes restless, hot, and delirious, about one pint of blood may be taken from the arm, and an attempt should be made to produce salivation as speedily as possible. For this purpose, 1 drachm of strong mercurial ointment should be rubbed every three hours, on various parts of the body, and 3 grains of calomel, with 5 grains of the compound powder of ipecacuanha (Dover's powder) given every third hour. Should these remedies fail in averting the danger, and a sinking, with coldness, clammy sweats, purging of blood, from the bowels, and hiccough succeed, one wine glassful of good red or white wine may be given, every half hour, and the following mixture:

Take of — Spirits of Hartshorn,
Sweet Spirits of Nitre,
Refined Sugar,
Peppermint Water,
One table spoonful every second hour.

Sweet Spirits of Nitre,
1 ounce,
0 ounces.—mix.

Vomiting is a very distressing symptom, and may be relieved by the saline draught, every third hour, to each

dose of which may be added, 5 drops of tincture of opium, or laudanum. The disease is contagious.

PLEURISY, AND INFLAMMATION OF LUNGS.

These diseases are nearly similar, and may be treated alike. Pleurisy is known by a sharp pain of the side, (generally the left,) just below the nipple, increased by coughing, sneezing, or by a deep inspiration; a frequent dry cough attends it, with thirst, fever, and difficulty of breathing. It is preceded by a degree of chilliness. This disease must be carefully attended to.

Treatment.—Bleed the patient until he faints; 3 grains of calomel, made into a pill, with conserve of roses, and half an ounce of Epsom salts, may be given every three hours, until the bowels are well purged; bags of hot salt are to be applied to the side, confine the patient to bed, and allow him the mildest diet only: viz, tea, oatmeal gruel, rice water, and arrow-root.

If, at the end of six hours, the pain be not relieved, the bleeding is to be repeated, especially, if the blood previously drawn be yellowish on the upper surface of the clot, or hollow in its centre; the bleeding may be repeated a third, or even a fourth time, if the pain and fever be not relieved. When the bowels are freely purged, the following pills may be exhibited:

Take of - Calomel, 24 grains, 12 grains, Opium, 2 grains,

Make into a mass, with a little Conserve, and then divide it into 12 pills;

One to be taken every third hour until the pain and

fever is abated, or the mouth be found tender. When the fever subsides, yet the pain of the side continues, a blister is to be applied. If, however, the fever continues, and difficulty of breathing be very great, and not attended with pain of the side, the following mixture may also be given, in addition to the above remedies:

Take of—Tartar Emetic, 4 grains,
Sugar, 2 ounces,
Cold boiled Water, 6 ounces,
Sweet Spirits of Nitre, ½ ounce.—mix.

One table spoonful to be taken every second hour.

If this mixture produce vomiting, it may be given every fourth hour, while if it do not produce any sickness of the stomach, it may be given every hour.

Great care should be taken to prevent a relapse, the patient should return gradually to his usual food and occupation, and be particularly careful in avoiding exposure to cold.

INLAMMATION OF THE LUNGS,

may be treated similarly.

Symptoms.—Thirst, hot skin, face flushed, disposition to raving, pulse full and quick, the breathing short and difficult, cough, sometimes attended with spitting of blood. It commences, like fever, with chilliness, headache, and debility; and in this stage, might be cut short by the timely use of the warm bath.

POISONING.

It sometimes happens that seamen incautiously use articles of food, that may either be poisonous themselves, Poisons. 61

or rendered poisonous by the quantity which has been taken, or by the peculiar constitution of the individuals eating them. It may be almost unnecessary to urge a warning against employing any description of diet, whose wholesomeness has not been previously well ascertained, yet in cases of extreme want, such may be necessitated. Under these circumstances, as in any situation which may cause a sudden change of food, it is of the first importance, that the new diet be taken abstemiously, for a comparatively moderate quantity of a food, to which the stomach has not previously been accustomed, may produce effects closely resembling those brought on by actual poison. Should such untoward event occur, or should any accident arise from poisoning, the safest step to be pursued is the immediate administration of an emetic, composed of 30 grains of ipecacuanha powder, and half a grain of tartar emetic, mixed in a teacupful of water; or, 30 grains of sulphate of zinc, dissolved in the same quantity of water. To aid and facilitate the vomiting, copious draughts of warm water, warm salt water, or olive oil may be given. Should the emetic not operate as speedily as may be thought desirable, 30 grains of ipecacuanha may be given. After the vomiting has subsided, a dose of castor oil may be administered, every three hours, until the bowels are well purged.

POISONS.

When a poisonous substance has been swallowed, either intentionally or accidentally, the stomach should be emptied as soon as possible, and some remedy exhibited immediately afterwards, which will counteract the effect of the poison. As the antidotes are various, the following table has been drawn up, so as to be referred to without delay.

Poisons.	Treatment.
Opium,	Evacuate the stomach with an emetic of 10
or	grains of sulphate of zinc, in two table
Laudanum.	spoonsful of water, and repeat every quar-
	ter of an hour, until it operates. Pour
	cold water frequently over the body; apply
	smelling salts to the nostrils; keep the
	head raised; infuse coffee in boiling water,
	and allow of it freely; sleep should not
	be permitted. Should the breathing be-
	come heavy and loud, take blood from the
at a too to	arm, and give an enema of one pint of
	water, and 4 ounces of vinegar, every hour.
Sublimate.	The best remedy is the white of an egg, dis-
	solved in water, and given freely. The
	gluten of wheat is also valuable; vomiting should be excited by the above given in
	large quantities, or by oil, linseed tea,
	arrow-root, new milk, &c. When the
	poison is removed, and that vomiting,
	purging, and pains in the belly, take place,
	bleed from the arm, give 30 drops of lau-
	danum, every three hours, and place in a
	warm bath. The diet should be most
	simple.

Poisons.	Treatment.
Tartar Emetie.	The stomach soon ejects this poison. Powdered bark, mixed with water, or a decoction of oak bark, or galls, are the most effectual remedies. In case they cannot be procured, one table spoonful of magnesia, every quarter of an hour, mixed with water, will prove valuable, or 5 grains of quinine, given every fifteen minutes, until 30 grains be taken. Ink has been used with success.
Arsenic.	An emetic of 20 grains of sulphate of zinc should be given, and repeated in twenty minutes, if necessary. The throat may be tickled with a feather, and large draughts of sugared water, linseed tea, lime water, chalk and water, or soap and water. Bleeding may be used if there be much pain in the belly.
Copper, from food being cooked in foul copper vessels.	
* Lead, Wines sweetened with Lead.	Epsom salts dissolved in water, both to excite vomiting, and to decompose the poison; or, water slightly acidulated with the elixir of vitriol.

Poisons.	Treatment.
Acids.	A teacupful of magnesia, mixed with 1 pint
Sulphuric, or	of water, and I glassful given every two
Vitriol;	minutes; soap and water, and chalk and
Nitric, or	water, are also valuable remedies. The
Aqua Fortis;	throat may be tickled to cause vomiting.
Muriatic, or	Solid food should not be used for some
Spirits	time afterwards. If pain follow, bleeding
of Salts.	from the arm should be employed, and
y Saller	from 30 to 40 drops of laudanum, given
	two or three times daily.
Nitre, or	Vomiting to be excited by 20 grains of sul-
Saltpetre.	phate of potass, dissolved in water. The
lirost may be	throat to be tickled with a feather, and
orge draughts	large draughts of linseed tea; chalk and
dine water,	water, sugar and water, to be given freely.
and water.	No solid food should be allowed for some
nount od oran	days afterwards, and the diet should be
Translation of the last	arrow-root, rice, gruel, and sago.
Vegetable	An emetic of 30 grains of ipecacuanha, with
Poisons,	60 drops of spirits of hartshorn, and two
viz.	table spoonsful of water, should be the
Hemlock,	first remedy. Injections of vinegar and
Nightshade,	water may next be used. Infusion of
and	coffee, brandy and water, mustard poul-
Foxglove.	tices to the stomach, and every means of
Aller Sectoral	preventing sleep should be used.—See
	opium.

RHEUMATISM.

There are two kinds of rheumatism: in one, the pains are accompanied with fever; in the other, no fever is present. The first form is easily known by the pains being chiefly in the joints, which are red, swollen, and incapable of bearing motion, by a great deal of fever being present, and by the pains suddenly changing from one joint to another.

Treatment.—A large bleeding may be practised at the commencement, the bowels are to be opened by the mixture, No. 1, and next a powder may be given every three hours, composed of

Dover's powder, 10 grains, Calomel, 1 grain.—mixed.

If in 24 hours no impression has been made on the disease, the bleeding and aperient mixture are to be repeated, and the powders continued until the pain and fever abate, or salivation be produced. The bleeding may be repeated for a third time, should the fever continue very high. The bowels are to be kept open daily with the aperient mixture. The diet must be simple, and plenty of drink allowed, such as barley water, tamarind tea, lemonade, nitre whey, &c. Should a severe pain be felt in the chest, mustard poultices are to be applied to the ancles and knees, and also to the pained part, and if the pain be not relieved in a few hours, blood must be drawn from the arm, and a tea spoonful of spirits of hartshorn, mixed with water, given every half hour until relief be obtained. Should any tendency to raving

be observed, it will be better to omit the powders, and give the following pills and mixture:

Take of—Calomel, 12 grains, Antimonial powder, 1 scruple,

Conserve of roses, sufficient to make 12 pills - one to be taken every third hour.

Take of—Mindererus's spirit, 2 ounces,
Sweet spirit of nitre, ½ ounce,
White sugar, 1 ounce,
Water, 5 ounces,

Two table spoonsful to be taken every third hour.

When the pain and fever abate, great care must be taken to guard against a relapse, which frequently occurs. The rheumatism of seamen is generally the consequence of mercury, and hence the calomel pills are to be omitted as soon as the mouth becomes slightly sore.

The other form of rheumatism, or that not accompanied with the fever, seldom affects more than one or two joints at a time.

Treatment.—One pint of blood may be drawn from the arm, and 10 grains of Dover's powder taken every night, the bowels are to be kept open, and the pained parts kept well covered with warm plaster spread on leather. A flannel dress should be worn next the skin. Warm baths are particularly useful in this disease, one of which may be taken every second night.

RUPTURE

Is very common amongst sailors, and arises generally from the violent exertions they are compelled to make. It sometimes occurs suddenly during the act of great

exertion, sometimes comes on gradually, at first disregarded, until the tumour has attained considerable and inconvenient size; or it sometimes follows blows upon the belly. Persons afflicted with this disease commonly acquire a knowlege of the easiest mode of restoring the gut to its natural situation, and then pay little attention to the inconvenience of the tumour. While it remains under the control of the person, or so long as he can return the gut, the rupture is of comparatively little importance. But if, through negligence, it be allowed to remain down, and the bowels to become costive, there is then considerable risk of its changing into a very dangerous description of rupture. The tumour is found to resist all attempts to reduce it; pain, vomiting, constipation, and hiccough, betoken its change to this highly-dangerous form of rupture. So soon as these symptoms present themselves, the person should be bled till he faints, a mixture of equal parts of spirits, vinegar and water, or, what is preferable, ice, if it can be procured, must be applied to the tumour. While in a state of faintness, an attempt should be made to restore the gut to its natural situation. For this purpose the patient should be placed on his back, with the head and shoulders raised, and the knees drawn up towards the belly, and he should be forbidden to retain his breath. Squeeze that part of the rupture which is nearest to the belly, between the finger and thumb of one hand, and push the lower part upwards with the other hand. Persevere for half an hour. If this plan fail, place him in a warm bath, in the same position, and repeat the attempt for another half-hour; if this fail, weigh accurately 1 drachm of tobacco leaf, and

infuse it in one pint of boiling water for ten minutes, strain, and when cold, inject half the quantity into the fundament; if in twenty minutes afterwards it has not produced sickness, chilliness, and an inclination to cold perspiration, throw in the remaining portion, and as soon as the tobacco begins to affect him, make another attempt at reduction. If these remedies fail, an operation only can be relied on, which requires an intelligent surgeon. This complaint is a most dangerous one, and should be immediately attended to. No ruptured person should venture to sea without a well-fitting truss.

ST. ANTHONY'S FIRE, OR ERYSIPELAS,

May attack almost any part of the surface of the body, but the face and extremities are the usual parts affected. It begins with a sensation of itching gradually increasing to a burning pain, the skin becomes very red, there is very little swelling, except in the face, or unless it be deep-seated; blisters sometimes accompany it, and there is a good deal of fever, with thirst, heat of skin, bitter taste of mouth, and sickness.

It seldom, if ever, suppurates (or comes to a head) when the face is attacked, and the treatment is certain and simple. On its first appearance, let an emetic of ipecacuanha (20 grains) be given, and after its operation 5 grains of calomel may be given, followed in two hours by the aperient mixture, No. 2, until the bowels are fully evacuated. The face should be frequently bathed with warm chamomile water, followed by hot poultices of oatmeal or bread and water. The linseed poultice will make

the skin very tender, and had better not be used if there be a choice. When it attacks the extremities, it sometimes penetrates deeply and matter forms, and even mortification may take place, hence it may become a most serious disease. As soon as there is a suspicion of matter having formed, or even before then, if the swelling be very great, a lancet should be pushed into the swelled parts, to the depth of an inch, and several of those punctures should be made at a few inches distance from each other.

The bleeding is to be encouraged by hot fomentations and poultices, which are to be continued after it has ceased. During the first attack of the disease the bowels must be kept free, the diet should be low, and if the pain be great, the perspiring draught, No. 4, may be given at night. As soon, however, as the matter begins to escape, or should there be the least appearance of mortification, which will be known by the livid colour of the part, and the fœtid smell, the whole treatment should be changed. The diet should be of the most generous kind, and a free allowance of ale, wine, and porter permitted. The quinine mixture, No. 3, should also be given.

It will be necessary, also, to surround the limb with a calico bandage, which should be changed night and morning.

SCURVY.

As this disease is now of such comparatively rare occurrence that many naval surgeons know it only from graphic description, it may be supposed unnecessary to

give here any method of treating it; still, however, there being scarcely a year elapsing without some cases occurring, it is requisite that I should say something on the treatment as well as prevention of a malady which has, in past times, committed such ravages. The cases that have come under my observation have been of that description which the disease now presents,-very different, indeed, in its intensity and malignity from the scurvy which was known to Anson's crew; but still of sufficient severity to require the nicest attention and most careful treatment. Even while writing I have under my care some of the crew of the Sir John Beresford, who, on their return from Lima, suffered under the disease pretty sorely. The symptoms of scurvy, in the advanced stage, are so well known to mariners, as to prevent their being confounded with those of any other disease; but it steals on most insidiously, and, in its early stage, I have seen it baffle some of the best informed practitioners in this town, when not informed that the persons so affected had been exposed to its causes.

Its first approach is denoted by a feeling of lassitude, and disinclination for exercise, the knees become feeble and stiff, and a breathlessness, or panting, accompanies any trifling bodily exertion; the countenance becomes pale and bloated, the gums are soft, spongy, and prone to bleed from the gentlest friction, and the odour of the breath is offensive. Those symptoms may continue for some time, in a greater or lesser degree, without a suspicion of scurvy being excited, unless several are simultaneously affected. Spots on the skin, of a blueish colour, sometimes black and livid, varying from the size of a

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pinhead to that of the breadth of the hand, next appear, attended with swellings of the hands and feet. I have never seen the disease in a more advanced stage than when the above symptoms only were present; but it goes on to produce shifting pains of the limbs and sides, constrictions of the hamstrings, fainting fits on the slightest exertion, bleeding from the nose, gums, lungs, bowels, &c.; the teeth fall out, the jaws ulcerate, and, if great care be not now observed, the most trifling exertion may prove fatal.

Treatment.—No disease yields more quickly and satisfactorily to medicine than this. Two table spoonsful of lemon juice, mixed with an equal quantity of water, may be given four times a day, or oftener, if required. sufficient quantity of sugar must be added, to prevent its injuring the bowels. If fresh lemon juice cannot be procured, a solution of citric acid, or crystalized salt of lemon, may be substituted—one ounce of the acid dissolved in one pint of water, well sweetened. Of this, the same quantity may be given as of the fresh juice. If the bowels become constipated, castor oil will be the safest aperient; a proper diet is also of the utmost consequence; a preference is to be given to vegetable food, particularly to cabbages, potatoes, salads, &c.; beer, porter, infusion of malt, cider, perry, spruce beer, and home-made wine, will be useful and agreeable beverages. Vinegar diluted with water, and sweetened, is very grateful, and will aid materially in the cure. On no account, should salt meat be permitted, neither should the patient be allowed to rise from his bed, as it has very frequently happened, that while in the act of rising from their beds, scorbutic

patients have fallen back, and died from the exertion. As applications to bleeding surfaces in a scorbutic patient, strong vinegar, or lemon juice, form the best; but the chief reliance must be placed on the constitutional treatment, just laid down.

Preventive measures, as used in the royal navy, should be attended to. After a vessel has been six weeks at sea, when salt provisions are the usual food, lemon juice, or a solution of citric acid, should be served out daily. No vessel should sail for the East Indies, South America, China, or the coast of Africa, without a large stock of this useful remedy on board. Great attention must be paid to cleanliness, and moderate exercise; over fatigue being hurtful. Captain Cook, shaded his men from the effects of a scorching sun, by an awning over the deck. The hammocks and bedding, every fine day, should be spread out and exposed to the air. The cabins are to be kept dry and warm, by means of heated stoves, as it is found that dampness materially tends to encourage the appearance of scurvy.

SMALL POX.

To guard as much as possible against this disease, care should be taken, that no person be received on board unless he have been vaccinated, or has had the small pox. The practice of vaccination has now, very fortunately, become so general in our country, that there are few British subjects, who are not protected against the malignancy of small pox. Sailors and passengers, however, from other countries, particularly people of colour, are

sometimes received on board, who may not have had the advantage of this useful precaution. Of these, therefore, it is necessary to be particularly careful. This malady commences, like almost all other fevers, with shivering, pain of the back and limbs, headache, thirst, and very frequently delirium or convulsions; on the fourth or fifth day, small, red, elevated spots begin to appear on the face, and gradually show themselves over the whole surface; in a few days the disease cannot be mistaken. The more numerous the spots the more dangerous. On the eighth day they begin to decline, and about the 20th convalescence is well advanced.

Treatment.—About one pint of blood may be taken from the arm; let the bowels be kept freely open by the mixture, No. 2, and let the diet be very simple and low; above all, let plenty of fresh, cool air be admitted to the patient's berth. Convulsions will require a repetition of the bleeding, and the following draught:

TAKE OF—Mindererus' Spirit, 1 drachm,
Laudanum, 50 drops,
Water, 2 table spoonsful—mix.

The disease is said to be contagious.

SUN STROKE, OR COUP DE SOLEIL,

Is caused by allowing the head to be exposed for some time to the perpendicular rays of the sun. The symptoms are those of inflammation of the brain, and the same treatment is to be followed. A person is sometimes attacked so severely as to fall down and instantly expire.

To prevent this disease, seamen should, if possible, not be required to labour during the meridian heat; but, if this be unavoidable, they should be protected by an awning on deck, or by using large white straw hats with broad brims and high crowns.

Treatment.—Let blood be drawn freely from the arm; the feet placed in very hot water for about twenty minutes; let 10 grains of calomel be given, followed by the purging mixture, No. 1, until the bowels be freely opened. The diet must be simple. Should the pulse rise, and delirium set in, the bleeding should be repeated, and two grains of calomel given three times a day until the complaint be removed. The head should also be shaved and kept cold.

THROAT, INFLAMMATION OF,

Is not a very dangerous complaint, and may be cured in a few days, by bleeding from the arm, placing the feet in very hot water, surrounding the throat with a hot poultice, keeping the bowels free by the purging mixture, No. 1, and giving the following draught every three hours, until perspiration is induced:

TAKE OF—Spirits Mindererus', 2 drachms,
Sweet Spirits of Nitre, 30 drops,
Laudanum, 10 drops,
Water, 1 ounce.—mix.

TOOTHACHE.

No person should venture on a long voyage having a decayed tooth which has ached. There is sometimes a difficulty in deciding whether the pain of the jaw proceeds from a tooth or not, as the jaw is liable to several painful diseases, such as gum-boil, rheumatism, tic doloreux, &c. However, if there be a decayed tooth in the

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neighbourhood of the pain, or the pain itself can be referred to the tooth, and is increased by cold or heat, it may be set down as the toothache. As drawing the tooth is generally out of the question on board a vessel, some attempt must be made to give relief. Should the pain follow exposure to cold, it may be removed by taking opening medicine, and then inducing perspiration by the following method, viz.: placing the feet in very hot salt water; going immediately to bed; being covered with plenty of bed-clothes, and taking the following draught:

ULCERS.

Take of—Mindererus's Spirit,
Sweet Spirits of Nitre, each one drachm,
Laudanum,
40 drops,
Water,
1 ounce.—mix.

Into the hollow of the tooth, a pill of opium and camphor may be introduced; should this fail to afford relief, one drop of strong nitric acid, or aqua fortis, applied by means of a small piece of lint fixed to a probe or long needle, has sometimes succeeded. A piece of wire heated to redness can be easily introduced through a quill, and is sometimes a very effectual remedy. Oil of peppermint has also been recommended. Should the sleep be disturbed, the draught as above prescribed may be repeated.

ULCERS.

There are several varieties of ulcers which require for their cure different treatments. The applications under which one kind will be speedily healed, will injure another where proper discrimination has not been used. It is fortunate, however, that their nature is such as to enlarge but slowly, so that proper medical advice can be obtained before much injury can be sustained. The greatest difficulty is to detect the nature of the ulcer, as the most appropriate remedies are then easily selected. They may be divided into two kinds—those depending on some fault of the constitution, and those over which the constitution exerts little or no influence.

Constitutional ulcers are such as arise from venereal, scurvy, &c., which are to be treated according to the directions already given. I will endeavour to point out how the other variety of ulcers may be treated according to their appearance. In whatever part of the body an ulcer is situated, if it be very painful, and the surrounding skin very red, it must be looked upon as in an inflamed state, and treated accordingly. Let salt food, ale, wine, and spirituous liquors, be refrained from; the bowels should be opened twice a-week by the purging mixture, No. 1, and one of the following pills taken every night:

TAKE OF-Calomel,

Antimonial Powder, of each 12 grains. Aloes in powder, 24 grains.

Form into a mass with Conserve of Roses and divide into six pills.

The ulcer should be fomented four or five times a-day with warm chamomile water, and a warm poultice of oatmeal or bread laid on immediately afterwards. This treatment should be persevered in until the inflammation be entirely removed, which will be known by the redness of the skin having subsided, and the edge of the ulcer having a whitish appearance. If these measures be pursued for ten or twelve days, and no improvement be observed, one pint of blood may be drawn from the arm; and if the ulcer be situated on the leg, it should be kept in a horizontal position. When the inflammation has

subsided, the sore may be dressed daily with sticking plaster. The plaster should be cut into narrow slips of about half an inch in breadth, and their length should be such as that, when laid across the sore, it may extend two inches on each side; these slips may be retained by cross ones; over the plaster a piece of lint, spread with spermaceti ointment, may be laid; and if on the limb, a bandage should be applied. The dressing should be renewed daily, washing the parts with warm water, and shaving away the hairs, if necessary. When proud flesh appears, which is known by its being of a red colour, and rising above the edges of the sore, it may be touched with the lunar caustic every second day. When the ulcer discharges a thin fluid which excoriates or scalds the neighbouring skin, giving rise to several small sores, the best treatment then will be to apply the following wash:

> Take of-Lime Water, 8 ounces, Calomel, 1 drachm.-mix.

This should be applied two or three times daily with lint, and should it be found very painful, an equal quantity of cold boiled water may be added; however, if even this wash prove hurtful, one may be made of spirit (brandy, rum, or whisky,) and water, viz.—one part of spirit to three or four of water, which may be further diluted, if necessary. When the discharge is very profuse, thin, and acrid, some finely-powdered chalk, or magnesia, may be sprinkled over the sore and the neighbouring skin, and renewed when necessary.

Erysipelas sometimes attacks a wound, which immediately puts on a very alarming appearance,—the sore spreads, the neighbouring skin becomes, hot, painful,

and red, and the constitution also suffers from fever. The wound must now be poulticed and fomented frequently, and it has been found, that if the lunar caustic be drawn around the parts affected with erysipelas, at about an inch distance, the erysipelas proceeds no further than to the line. The constitution must also be attended to most carefully, as directed under the article erysipelas, as the bad state of the wound proceeds from the constitutional disturbance. Should a person who suffers from an ulcer be attacked with fever, it cannot be healed until the fever be removed. There are a few things to be attended to in the application of bandages, lunar caustic, and poultices.

Bandages.—These are required chiefly when the sores are on the extremities. The bandage may be made of calico, linen, or flannel, from two to three inches in breadth, and sufficiently long to reach from the fingers or toes to the joint above the ulcer. Every part of the limb should be encircled, and the compression should be greater below than above, but not disagreeably so in any part. It will be necessary to change it when it becomes soiled or crumpled.

The Lunar Caustic.—A small piece, about one inch in length, should be fixed either in a quill, a silver pencilcase, or between two slips of wood. When the piece is too small to be retained in the quill, a small piece of paper may be rolled round it, or it may be secured with a thread, and when too large, it may be pared down. The medicine chest should have one ready for use.

VENEREAL DISEASE.

This disease shows itself in two forms,-first, in that

of gonorrhæa, or clap; and, secondly, in that of chancres, or sores on the *penis*, accompanied occasionally by buboes, or swellings in the groin.

Gonorrhæa, or clap, is a running of yellow thickish matter from the orifice of the penis, attended with a scalding sensation in passing water and frequently with a chordee while in bed. It would be useless to be more particular in mentionting the symptoms of the disease, as it can scarcely be mistaken for any other, and as it is a complaint with which seamen are but too familiarly acquainted.

There is no form of venereal disease so liable to bad treatment as gonorrhœa; -the patient always flies to copaiba, cubebs, or even to injections, which, when judiciously employed, may prove highly beneficial, but which, when indiscriminately used, must aggravate the complaint. The best method, for the first eight days, especially if it be the first attack, is to plunge the penis in warm water every three or four hours, to keep the bowels free by Epsom Salts, to avoid exercise, and on no account to make use of spirituous liquors; for these will not only increase the disease during its existence, but will also re-excite the malady, should it have only just subsided. Should leeches be convenient, they will be found extremely useful; but as I only speak of what is to be done on board a vessel, where no professional advice can be had recourse to, I need give no further directions about them. When the inflammatory stage is over, which may be known by the discharge not being so yellow or profuse, and the scalding sensation in making water not so severe, 30 drops of the balsam of copaiba may be taken three times a-day, on

white sugar, or in water, or one tea spoonful of cubebs every three or four hours daily. Sometimes both of these remedies may be taken together.

If this treatment be properly persevered in, the complaint will be removed in a month or five weeks. If the discharge continue and no pain be present, a small blister applied to the under part of the penis will be very serviceable. An injection may also be used two or three times a-day, and those now mentioned will be found the safest:

Take -20 grains of Sulphate of Zinc, 1 ounce of White Sugar, and ½ a pint of Cold Water.—mix; or Take -12 grains of Lunar Caustic and ½ a pint of Cold Boiled Water.—mix.

When gonorrhea is injudiciously treated, it is sometimes attended, or succeeded, by bad consequences, such as a difficulty, or even an impossibility, in making water, strictures, or swelled testicles.

Difficulty in making water must be treated with great care, and speedily attended to. Take about one pint of blood from the arm, place the sufferer in a bath of hot water, give him 60 drops of laudanum, and a glyster of warm water; let him discontinue the use of any medicine he may have been taking for the gonorrhæa. If he get no relief by these remedies, let the bleeding and bath be repeated, and give him two table spoonsful of the following mixture every hour:

Take of—Tartar Emetic, 2 grains,
Ipecacuanha, in powder, 4 grains,
Sugar, refined, 1 ounce,
Water, ½ pint.—mix.

Should this mixture produce vomiting, one table spoonful will suffice, and the stomach may be kept sick until relief be obtained.

A swelling of the testicle is another and a frequent consequence of gonorrhœa. It may arise from the use of cubebs or copaiba while the inflammatory stage is high, from too much exertion, or from the too early use of injections; wherefore, all these causes should be avoided. In case of swelling commencing in the testicle, the patient should be kept in bed on his back, be bled largely from the arm, the part fomented every four hours with chamomile or warm water, then a warm oatmeal or bran poultice applied, a purge of senna and Epsom Salts administered, and after the bowels have been well opened, three grains of opium, with five of calomel, made into pills, should be given every night until the pain be relieved, or the mouth made sore. A very useful plan is to open with the lancet one or two of the veins on the testis, which are always full and easily seen when the testis is inflamed. The diet must be low.

The treatment for strictures, which is sometimes a consequence of this disease, will be found in another part of this work. See Catheter, introduction of.

The next form of the disease is that of chancre, or sores on the penis, with or without buboes.

Chancre is best treated by lightly touching it every second day with lunar caustic, and washing it immediately afterwards with lukewarm water. A dressing of mercurial ointment spread on lint, and renewed daily, is next to be applied. Previous to the application of either the ointment or caustic, the sore should be washed with a mixture of one table spoonful of brandy and three table spoonsful of water; should the proportion of spirit be too irritating, more water may be added. Should the

ulcer show no disposition to heal after, being thus treated, but rather become broader and deeper, or should a swelling in the groin (a bubo) be perceived, then, and not until then, a few mercurial pills should be given, one every night. If, after having taken about twelve pills, the gums are not tender, the bubo not dispersed, nor the ulcer healing, let a pill be taken night and morning until the disease be removed. Should the chancre not heal, although the mouth be sore, the mercury is to be discontinued; for, if persevered in, the constitution will suffer. The best application now will be a poultice of bread (biscuit) and water, supporting the penis by a handkerchief tied round the loins, keeping the bowels open with Epsom Salts, while a small bleeding from the arm may be practised once or twice. The penis is to be kept from being irritated by the friction of the small-clothes. If the sore be on that part termed the nut, it will heal as soon, and even sometimes before the mouth becomes tender; while, if it appears on the foreskin, especially on the outer surface, mercury will not be necessary. When a bubo becomes red and very painful to the touch, the exhibition of the mercury may be stopped, as, in nine cases out of ten, it will suppurate and break. When it reaches this state, it should be fomented with warm water; a poultice of hot bran or linseed frequently applied; salt food, spirituous liquors, and spices carefully avoided; some opening medicine taken daily, and, if possible, the person should keep his bed. As soon as it points and is soft, the matter should be let out with a lancet, the opening being made in a line with the fold of the thigh.

The pain is materially relieved as soon as the matter is discharged, but the poultices and fomentations are to be continued until the inflammation is entirely removed; the sore may now be dressed night and morning with white ointment, and if it show no disposition to heal, it is to be touched with lunar caustic daily, and dry lint applied and retained by adhesive plaster. Chancre sometimes produces other diseases; and as they are both painful and dangerous, it will be proper to lay down for them a suitable mode of treatment.

The first is phymosis; a disease in which the foreskin completely covers the nut, and cannot be drawn back, causing the discharge from the sore to be retained, increasing the swelling, and often obstructing the passage of the urine. In this condition the patient should observe perfect rest, lying constantly in bed, having the penis covered with a warm linseed meal poultice, which should be changed three or four times during the day, when the matter must be washed from under the foreskin by using the following injection:

TAKE OF-Calomel, 1 drachm, Lime water, 8 ounces. - mix.

Gentle attempts should, at the same time, be made to draw back the foreskin. It is not unfrequently an obstinate disease, which ought to be put under the care of a medical practitioner as soon as possible.

Paraphymosis is the reverse of phymosis: it consists in the foreskin so tightly surrounding the nut as to be frequently immoveable; when, in consequence of the manner in which it encircles the prepuce, the nut increases in size, the foreskin swells, and the most unplea-

sant condition is induced. If permitted to advance, the destruction of the member may follow. To prevent this, the point of a lancet should be stuck in four or five places of the swelled foreskin to the depth of half an inch; some blood and water will follow, which should be allowed to flow for a few minutes, after which the penis should be placed in very cold water, and in about five minutes' time an attempt ought to be made to restore the parts to their natural position. For this purpose, squeeze the nut between the points of the thumb, fore finger, and middle finger of the left hand, enveloping the body of the penis in fine lint, and placing it between the bodies of the fore and middle fingers of the right hand, then bring forward the swollen foreskin, at the same time pushing back the nut. 1 am particular in giving these directions, having seen an unfortunate man die of erysipelas, brought on by paraphymosis, whose life might have been saved had a proper treatment been adopted.

There is seldom much anxiety about the venereal disease, until the throat becomes tender, and the skin affected with ulcerations. In such cases I would advise the captain to interdict the use of mercury, and content himself by ordering a hot bath three times a week, giving the mixture No. 1 twice a week, and using the following gargle morning and night:

Lunar Caustic, 16 grains, Dissolved in 8 ounces of cold boiled water.

The diet should be low. The captain should take care that the patient have proper medical advice on reaching shore, either from a private physician or at some of the public institutions, as he is very apt to become a prey to URINE. 85

quacks, who, knowing nothing of the complaint, in this stage, destroy his constitution.*

URINE, DIFFICULTY OF PASSING.

This is a most serious disease, and if not speedily relieved might prove fatal. The causes from which it may originate are various, each requiring a different treatment. The most usual causes, are gonorrhæa, stricture, gravel, cold, fever, and injuries of the brain or spine. A difficulty in making water, is not an unfrequent consequence of improper treatment of the first stage of clap, and when it does arise from this cause, the patient should be placed in a warm bath, for about 20 or 30 minutes; a pint of blood should be taken from the arm; and one drachm of laudanum administered. Should these remedies fail, a tobacco injection (see Locked Jaw) may be tried; if the

^{*} In such cases it becomes, I think, the duty of the captain, to see that the sufferer receives the advice of a respectable practitioner, as soon as he arrives in port. For several reasons, I should regard this to be the duty of the captain; because, he is the guardian of the health of his crew; because, he is the best qualified to distinguish the properly qualified practitioner, from the audacious quack; and, because, his crew generally speaking, is composed of men too easily misled by the delusive promises of those impostors, whose existence is a disgrace to every civilized country, and whose success is erected on the misery they entail on individuals, and the destruction they commit on society. Nothing can impress more strongly, on the minds of persons of all classes, but more especially of mariners, the necessity of shunning these impostors, than the melancholy truth that those very diseases, which destroy the constitutions, and cripple the corporeal powers of persons, who have once suffered under the venereal disease, are, in 99 cases out of 100, the effects of the injurious treatment of quacks. By skilful treatment, this disease may be conquered without prejudice to the health of the patient; whereas, by the treatment of Charlatans, the original comparatively trifling disease, is only displaced by others far more deplorable in their course, and much more dangerous in their consequences.

water have entirely ceased to flow, and there be a swelling at the lowest part of the belly, the smallest bougie, or catheter well oiled, should be gently introduced, and its use persevered in, until the urine escapes.

In stricture, which is known by the retention of urine taking place gradually, the urine previously flowing only in a small stream, and passing with difficulty, there is no remedy but the daily use of the bougie. The smallest should be employed for a week, when a larger size may be substituted and used for the same length of time, when this should be laid aside for a still larger size, so gradually increasing the size until the largest bougie will pass with ease.

Gravel, as a cause of this distressing symptom, is easily distinguished by the small particles of sand found in the urine, one of which, if lodged in the passage, may prevent the urine from escaping; the person should bear with it for some time, allowing the urethra to be rubbed with the finger, and also by having the largest sized catheter passed down to the seat of the obstruction, but no further, so as not to push the stone back again into the bladder; if, however, the pain increase, and the water cannot escape, the catheter must be re-introduced, and passed quite into the bladder, pushing the stone before it.

Cold.—When proceeding from this cause, it comes on suddenly. but will give way to the use of the warm bath, or the use of the following mixture:

Take of—Tartar Emetic, 2 grains,
Cold boiled water, 8 ounces.—dissolve.
Two table spoonsful to be taken every hour.

When a person becomes insensible in fevers, or from

injuries of the brain or spine, or from any disease, he should be most closely watched, as retention of urine may take place and prove fatal; if, at the lowest part of the belly, a firm round tumor be felt, and urine have not been passed for the last 24 or 36 hours, the catheter should be introduced twice a-day, until the power of expelling the urine have returned.

It may happen that the catheter cannot be introduced, and then the situation of the sufferer becomes deplorable. Sooner than allow the person to die, I would recommend a lancet to be pushed exactly into the centre of the lowest part of the tumor, and a catheter to be immediately passed into the urethra, where it should be kept for 36 hours, the person being confined to his back, and allowed very little drink.

WHITLOW.

Amongst the trifling complaints which become so serious to seamen, deprived of proper medical assistance, there is none produces more injurious effects than whitlow. The bones of the fingers may rot, or the use of the finger, or even of the hand or arm, may be lost from the consequent contraction. Whitlows are of various kinds. Those which commence about the nails are the least distressing. If the disease attack the end of the finger, and there be swelling, redness and pain, the worst that usually happens is the loss of the nail; the usual remedies of poultices, warm fomentations, and the confinement of the hand in a sling, with the occasional use of Epsom salts,

will succeed, but if there be very severe pain in any part of the finger, attended with trifling swelling and redness, it then becomes serious, as the bone will most commonly be found to be implicated. Not a moment should be lost in adopting the following plan. Push a lancet down to the bone in that spot, where the pain is most acute. As the arteries run along the sides of the fingers, the safest point to puncture will be the back part, or the fore part. Blood only will follow this wound, but relief will be obtained, and the disease probably arrested; the poultices, &c., as spoken of above, should be applied, and in addition, one of the calomel and opium pills (No. 6,) given every third hour. This is the form of the disease, which if neglected, ends in the destruction of the bone, and when this occurs, loose pieces of bone appear at the orifice of the wound, and may then be removed with the forceps.

Another form of the disease is when that part of the finger furthest from the nail inflames, becoming painful, red, and swollen; if the matter, which soon forms, be not quickly let out by a lancet or by nature, the whole hand and forearm may swell enormously, and after excruciating pain, the matter force its way at the wrist; this disease is tedious, and frequently ends in contraction of either hand or forearm, or of both. The treatment should be to bleed freely from the arm, poultice and foment the hand constantly, keeping the bowels open by the daily use of the purgative mixture, (No. 1,) exciting perspiration by the draught (No. 4) every night, and above all introducing a lancet into the diseased part, at the very commencement of the disease.

WORMS.

The symptoms of worms are so various and obscure, that the only positive proof is that of voiding them from the body. There are three kinds, which more particularly infest the human body; first, the tapeworm, whitish, broad and flat, like tape, and jointed; the next, is from 2 to 8 inches long, differing from the common earthworm in colour only, which is white; the third, is the seatworm, about one inch long, whitish, scarcely thicker than a thread, of which great numbers may be present.

Treatment.—For the first kind, 8 grains of calomel may be given at bed time, and on the following morning, one ounce of castor oil, with half an ounce of turpentine. This prescription may be used twice a-week, for four or five times. The second kind, may be treated by the following mixture:

Take of—Epsom Salts, 1 ounce,
Powdered Jalap, 1 drachm,
— Rhubarb, 1 scruple,
Tinct. of Rhubarb, 1 ounce,
Peppermint Water, 7 ounces.—mix.

One wine glassful to be taken every third hour, until the bowels are well purged.

For the third, the aperient pills will prove very useful and after the bowels have been well freed, the quinine mixture will be found extremely serviceable.

The Guinea worm is of somewhat rare occurrence, it is however, more commonly found in Egypt, the Coast of Guinea, or the Indies; but is by no means peculiar to these localities, as I have seen them in two cases, in the Infirmary of this town.

It appears usually in the form of an ordinary boil, with itching, redness, and swelling, gradually becoming painful until the skin breaks, when a dark coloured spot, the head of the worm, is observable in the centre of the wound. So soon as any portion of it protrudes, it should be tied by a piece of strong thread to a quill, and each day a very gentle attempt should be made to roll a new portion of it round the quill. This operation must be done very carefully so as to avoid breaking the worm, for it has always been found, that if the animal be broken the part remaining under the skin will grow with increased rapidity, and even sometimes occasion a fatal inflammation. Should, however, the worm be unfortunately broken, a poultice must be applied to the part, and so soon as any part of it reappears at the surface of the sore, it must be withdrawn with the utmost care, in the manner already indicated. If any great degree of inflammation, with fever, should follow such an accident, an opening may be made with a lancet into the tumour, and the end of the worm again seized, applying over the sore, poultices of linseed meal, and giving one of the following pills every night:

TAKE OF—Calomel, and
Antimonial Powder, each
Powdered Opium,
12 grains,
4 grains,

Made into a mass with Conserve of Roses, and divided into 12 pills.

When the worm has been completely removed, the external wound will soon heal with the simplest dressing.

WOUNDS.

The nature, and consequently the treatment of wounds, depend so much upon the mode of their infliction, that they are commonly arranged according to the description of instrument, by which they have been produced; thus, we have the incised wounds, or those produced by cutting instruments; the punctured wounds, or those effected by pointed weapons; contused or bruised wounds, such as are the consequences of blunt instruments; gunshot wounds, those inflicted by fire-arms; and poisonous wounds, as those from the bites of rabid or poisonous animals. Each of these require a treatment somewhat peculiar, and therefore deserve a separate and distinct consideration.

Incised wounds, are, generally speaking, the most common and safest of the several kinds of wounds; for, unless some large bloodvessel have been injured, they are easily managed, and are commonly curable within a few days. If the situation of the injury will admit of it, the best and simplest treatment, is that of carefully washing away the blood, and then drawing the sides of the cut together by strips of sticking-plaster; taking care that there is a small space left between each piece of plaster, so as to allow the escape of any matter that may form. Over the plaster, a fold or two of lint wet with warm water, should be laid, and then the whole dressing confined by a bandage firmly applied. Should the situation of the wound prevent the possibility of following this plan, as may be the case in different parts of the

face, it may be then necessary to bring the separated sides together by suture or stitches, (the mode of doing which is described page 102,) this being accomplished, the adhesive plaster may afterwards be applied, as a protection to the stitches. In these cases, I have supposed that no large bloodvessel has been injured; but, should a vein or artery have been wounded, as may be known by the amount of bleeding, it will be adviseable to fill the wound with cotton, lint, or pieces of sponge, which should be retained by a firm pressure, until the bleeding is arrested, when the preceding form of dressing may be adopted. If this pressure on the surface of the wound, do not check the bleeding, as is not unfrequently the case in injuries of the large vessels of the limbs, it may be then requisite to have recourse to the tourniquet, (see Tourniquet, page 103;) when after succeeding in stopping the hæmorrhage, the approximation of the sides of the cut may be effected by either of the methods above described.

Punctured wounds, sometimes become painful and troublesome sources of danger. The part on which an injury of this kind has fallen should, in the first instance, be well fomented with warm water, and afterwards, either poulticed with hot bread and water poultices, or, which is simpler and equally efficacious, covered with two or three folds of lint wet with hot water, and the whole afterwards enveloped in oiled silk; either description of dressing should be repeated every two hours. If under this treatment the part swell, and the pain in it increase, relief may be produced by enlarging the outward wound, by introducing a lancet. At the same time that attention is being paid to the local

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injury, the state of the bowels and the nature of the diet must not be overlooked; for these purposes, 2 grains of calomel, with 4 or 6 grains of jalap, may be given every night, and a light broth and bread regimen allowed during the day.

Contused or bruised wounds may, generally speaking, be safely treated from the commencement, in the same manner as the incised wounds, viz: by hot fomentations and poultices, or hot water dressings, with the same attention to the medicinal and dietetic treatment.

Gunshot wounds must happen but rarely in the merchant service, since they may, however, occur from accident as well as from design, a few words may be necessary here, descriptive of the treatment suitable in such cases.

There is no class of wounds more dangerous or more treacherous than those termed gunshot. There may be only one wound as from a ball, or several as from small shot. The danger is according to the value of the part struck. Should a ball pass through a fleshy part merely, neither breaking a bone, nor wounding a large artery or nerve, very little apprehension need be entertained for the result; but, should it have passed through the chest or belly, very little hope of recovery can be promised. It is almost instantly fatal when it passes through the head. When it passes through a limb without breaking a bone, the danger arises from its wounding some of the large bloodvessels or nerves; and, as these lie on the inner side of the bone, a favourable result is less to be expected when the ball traverses that direction. In general, the blood instantly flows on the bloodvessel being

wounded, but it is the nature of a gunshot wound to cause mortification along its track, by which the bleeding is generally prevented, until the mortified parts separate, which may take place in the course of 10 or 12 days. We, therefore, should be very cautious how a person conducts himself for 14 or 15 days, after an accident of this kind. I will now lay down a few rules as to the treatment, which may vary according to the part wounded, and the size of the shot, or extent of the injury.

Treatment.—When the head is the suffering part, it should be ascertained whether the bone be broken, or whether the ball or shot have entered the skull. In the latter case, there can be very little hope of recovery; but, in the former, some attempt may be made to give relief. When the head is much injured, the usual symptoms are complete insensibility, loss of power over the limbs, loss of speech, and an incapability of swallowing, the pulse becoming slow and full, the bowels confined, and the breathing slow and stertorous. The danger will be in proportion to the intensity of the above symptoms, which cannot long continue without the usual consequence, death. Let the head be shaved and covered with a large poultice; if the patient be able to swallow, let 10 grains of calomel be given, and in two hours afterwards, the purging mixture, (No. 1,) until the bowels be well opened; if not able to swallow, let a strong clyster be injected composed of the following:

Take of—Epsom Salts, 1 ounce,
Treacle, 4 ounces,
Warm water, 1 pint,
Spirits of Turpentine, 1 ounce,
Olive Oil, 2 ounces.—mix.

Should this not purge before the expiration of an hour, it should be repeated. If 12 or 14 hours have elapsed since the reception of the injury, and the skin be not cold, or the pulse very feeble, let one pint of blood be taken from the arm, and repeated in 6 hours afterwards, if necessary. As insensibility is the most common symptom attending a fracture of the skull, very little can be done in the way of giving medicine internally. The return of sensibility, the restoration of muscular power, and the presence of sickness of the stomach, may be regarded as reasonable grounds for expecting a favourable termination.

Chest and belly.—Should these cavities be penetrated, particularly the latter, death will almost certainly ensue. The person may bleed to death internally in a few hours, or he may die of inflammation in a few days. The former may be known by the feebleness of the pulse, the liability to faint on the head being raised, the pallor of the face, the coldness of the feet, and the sunken state of the countenance.

Treatment.—The most perfect quietude should be observed, the head left quite low, the drink should be cold and simple, as barley-water or gruel, either of which may be acidulated with lemon-juice, or cream of tartar.

Poisoned wounds may be inflicted by the bite of any rabid canine or feline animal, as a dog, wolf, fox, cat, &c.; by the bite of any venomous reptile, as the viper, rattlesnake, &c., or by the sting of any poisonous insect, as the scorpion, tarantula, wasp, &c. It is not the immediate mischief produced by the bite of a rabid animal that needs excite so much apprehension, as the remote

consequences of such an accident, for the local injury may be of trifling inconvenience, and so slight as scarcely to bring attention to it, until after the lapse of, perhaps, a considerable time, when the constitutional effects may break out with the most fearful and unmanageable malignancy. To prevent such a horrible catastrophe, the strictest attention should be devoted to any accident of this nature, where the health of the animal is at all dubious. Immediately on the reception of the injury, however slight, a ligature should be passed round the limb just above the wound; the wound itself should also be washed thoroughly with hot water, or hot vinegar, and cupping glasses then repeatedly applied over the broken skin, carefully washing the part each time that the glasses are removed, with the hot fomentations, whether of vinegar Should cupping glasses not be at hand, wine glasses or tumblers may be made, to answer the purpose, by pouring into them a small quantity of spirits of wine, so as to moisten the whole inside of the glass, then setting the spirits on fire, and while burning, immediately applying the mouth of the glass over the part affected, taking care to repeat the operation pretty frequently, at the same time, attending to the washing of the wound on each removal. After the continued use of the cupping glasses, or their substitutes here described, the part should be freely rubbed with some strong caustic, such as oil of vitriol, aqua-fortis, or lunar caustic, after which, a poultice of linseed meal may be applied every three hours. The consequence of this treatment will be the separation, in a few days, of that part of the flesh to which the caustic has been applied, and a reasonable chance of the

wounds. 97

remote danger being removed, Perhaps the safest, as it certainly is the most expeditious, plan of procedure, would be to extirpate the part bitten, but as this may, from a variety of circumstanees, require much practical discrimination and skill in the operator, so as to secure the preservation of the contiguous bloodvessel, &c., I would not recommend such a course, to the unprofessional, rather trusting to the more circuitous mode mentioned above, for attaining the same object. While the local injury is undergoing this species of treatment, the state of the constitution must be watched, that no fever insidiously attack it; and, in case headache, with restlessness, dry tongue, and costive bowels, do show themselves, it may be advisable to give 2 grains of opium with 3 grains of calomel at bed time, and a dose of castor oil on the following morning, repeating the same medicines, should relief not be obtained. The diet should be pretty good, with a very free use of barleywater, thin gruel, &c., and a glass or two of wine daily.

The bites of the viper or of the rattlesnake, like the bites of many other reptiles of a similar description, are sometimes exceedingly dangerous, being occasionally, even so rapid in the destruction of life, as not to allow time or an attempt to counteract their mischief. This activity depends on a variety of circumstances, as well on the part of the serpent itself, as on the condition of the individual at the time of the accident, and the particular part on which he may be bitten. It has commonly been observed that the danger is the greater, when the bite has been inflicted on small organs, such as the fingers or toes. The symptoms usually distinguishing an injury of

this sort are acute pains, commencing about half an hour after the bite, accompanied by swelling at first hard and pale, soon changing to a red, livid and firm tumour; an inclination to fainting soon comes on, as also bilious vomiting, and sometimes convulsions, the pulse is rendered irregular and small, the breathing difficult, a cold perspiration breaks out, the mind fails, and death To prevent such a termination, the treatment recommended for the bites of rabid animals should instantly be had recourse to; but, as the cupping glasses may not be available in consequence of the situation of the injury, as for instance, when it happens on the finger or toe, the wound may be sucked for some time, and the caustic and poultices subsequently applied. According to the experiments of eminent medical practitioners, this practice is unaccompanied by any danger to the person sucking the wound, providing there be no sore in the mouth or on the lips, it having been proved that very large quantities of the poison of vipers, may be swallowed without producing any injurious effects.

The wounds inflicted by the stings of poisonous insects, are not nearly so serious in their consequences as those already mentioned. They sometimes, however, do produce very considerable trouble, both by their local poison and constitutional disturbance; they are most easily treated by the continued and repeated use of the cupping glasses, and subsequent fomentation with hot fluids, applying leeches to the part, should the swelling and inflammation afterwards proceed to any extent, and administering two of the following pills every night, should the fever be great:

Take of—Calomel, 8 grains, Rhubarb, 1½ scruple, Tartar Emetic, 1 grain,

Make into a mass with Conserve, and then divide into 4 pills.

The musquito essentially differs from the poisonous insects just mentioned in having no sting, and in feeding themselves by sucking blood from animals. In the tropical climates, their bites not unfrequently prove exceedingly annoying from the intense itching they produce on the skin, yet are rarely, unless by their number, and the constant scratching the sufferer indulges in destroying the skin, of any great consequence so far as the health is concerned. In case, however, their irritation proceed to any degree of inflammation, it may be advisable to rub the part with lemon-juice, vinegar, or strong spirit.

The best practice is the preventive system, which consists in avoiding any unnecessary exposure of the skin while sleeping, it is therefore better to lie down in the clothes, and to cover the hands and face with thin muslin, to burn tobacco in the room, to rub the parts exposed with lemon-juice, to wash them with vinegar, or to smear them with olive oil.

Mortification, as a consequence of wounds, deserves to be considered. There are several varieties of mortification, each requiring a different mode of treatment. It may arise from excess of inflammation, as in burns, from impediments to the free circulation of the blood, as in cold, as well as from other causes which need not be mentioned. Mortification from excess of inflammation, is easily known by the black spot in the centre of the diseased part, while the surrounding skin is of a bright red. This takes place in burns, in severe contusions, and is oftentimes a consequence of the part being for a long time subject to pressure, as in bed-sores. The treatment should be to foment the parts with hot water, four or five times daily, applying immediately afterwards, a warm bread and water poultice. The pain may be relieved by the following draught, taken once, twice, or even three times a-day:

Take of—Spirits of Hartshorn,
Laudanum, of each, 30 drops,
Peppermint water, 1 ounce.—mix.

If the mortification follow a blow, and the pulse be quick, the skin hot, the thirst constant, and other signs of fever present, it will be proper to take blood from the arm, to open the bowels with the aperient mixture (No. 2,) and to restrict the diet, particularly avoiding the exhibition of ale, wine, or spirituous liquors. But, in the mortification from burns, or bed-sores, the treatment must be quite opposite, the patient should be supported with strong broths, animal food, ale, wine, and every other kind of nourishing diet, the quinine mixture should also be given in the doses already prescribed, and the patient confined to the recumbent position in a well ventilated place. Should the mortification be extensive, and a tendency to raving be observed, it will denote great danger. Wine should now be given in glassfuls every two hours, and the other means strenuously pursued, and the following mixture given:

TAKE OF—Sweet Spirits of Nitre,
Spirits of Hartshorn,
Ether,
White Sugar,
Peppermint water,

Take of—Sweet Spirits of Nitre,
and discounce,
a

Two table spoonsful to be taken every second or third hour.

Should vomiting be a troublesome symptom, the following mixture may be substituted:

TAKE OF—Carbonate of Potass, ½ ounce,
White Sugar, 2 ounces,
Laudanum, 80 drops,
Water, 8 ounces.—mix.

Two table spoonsful to be taken, with one table spoonful of lemonjuice (or solution of citric acid,) every second hour in a state of effervescence.

That these medicines may effervesce, let the lemonjuice be poured into one vessel, and the mixture into another; on being mixed they will immediately effervesce or boil up, and should be drank in that state. These remedies and the poultices should be continued until the mortified parts come away, when the ulcer may be dressed in the ordinary manner with adhesive plaster and spermaceti ointment.

Mortification from cold may attack the nose, ears, hands or feet, but it is the feet which most generally suffer. The part first becomes very cold, and then a tingling sensation is felt, the natural colour changes to a livid or bluish colour, and finally becomes quite black. If proper means be pursued in the first instance, the disease may be checked by assiduously rubbing the parts with spirits and water, then enveloping them in flannels, and repeating this plan every hour. Confinement to a warm bed will be also very necessary, but on no account should the parts be placed in warm water, or much heat in any

form applied. It will be proper to allow generous food, with a few glasses of wine, which should be discontinued on the appearance of fever. This method should be pursued unless some change follows, which will be either that of the part becoming quite black, or of an ulcer forming. In the first case, the system must be well supported with ale, wine, animal food, and bark, and poultices continually applied until the mortified part is detached; in the next case, which comes under the name of

Chilblain—there need be no change of diet, but the ulcer will require to be touched occasionally with lunar caustic, and dressed daily with spermaceti ointment, these sores are sometimes very difficult to heal, but when a good diet and warmth are enjoyed, they are soon cured. If a person with chilblains be exposed to a severe cold, the parts are in danger of becoming mortified.

Stitching of a wound may be done in two ways. A common middle sized needle may be threaded, and the thread doubled. The needle should then be made to penetrate the flesh, at about half an inch distant from the edge of the wound on its outside; on pushing forward the needle it will appear in the wound, its lips or edges should now be brought evenly together, and held steadily in that position, while the needle is pushed forward through the opposite lip of the wound, on the inside, and as deep as will be necessary, to bring it out on the outside at the same distance from the other lip of the wound, as it entered on the opposite side; having drawn the threads quite through, the needle may be cut away, the edges of the wound drawn together by the threads, which should

now be tied with a sailor's knot, and the remaining portion cut away close to the knot. The number of stitches should be proportioned to the extent of the wound, one stitch being sufficient for each inch, i. e. a wound two inches in extent will require one stitch, one of three inches, will require two stitches. The other method is to take a fine needle, and pass it fairly through the wound in the manner above directed, but without having any thread passed through it, the edges of the wound may be held together while a thread is passed repeatedly under the needle, until it is fixed firmly in its place. Should the wound be of much extent, several needles may be introduced in the same way. When no pain or inflammation follows the ligatures or needles, they need not be removed until the 5th day, when the stitches may be removed by simply cutting the thread, and withdrawing it, and the needles, by first untwisting the thread, and then removing the needles. If inflammation should soon follow the use of the stitch or needle, they must be speedily removed, and a warm poultice applied to the wound.

The tourniquet should always be introduced into a mariner's medicine chest, as it is one of those instruments whose use is very easily understood, and whose timely application may preserve many a life. The manner of employing this instrument is of course regulated by the particular part to which it is to be applied. It is intended to be used to the limbs, in cases where the bleeding from any wound is of such extent as to endanger the life of the patient; when a wound, for example, has

been inflicted on either of the legs, thighs, hands, or arms, the tourniquet is to be placed at some distance above the wound; in case of such accident happening to the legs the pad of the tourniquet should be placed on the inside of the thigh in a depression, which may be found about half-way down, and where a pulsation may be distinctly felt; the tape should be then passed tightly round the limb over the pad, and carried through the screw; the screw may then be twisted so as to tighten the tape, and compress the pad until the bleeding cease. injury be inflicted on any part of the arm, from the finger to a few inches above the elbow, the pad must be placed on the inside of the arm, in a hollow situated about 3 or 4 inches below the arm-pit; the tape must then be made to pass over the pad, encircle the arm, and in the same manner be carried through the screw, when it may be tightened sufficiently, by turning the screw, to check the bleeding from the wound. Should a tourniquet not be at hand, a similar instrument may easily be constructed by rolling up into a firm pad some folds of linen, which may be placed in the situations already described; a handkerchief may then be tied round the limb over the pad, and a stick introduced under the handkerchief at the part just over the pad, and it may be twisted round until a sufficient degree of pressure is produced to stop the bleeding. Whenever the tourniquet is had recourse to, care should be taken not employ any unnecessary degree of force, but only such an amount as is found adequate to the purpose for which it is used; for, by keeping it for any length of time too tight, swelling and other unpleasant consequences may befal the

limb. As soon as the inordinate bleeding is checked the wound should be dressed with sticking-plaster, or its edges kept together by stitches, the tourniquet should then be slakened, and providing the flow of blood do not return, the tourniquet should be left loosely in its situation. It ought not to be taken away for 24 hours after its first application, so that it may be immediately used in case of any return of the bleeding. Should the use of this instrument not completely restrain the hæmorrhage,, the wound should be filled with pieces of sponge, in the manner directed under the treatment of Incised wounds.

SEA SICKNESS.

As sea sickness can scarcely be denominated a disease, I have not introduced it into the list of maladies, and yet, as does not unfrequently prove very distressing, I have thought it advisable to allude to it here, more particularly, since it has been mistaken for the commencement of different diseases, such as cholera, fever, &c., which in their turn, when vomiting was the primary symptom, have been taken for sea sickness. The symptoms are continual vomiting and sickness of stomach, increased by raising the head, and unattended by chilliness, headache, or lumbago, which last symptoms being absent, are the best proofs of its true nature. This complaint usually seizes the person on the first day of the voyage, although it is sometimes delayed until the vessel meets with boisterous weather. It usually ceases after the first few days, yet it has been known to

continue for months, reducing the person to the utmost degree of weakness. For its relief, confinement to the horizontal position may first be tried, giving a table spoonful of pure brandy occasionally, yet so as not to intoxicate, especially in the case of females, who are the most obnoxious to its attacks. It will be also a good precaution to have the bowels freely evacuated. Should the sickness become very distressing, 1 grain of opium in the form of a pill, or 20 drops of laudanum on refined sugar, may be given every three hours until it be removed or relieved. The thirst may be quenched by the effervescing draughts as mentioned in the list of prescriptions, and fluids as much as possible refrained from. Stale bread, biscuit, arrow-root, or animal food will best agree with the stomach, while on the contrary, it will be increased by warm coffee, tea, &c. Should the voyage be of any length, and the sickness continue unabated, it will be proper to come on deck, to engage in conversation. light reading, games of chance, or any of those means which will agreeably occupy the mind.

HINTS

ON THE NECESSITY OF STRICT ATTENTION TO THE CLOTHING, CLEANLINESS, AND DIET OF SEAMEN.

There can scarcely be a doubt reasonably entertained that many diseases incidental to mariners, are traceable to negligence in clothing—inattention to cleanliness or error of diet.

As it is the safer practice to prevent diseases than to treat them, I may only be extending the utilitarian principle which originated this work, by giving some brief hints on the necessity of every sailor enforcing this duty in his own person, and on the manner in which he can best accomplish the triple object of ensuring good clothing, true cleanliness, and proper diet.

It must be obvious to those reflecting on the various causes of the different diseases, which I have described in the preceding part of this work, that no cause is so general, indeed it would seem almost universal, as a generator of disease, as difference of atmospheric temperature, &c., to which the body is exposed. This knowledge of the mischievous tendency of the sudden vicissitudes of the weather, the succession of the seasons, and the change of climates, has led to the regulation of the external clothing conformably with the state of the weather to which the individual is exposed; and a strict attention

to this particular, would no doubt spare many individuals the endurance of long and painful ailments. The occupation of the sailor is, of all others, the one which should induce him to respect this knowledge, and to follow its suggestions. He should be careful to accommodate his clothing to the temperature of the climate in which he may be sailing. While approaching the tropics, for example, the amount of clothes should gradually be diminished, and their nature somewhat changed. For the heavy, hot clothes of woollen, the lighter dresses of fustian, cotton, calico, or linen should be substituted. The colours too, are of no trifling importance. All the dark colours, more especially black, are particularly unsuitable for the warmer climates. Black hats, for instance, have sometimes proved particularly inconvenient in hot countries, from the great heat their colour attracts to the head, the wearer, being, in consequence, not unfrequently struck with the "coup de soleil!" In such climates, white or straw-coloured clothes should be worn, and high-crowned white straw hats. On the other hand, when "homewardbound," the quantity of clothing should be increased, and its texture changed for woollen. Thus far, I have spoken only of the change to be made in the dress, with reference to the variation in the air from hot to cold, or cold to hot, but another equally important point must be regarded, the dampness or dryness of the air. The body should be protected as much as possible from damp air by the use of flannels next the skin, and those engaged in the nightly watches, should wear a much greater quantity of clothing of this description, than, under the same circumstances during the day they, might be required to

do; because, the exercises they undergo during the day, will in some degree answer the same purpose as a given quantity of warm clothes; and, again, they are not exposed to the same damp cold in the day, as they are during the night. The steersman, whose engagement necessitates his confinement to one spot, and so prevents his taking any exercise, should pay especial regard to the state of his clothes. It is a common supposition that on the clothes being once wet, the risk of taking cold cannot be increased, this, however, is a very erroneous idea; the longer wet clothes are in contact with the body, the more heat will the body lose, and consequently the greater will be the danger incurred. By a proper and strict attention to these hints, I am convinced, that many of those maladies, such as fevers, bowel complaints, cholera, dysentery, &c., which endanger the lives, and frequently frustrate the best efforts of a captain, or compromise the interests of his employers might be prevented, as well as the enjoyment of health in the crew be prolonged.

Cleanliness both in person and in dress, is very necessary for the enjoyment of good health, and indispensibly requisite in warm climates. While living in a warm climate, the whole person should be daily washed, particularly on rising in the morning, or after sleeping. The hair of the head should be kept closely cut; the body linen should be changed at least twice in the week; the bedding should be brought on deck daily and exposed to the sun, as it soon becomes soiled, owing to the constant perspiration. Hammocks are preferable to berths in a hot climate, and can always more easily be kept clean; besides, the infection from a disease is more easily communicated

by bedding, and as the hammock can be brought on deck and purified, this great source of danger may be removed. The decks should be washed about noon, and rubbed tolerably dry; by this method, the evaporation will be lessened, and the danger of cold from the damp be avoided. The cabins should be cleaned frequently, all the furniture brought on deck, and the dust swept from every crevice. The best time for washing the cabins would be when the vessel is at anchor, so that the occupiers might sleep on shore until they be perfectly dry, which should be expedited by lighting fires in them. If living animals be kept on board, their stables should be cleaned once or twice a-day. During the great heat of the day, the seamen should be called upon as seldom as possible to exert themselves, and should be allowed the morning or evening to perform their duties. Should a sailor be attacked with any contagious disease, it will be preferable to place him in a hammock on deck: several advantages may be gained by this plan, the danger of infection to his fellow-sailors will be lessened, the free current of air will prove refreshing to himself, and the facility of attending to his wants will be increased. Those who are in immediate attendance upon the invalid should take the quinine mixture, and be allowed a very generous diet, by which they are much better enabled to resist the influence of contagion.

Diet.—Proper diet is one of the most important things to be regarded during a sea voyage, or a residence in a warm clime. Were proper rules for an appropriate diet laid down, and those rules strictly attended to, the predisposition to many fevers peculiar to such climates

would be much lessened. That diet must have a powerful influence in predisposing to or producing diseases, is proved by the existence of scurvy, a disease seldom seen on shore, and at present very rarely seen at sea. disease originates in the continued use of salt food, without vegetables. Although this is well known, yet so numerous are the accidents at sea, that the necessary precautions cannot always be used. Under such circumstances, an attempt should be made to prevent the disease by the use of those remedies recommended by the royal navy, viz., lime-juice, lemon-juice, vinegar, and citric-acid, of which a stock should always be kept on board, especially of citric-acid and vinegar, which will not spoil from age. In case of these remedies being exhausted, the elixir of vitriol or alum may be substituted. The bread may also be rendered unfit for use by becoming musty, and the water may also be bad. The bread may be improved by rebaking it and adding a little sugar or treacle, and in case there should be no oven on board, it may be reduced to a coarse powder, and being formed into a paste with cold water, it may be baked like an oaten cake on a girdle. The water may be made sweeter by letting it filter through coarsely powdered charcoal, and then allowing it to remain in the vessel until perfectly clear, or the water should be turned into a newly cleaned vessel, or the filtering stones may be used. Mr. Ostridge's tin machine will be found very serviceable. Whenever a supply of water is required, the water casks should be made perfectly clean, and if necessary, newly charred or washed out with charcoal, as a small quantity of foul water remaining in the cask will

quickly contaminate the new supply. It is sometimes made very palatable by boiling it with some oatmeal, and then allowing it to become cold. The meat should be steeped in water, for at least sixteen hours before meal times, and it is a common practice at sea to tow it after the ship in a net. If molasses were plentiful on board, it would be an excellent plan to place the meat in it. The use of injured provisions or constant employment of salt food, not only produces scurvy, but leaves the constitution in so debilitated a state that it is unable to resist any serious illness with which it may be attacked, and it is a well ascertained fact, that the weaker we are the more liable we become to every contagious disease.

Having spoken of the best method of counteracting the injurious effects of diet where no choice can be made, it will be necessary also to mention those articles of diet which should be avoided. Young men who accompany merchant vessels, should pay particular attention to these directions. It may be laid down as a general rule, that the warmer the climate, the less of animal food or spirituous liquors is necessary. This is a rule not well understood, or if so, not acted upon, hence, we hear of so many dying of those fevers which are so prevalent in warm climates. The natives make very little use of animal food, and in some places none at all, while their abstinence from intoxicating liquors is remarkable, unless where such have been introduced by traders. Their mode of living, as it is the result of experience and is shown to be agreeable to nature and reason, should be imitated. Let spirituous liquors be entirely avoided, and nothing drank stronger than porter or ale. The quantity of

animal food should be lessened, and taken without that quantity of pepper and spices, which destroys the tone of the stomachs of those who indulge in them for any length of time. In return, the fresh fruits of the country may be freely used, and all their wholesome vegetable productions; to quench thirst, which in those countries is sometimes excessive, simple cold spring water will be the most agreeable and wholesome, but as it may not always be procurable, lemonade, imperial, or tamarind tea, may be substituted. To some constitutions, more especially in such climates as those we are speaking of, acids in any shape are injurious, causing diarrhoea, griping, and pains in the bowels; wherefore, they should be discontinued, and soda water, ginger beer, or the effervescing draught used. When the body is very much heated, no cold fluids should be swallowed, as bowel complaints of an obstinate nature are apt to follow their use. These directions may appear difficult to follow, but, after the perseverance of a few days their observance becomes easy, and a freedom from lassitude and dyspepsia amply compensates for the abstinence. Most of the above directions, are intended for those sailing towards the Equator, and would by no means be applicable to those engaged in the whale fishery of the Northern Ocean. They, on the contrary, should live generously, making use of animal food, ale and porter, according to their wishes. It is however, a mistaken notion to think that spirituous liquors are the most appropriate remedies to ward off the bad effects of cold; on the contrary, after their first effects are over they leave a greater predisposition to chilliness, the best time for taking them is after a person has been long exposed to

intense cold, but when exposure no longer exists. For example, if a person have been in the water or on watch, but have retired to his warm cabin, spirituous liquors will then be found to be absolutely necessary, but while on watch, warm tea, coffee, or broth, will preserve the animal heat longer, and thus better enable him to resist the effects of cold.

CHOICE OF SEAMEN.

The choice of seamen might be placed under the head of preventives of disease, as by rejecting those subject to certain infirmities, the infirmities themselves are got rid of so far at least as the vessel alone is considered. A seamen should be neither very young nor very old. He should not have a sickly appearance, and if possible, in case of long voyages, each man should be previously submitted to the inspection of a physician. The diseases under which they may labour, and which may in time cause a great deal of inconvenience to the master of a vessel are ruptures, strictures, ulcerated legs, falling sickness, &c. Should a person have lately undergone salivation, it would be very improper to engage him for a voyage to Greenland, Russia, or any country in the same degree of latitude, as he would be almost certain to be attacked with rheumatism, and so incapacitated for any useful purpose; while on the contrary, by a voyage to the Indies, China, Africa, &c., he might be materially benefited. Should a person have once suffered from ague, he will he much more liable to its attacks, on reaching those countries where it most usually prevails, than

those who have never suffered from it; yet this should not be held a very cogent reason for rejecting an otherwise unobjectionable man, as by allowing him one grain of quinine three times a-day, while residing on or near the coast, he may, in all probability, be secured against the disease. Consumption is a complaint which should reject any man offering himself as a sailor, it is a mistake to think it may be cured by a residence in a warm country, it is equally fatal, whether a cold or warm country be chosen for a residence. Several of these diseases can be concealed from the master of a vessel, so that it will be necessary in case he is venturing on a long voyage, to have the applicant submitted to a physician for examination. There is no disease which so utterly disqualifies a man for the laborious occupation of a sea life, as one which cannot be detected by the physician, and can be learned only by the testimony of himself or of his friends; viz. falling sickness. A person subject to this complaint, may injure not only himself but others, for instance, he may fall into the sea, or as has occurred, he may be attacked while holding a lighted candle, and in his fall the candle may be thrown on some combustible matter, and thus endanger the destruction of the ship and crew. As to the moral character of the sailor, it does not come under the intention of this article, but I may add, that the more moral the character, the more freedom from disease may be expected; drunkenness alone engendering a host of diseases.

CONTENTS

OF

THE MEDICINE CHEST.

There is a variety of instruments which will be found indispensable to a mariner's medicine chest. Some, for instance, are essentially necessary in preparing and compounding different drugs; while others are equally requisite for the performance of many little surgical operations. Those which may be needed for the former purpose, are—

A small Wedgwood Pestle and Mortar,
Marble Slab,
Spatula,
Four-ounce Glass Measure,
Small set of Scales and Weights,
Pair of Scissors,
Small Tin Funnel,
A small Glass Funnel,
Bolus Knife.

And others that may be required for the latter purpose are—

- A case of 4 Lancets, (2 for bleeding and 2 for abcesses,)
 Silver Catheter,
- Small Gum-elastic Catheter,
 - 6 Metallic Bougies of different sizes,
- 12 Wax Bougies of various sizes,
- 6 Pewter Syringes,
- A Stomach Pump and Enema Syringe, *
- · Tourniquet,
- 12 Calico bandages, each 21 inches wide and 6 or 7 yards long
 - 1 Pound of Tow,
- A few Skins for spreading plaster,
- Pins.
- A Sponge,
- Half a dozen Trusses

It is of considerable importance that the weights and measures be clearly understood, more particularly as the signs by which their respective value is indicated are somewhat calculated to confound an inexperienced eye. With some attention, however, to the following explanation there can be little danger of any errors being committed. The weights used by the apothecary are those regulated by what is in England understood by *Troy weight*, according to which the pound is thus divided:

According to the measure used by the apothecaries, the gallon is divided as follows:

For this reason we have the glass measure graduated and the particular quantities indicated by these signs engraved on its side; for example, an ounce is marked thus, $\frac{\pi}{2}$; a drachm thus, 3; and the number under each mark means so many ounces or drachms. The smallest quantity that can be measured by the graduated glass is half a drachm, or thirty drops; and any quantity that is required less than this must be calculated by drops. When using this measure the liquid must exactly reach the line upon which the number is placed. Generally speaking, a teaspoonful equals about a drachm; a table spoonful about half an ounce, and a wine glassful two ounces; so that in case of the graduated measure not being at hand, these may serve the purpose.

In the employment of any medicine, it should always be borne in mind that the dose must be principally regulated by the age of the patient: it would not, for example, be safe to give a youth the same quantity that may be advantageously administered to a middle-aged man; nor, on the contrary, would it do to give the boy's dose to an adult. In order to show the differences which should be made in regulating the doses according to the age of the patient, I will subjoin a table, in which a calculation is made on the supposition that the dose for an adult is one drachm, when a patient

Under	1	year w	vill	requir	e only	1-12th	of the fu	ll dose	e or	5 grains.
	2			• • • • •		1-8th			or	8 grains.
	3					1-6th			or	10 grains.
	4				• •	1-4th				15 grains.
	7					1-3d			or	l scruplc.
	14					1-half			or	½ drachm.
	20					2-3ds			or	2 scruples.
Above	21					the full	dose		or	1 drachm.

I do not think that with a lesser number than that composing the following select list of medicines, the medicine chest could prove of much practical utility during a voyage of ordinary length:

1	Aloes,	27	Lunar Caustic,	
2	Alum,	28	Magnesia,	
3	Adhesive Plaster,	29	Mindererus' Spirit,	
4	Antimonial Powder,	30	Mercurial Ointment,	
5	Balsam of Copaiba,	31	Opodeldoc,	
6	Blistering Plaster,	32	Powdered Opium,	
7	Blue Pill,	33	Rhubarb,	
8	Calomel,	34	Ipecacuanha,	9
9	Carbonate of Potass,		Jalap,	
10	Soda,	36	Ginger,	
11	Castor Oil,	37	Quinine,	3
12	Citric Acid,	38	Senna Leaves,	0
13	Conserve of Roses,	39	Spermaceti Ointment,	
14	Cream of Tartar,	40	Spirits of Hartshorn,	0
15	Cubebs,	41	Sweet Spirits of Nitre,	9
16	Daffy's Elixir,	42	Spirits of Turpentine,	
17	Dover's Powder,	43	Sugar of Lead,	
18	Elixir of Vitriol,	44	Sulphur,	
19	Epsom Salts,	45	Smelling Salts,	0
20	Essence of Peppermint,		Sweet Oil,	
21	Æther,	47	Tartar Emetic,	
22	Laudanum,	48	Tincture of Rhubarb,	
23	Lard,	49	Vinegar,	
24	Lime,	50	White Vitriol,	
25	Lint,	51	Yellow Basilicon.	0
26	Linseed Meal,			

The necessary quantities of these articles will of course be relative to the number of men composing the crew, and the length of voyage on which they are proceeding. In order to secure a just apportioning of the stock of medicines, I have appended to this work a table exhibiting the respective amount of each medicine, which I consider requisite for a crew of 32, 24, 16, or 8 men, on a voyage of three months.

DIRECTIONS FOR COMPOUNDING THE MEDICINES.

Medicines are administered in three different forms, mixtures, pills, and powders, for the simplest preparation of which, a few brief directions may be necessary.

Mixtares are best prepared by first putting the powders into a mortar, and rubbing them well with a small quantity of the fluid intended to be used; after these are perfectly mixed, gradually adding the remainder of the fluid, and then pouring in any other liquid that may have been prescribed. In the various prescriptions to be found in another part of this work, the ingredients are stated in the order in which they should be mixed.

Pills are most easily and perfectly made by mixing the powders together first, and then rubbing them in a mortar for a sufficient time to secure their complete and intimate mixture. The fluid or ingredient should then be added in very small quantities at a time, until, by continued rubbing the whole is converted into a mass of the consistence of putty, when it should be rolled out upon a marble slab and divided into the required number of pills, each being of equal size.

Powders should be prepared by mixing the articles of which they are to be composed in a mortar, and rubbing

them thoroughly together, then dividing the whole equally into the number of powders desired.

It is of the first consequence, in preparing any medicines that particular attention be paid to accuracy in weighing or measuring the several ingredients; this cannot, indeed, be too strongly impressed on the minds of the nonprofessional, for the most serious accidents might result from too great liberality in the use of many very active medicines found in the chest; and, on the contrary, much disappointment in the treatment of diseases might follow the use of medicines in the opposite extreme. Whosoever has the charge of the chest should also be very exact in his attention to its cleanliness, and in keeping the bottles and jars closely stopped. If the former injunction be not strictly attended to the various medicines attached to the scales, mortar, or measure may very considerably interfere with the operation of any other ingredients for which they may afterwards be used, while a disregard of the latter may be followed by much confusion and frequently by the deterioration of many very useful articles which would be spoiled by exposure to the air.

DESCRIPTIONS

OF

THE MEDICINAL PROPERTIES AND USES

OF

THE PARTICULAR MEDICINES.

ALOES, NO. 1.

Is a very useful purgative in the dose of 5 to 10 grains; but, it should never be given to a patient who is liable to piles, for, as it seems to have an almost exclusive action on the lower part of the bowels, it very considerably aggravates the evils of such diseases.

ALUM, NO. 2.

Is a useful remedy in long continued diarrhæa, or looseness of the bowels, when unattended with fever or pain. The dose may be from 5 to 20 grains. In hæmorrhage or bleeding from the nose, bowels, &c., it has been found very beneficial when exhibited in the same doses three or four times daily. Ten drops of laudanum may be added to each dose. It may be used as a wash in the proportion of half an ounce of alum, to half a pint of water, at the commencement of a sore throat, or when the fundamental part falls down. Alum whey is made by adding 2 drachms of powdered alum, to a pint of hot milk with sugar; a tea cupful may be taken twice or thrice daily.

ADHESIVE PLASTER, NO. 3.

May be placed in the medicine chest, either in the form of a roll, or spread on calico, linen, leather, &c. When in the roll-form, it must be gradually melted in an iron vessel, and when fluid, spread with a spatula on a long stripe of calico. It is most generally used to retain the edges of recent wounds together, and for this purpose should be cut into long narrow stripes, proportioned to the size of the wound, and having been heated by the flame of a candle, may be made to cross the wound altogether, small spaces being left between the stripes for the discharge of matter. It is also used for retaining blisters, or dressings to sores.

ANTIMONIAL POWDER, NO. 4.

This powder should be rubbed in a mortar with a little white sugar previous to use. The usual dose is from 3 to 8 grains, taken in treacle or jam, or formed into a pill. It is useful in fevers and inflammations when vomiting and tenderness of the stomach are absent. During its use, no acids, or acidulous fruits should be used; the best drink will be rice-water, barley-water, oatmeal-gruel, &c.

BALSAM OF COPAIBA, NO. 5.

This medicine is frequently exhibited at an improper stage of gonorrhœa, and therefore, gives rise to a discharge of blood from the urethra, chordee, &c. If a gonorrhœa be attended with great pain and swelling, it is injurious. In a first attack of this complaint, eight or nine days should be allowed to pass over before using it. The dose is from 30 to 60 drops, three times daily, on sugar, or mixed with water by means of mucilage, sugar, or yolks of eggs.

In piles it is a most useful remedy for freeing the bowels without pain. The dose may be the same as the above, mixed with sulphur and treacle, and made into an electuary.

BLISTER PLASTER, NO. 6.

Is one of the most valuable assistants which a physician has in the treatment of diseases of a severe or active nature. In inflammations situated in any internal organ as in pleurisy, inflammation of the liver, inflammation of the bowels, &c., their application, if bleeding have first been used, is frequently succeeded by the most satisfactory relief. In painful affections of the joints, in lumbago, and many similarly painful complaints, they may be very advantageously employed. But when about to be used they should never be warmed, as heat uniformly seems to deprive the plaster of its activity; for this reason, in making a blister the plaster should be spread with the thumb without any other heat, upon a piece of leather or canvass, cut to the required size, (for the mode of application, see page 14.)

BLUE PILL, NO. 7.

This is one of the safest forms of exhibiting mercury. To produce salivation, it may be given in doses of 5 grains made into a pill, and combined with about $\frac{1}{4}$ grain of

opium. One pill may be taken night and morning until the gums become tender, or a coppery taste be felt in the mouth. It may be used also as a purgative, in smaller doses without the opium, in cases of jaundice and dropsy. Should it have been exhibited in such a quantity as to salivate, it will be necessary to have recourse to a few warm baths.

CALOMEL, NO. 8.

There is no medicine which seamen should be more cautious in using than calomel, as their exposure to wet and cold, while taking it, renders them liable to rheumatism, colds, &c. It is seldom used unless in the form of a pill. The dose will vary according to the nature of the complaint, from 1 to 3 grains once, twice, or even eight times a-day. Unless combined with a small proportion of opium, (a grain to each dose,) it is apt to cause griping pains in the belly, bloody stools, and other symptoms of the flux, for which these bad effects have often been mistaken. It is useful in venereal. inflammation of the liver, rheumatism, inflammation of the eyes—bowels, and heart—when salivation is produced, its use must be immediately suspended. The best remedy for the bloody stools, &c., produced by this medicine, is a full dose of laudanum, and an abstinence from acids, milk, or any food likely to irritate the intestines;—a few warm baths will be necessary after salivation, and flannel should be worn next the skin during the ensuing winter.

CARBONATE OF POTASS, NO. 9.

Is an excellent remedy in heartburn, or acidity of the

stomach, when taken in doses of 10 grains, three times a-day, dissolved in half a wine glassful of cold spring water; with tartaric acid it effervesces, and forms a most agreeable draught, which may be taken in cases of vomiting, or even at any time to allay thirst, see page 141.

CARBONATE OF SODA, NO. 10.

Has very nearly the same properties as carbonate of potass, for which it may be substituted in the same doses, and for the same diseases.

CASTOR OIL, NO. 11.

Is one of the most useful purgatives contained in the medicine chest. When there is any doubt as to what purgative medicine is most proper, castor oil should be preferred. The dose is from 1 to 3 table spoonsful, given in peppermint water or pure water. When combined with 2 drachms of Daffy's elixir, or tincture of rhubarb, its disagreeable taste is more or less concealed. It may be used in almost every disease, but principally in dysentery, piles, diseases of the bladder, fistulas, jaundice, &c.

CREAM OF TARTAR, NO. 14.

This, when combined with jalap, is a very useful medicine in cases of dropsy, worms, or habitual costiveness. It forms a grateful and cooling drink by being prepared in the following manner, and is known under the name of *imperial*, viz., cream of tartar and fresh lemon peel, bruised, of each half an ounce, white sugar 4 ounces, boiling water 3 pints mixed.

CUBEBS, No. 15.

Is seldom used in medicine, excepting in cases of gonorrhæa or clap. In this complaint it is a most powerful and useful medicine when exhibited at a proper period. The best method of using it, is after the inflammatory stage has subsided, which is known by the discharge being less high-coloured, and less profuse, and the pain in making water being also diminished. The dose is from 1 to 2 tea spoonsful three times a-day, in cold water or lemonade.

DAFFY'S ELIXIR, NO. 16.

Is a purgative medicine, which is generally added to other purgatives, as Epsom salts or castor oil. The dose, when separately taken, is about two table spoonsful, but, if taken with one ounce of Epsom salts, or the same quantity of castor oil, about half the quantity will suffice. When the stomach is very irritable, or where there is much griping pains in the abdomen, it had better be withheld.

DOVER'S POWDER, NO. 17.

The dose is from 10 to 20 grains, given either in a powder or formed into pills. It is a most useful remedy for producing a perspiration, when no fever is present. Warm fluids should not be taken too soon after this powder as vomiting is apt to be excited. It is used in rheumatic pains, coughs, inflamed eyes, dysentery or bloody flux, and is also an excellent remedy given at bed

time for chordee. The dose may be repeated every third hour, until perspiration be induced.

ELIXIR OF VITRIOL, NO. 18.

In cases of profuse sweating, bleeding from the nose, or spitting of blood, this remedy has been found extremely beneficial. It may be given in doses of from 10 to 15 drops, three times daily, in a sufficient quantity of sugared water; combined with quinine in the proportion of 1 grain with each dose, it is a most powerful tonic.

EPSOM SALTS, NO. 19.

This is one of the safest and most useful of purgative medicines. The chief objection to its use is its nauseous taste, which may be somewhat obviated, by combining it with magnesia. It will act more powerfully when largely diluted. From 1 ounce to 1½ ounce may be dissolved in half-pint of water, which may be divided into three portions, one of which should be taken every third hour, until the bowels are fully evacuated.

ESSENCE OF PEPPERMINT, NO. 20.

Is an agreeable stomachic in cases of obstinate windy, or flatulent complaints; for this purpose, it may be given in the dose of from 5 to 10 drops on loaf-sugar. It is also useful in the extemporaneous preparation of peppermint water, for which see page 140.

ÆTHER, NO. 21.

Æther is one of the most powerful stimulants we possess. It is of the greatest service in cases of long

continued fainting, whether from accidental or corporeal causes. Whenever the stomach is much affected as is commonly the case with drunkards liable to falling sickness, a tea spoonful of this medicine in water will, during the fit, frequently prove beneficial.

LAUDANUM, NO. 22.

Is one of the most useful medicines in the chest. The dose varies from 30 to 60 drops. In severe pains of the bowels unattended by costiveness, it will frequently prove highly useful in the dose of 50 drops in a little warm spirit and water. When the pain and suffering from accidents such as burns, wounds, contusions, &c., are so great as to prevent sleep, or to affect the patient's health, 40 or 60 drops of laudanum, will frequently produce speedy relief. When sickness of the stomach or vomiting, is a distressing symptom, it may be generally allayed by the administration of 20 drops of laudanum, given in a little cold spirit and water. It may be also used as a fomentation, in cases where the pain in any particular part is acute and the skin not broken; for this purpose, an ounce of laudanum may be mixed with a quart of hot water, and the part freely fomented with it.

LINSEED MEAL, NO. 26.

Is very useful either as an external application, or as an internal medicine. When combined with a sufficient quantity of boiling water, it forms a cleanly and excellent poultice, which may be smeared with oil, lard, or butter, before application. When made into linseed tea, and sweetened with liquorice, figs, or raisins, it is a

pleasant and agreeable demulcent in cases of coughs, dysentery, gravel, gonorrhœa, piles, fevers, &c.

LUNAR CAUSTIC, NO. 27.

The medicine chest should always contain this valuable article. It is used as an external application for removing proud flesh, expediting the healing of ulcers, destroying chancres, and lessening the pain of an ulcer; after inflammation of the eye, when the severe pain has subsided, and there remains only a redness with pain on exposure to light, it forms a most excellent eye-wash, in the proportion of 1 or 2 grains to 1 ounce of cold boiled water. As a gargle in sore throat (ulcerated,) when unattended with swelling, 20 grains dissolved in $\frac{1}{2}$ a pint of cold boiled water, to which may be added 1 ounce of refined sugar, will not fail to remove the pain and heal the ulcer.

MAGNESIA, NO. 28.

Is a very useful purgative when the bowels are irritable, or when vomiting is present, or in cases of piles. The dose may be one teaspoonful two or three times daily mixed with treacle. In cases of heartburn, acidity of the stomach, and in *hives*, it will afford relief when used in the above quantity. It should be rubbed in the mortar with the treacle, and a small quantity of water then added.

MERCURIAL OINTMENT, NO. 30.

This is a very good form of employing mercury when the internal use of the various preparations disagree with the bowels. One ounce may be divided into eight parts, and one portion rubbed night and morning into the inner side of the thigh, or wherever the skin is tender, until salivation be produced. In inflammation of the liver it may be rubbed over that region, or should a blister have been applied, it may be used to dress the blistered surface.

OPODELDOC, NO. 31.

Is a liniment that may be safely and often advantageously used to sprained joints; but, as frictions commonly, more especially with the addition of greasy embrocations, such as this, are injurious during the existence of acute inflammation in any part, opodeldoc should not be employed, until at least a week or fortnight after the accident; half an ounce of it may then be rubbed on the part which has sustained the injury, or where any pain or stiffness is felt.

POWDERED OPIUM, NO. 32.

Has the same effect as laudanum, but is more useful in cases of vomiting or dysentery. In cases of severe pain, three grains of the powder made into a pill is a sufficient dose; but the safest method of exhibiting it is in pills each containing one grain; of these one may be given every third hour, until six or seven have been taken. It may be joined with calomel in inflammation of the liver, with ipecacuanha in dysentery, and both in rheumatism.

POWDERED RHUBARB, NO. 33.

Is a disagreeable purgative, but is useful when there are griping pains and a disposition to looseness. The

dose is from 20 to 30 grains, which may be repeated. It is less nauseous and more powerful when combined with magnesia. It is sometimes beneficially applied on indolent and painful sores.

POWDERED IPECACUANHA, No. 34.

In doses of 30 or 40 grains, is the safest emetic that can be given; generally speaking, it may be usefully administered in these doses at the commencement of any kind of fever, care being taken not to employ it if there should be any vomiting, or pain at the pit of the stomach on pressure. When used as an emetic it should be given in a little water, and copious draughts of lukewarm water taken in about a quarter of an hour afterwards. It has also in doses of one or two grains, every three hours, been found highly serviceable in cases of dysentery, coughs, inflammation of the lungs, rheumatism, and many other complaints originating in cold.

POWDERED JALAP, NO. 35.

Is a highly useful purgative when the bowels are very costive, and when there is no inflammation present. It ought not to be given in any of the fevers of warm climates at their very commencement, as it is apt to produce griping pains, bloody stools, &c. In general, it will be found advantageous to rub it in a mortar, with a proportionate quantity of cream of tartar, which greatly corrects its tendency to gripe. It may be administered in doses of 20 or 30 grains every three hours, until the bowels are purged. In all cases of worms it is exceedingly useful.

POWDERED GINGER, No. 36.

Is chiefly used to correct the griping qualities of other medicines, as jalap, aloes, senna, &c. The dose may be from 5 to 20 grains. In cases of cholic, when no other remedy is at hand, about 30 grains will be found a useful remedy.

QUININE, NO. 37.

Quinine is the best form in which bark can be exhibited. It may be given in the form of a pill, or in treacle, or dissolved in water, with a few drops of elixir of vitriol. The usual dose is from 2 to 4 grains, three times a-day, but in cases of obstinate ague, the dose may be increased to 5 grains three times a-day. It should not be exhibited when there is any inflammation present.

SENNA LEAVES, NO. 38.

Are used to make senna tea, by boiling I ounce of senna leaves in a pint of water for about ten minutes, and adding a few prunes or sufficient sugar to correct its unpleasant taste. An ounce of Epsom salts, and $\frac{1}{2}$ an ounce of cream of tartar dissolved in a pint of senna tea, makes a good purgative mixture, of which, a wine glassful taken every morning, will be found sufficient.

SPIRITS OF HARTSHORN, NO. 40.

Is a powerful stimulant when given internally, in the dose of 5 to 15 drops in water, and a very appropriate remedy in cases of faintness, sickness, or heartburn. When held under the nostrils, it proves serviceable in recalling

sensibility to fainting persons and it is also a most useful external application, when mixed with oil, and used as a liniment to bruised parts, rheumatic pains, lumbago, &c.

SWEET SPIRITS OF NITRE, No. 41.

Is useful in promoting a flow of urine or sweat, or as a cordial in stomach complaints. It may be given either alone or mixed with Mindererus' spirit, Daffy's elixir, or tincture of rhubarb. The dose is one tea spoonful three times a-day.

SPIRITS OF TURPENTINE, NO. 42.

May be administered internally, in doses of $\frac{1}{2}$ an ounce as an active purgative in dropsy, or for the removal of tapeworms. It may also be used externally, in cases of long continued rheumatism, lumbago, sprains, and such like, while it will frequently be found useful in obstinate bleeding from wounds, particularly contused and gunshot wounds.

SUGAR OF LEAD, NO. 43.

This is more generally used as an external application, but with caution, forms a most useful internal remedy. In cases of sprains, bruises, or fractures, from 1 to 2 drachms should be dissolved in 1 pint of water, and 4 ounces of vinegar, which will make a useful wash. It has been used with great success to check profuse discharges from the bowels, spitting of blood, and gleet. The dose may be from \(\frac{1}{4}\) to 1 grain three times a-day, made into a pill with the same quantity of powdered opium.

FLOWERS OF SULPHUR, NO. 44.

Have proved very efficacious when applied externally in many diseases of the skin, and, when given internally, in many cases of constitutional costiveness of the bowels. As an ointment it may be used in the proportion of 1 ounce of flower of sulphur, to 1 ounce of spermaceti ointment; those parts on which any itch or other eruption has appeared, being well rubbed with it for four or five nights, after which, the patient may safely have clean linen and bed clothes. As a purgative in cases of costive bowels, it may be mixed in the proportion of 1 ounce of the flowers of sulphur with 3 of treacle, (2 drachms of powdered rhubarb and ½ a drachm of powdered ipecacuanha may be advantageously added,) a table spoonful of which may be taken as a dose, every night on going to bed.

SWEET OIL, NO. 46.

The medicine chest should always have a sufficient quantity of this useful article. In cases of poisoning by arsenic, sublimate, or any of the corrosive poisons, it should be given freely until rejected by the stomach. When mixed with spirits of hartshorn, it forms a very useful liniment, where it is necessary that the skin should be reddened. It is, in those countries where the plague prevails, very strongly recommended to have the whole surface of the body rubbed with sweet oil two or three times daily as a preventive. In doses of one to three table spoonsful it is purgative.

TARTAR EMETIC, NO. 47.

This is a most powerful emetic. From one to two grains dissolved in water is the proper dose. In general it will be preferable to combine it with Ipecacuanha powder. It should never be exhibited when the stomach is very irritable. In cases of deep-seated pain, long-continued coughs, or pain of the joints, it is very useful when rubbed over the part in the form of an ointment, until an eruption appears. The ointment is made by mixing from one to three drachms with an ounce of lard.

TINCTURE OF RHUBARB, 48.

This medicine is chiefly used when there are griping pains in the abdomen. It first acts as a purgative, and then as an astringent. The dose is from 1 or 2 to 6 drachms. It will be found much more efficacious if exhibited in combination with castor oil.

VINEGAR, 49.

In cases of sprains, bruises, and fractures, vinegar mixed with water and spirit, forms a very useful wash. It is also useful in cases of poisoning by opium or laudanum, when the poison has been ejected from the stomach. When citric acid or lemon-juice cannot be procured, vinegar may be used as a substitute. For the cure of scurvy, it may be taken freely, diluted with a sufficient quantity of water. Its vapour is useful and pleasant in close rooms, or when any disagreeable smell is present, the vapour may be procured by pouring vinegar on a heated brick or red hot iron.

WHITE VITRIOL OR SULPHATE OF ZINC, NO. 50.

Is extremely useful in cases of poisoning, as in doses of 10 or 15 grains, it almost immediately produces free vomiting. Should it fail, the dose of ipecacuanha may be given and repeated after intervals of ten minutes. In cases of gleet or dysentery, ½ a grain given three times a-day, has been found very beneficial.

YELLOW BASILICON, NO. 51.

Is an ointment which, spread on lint, may be safely and beneficially applied to wounds that are slow in healing, or which do not yield a good cream-coloured matter, but, neither it nor any other similarly greasy application, should be used to any wounds which are surrounded by erysipelas, or that inflammation which is distinguished by its fiery red colour, and its quick return after the pressure of the finger has been applied to the part affected.

PRESCRIPTIONS

REFERRED TO IN THE FOREGOING PAGES.

PURGING MIXTURE, NO. 1.

Take of—Epsom Salts, 1 ounce,

Powdered Jalap 1 drachm,

Tartar Emetic ½ grain,

Peppermint Water, ½ pint,

Daffy's Elixir, 2 drachms.

Mix. A wine glassful to be taken every third hour until the bowels are freely opened.

APERIENT MIXTURE, No. 2.

Take of—Epsom Salts, 1 ounce,

Magnesia, 1 drachm,

Peppermint Water, 7½ ounces,

Tincture of Rhubarb, ½ ounce.

Mix. May be taken in the same manner as No. 1.

QUININE MIXTURE, NO. 3.

Take of—Quinine, 1 scruple,
Elixir of Vitriol, 1 drachm.
Water, $\frac{1}{2}$ pint,

Mix. Two table spoonsful to be taken thrice a-day.

SWEATING DRAUGHT, NO. 4.

Take of—Mindererus' Spirit, 2 drachms,
Spirits of Nitre, 1 drachm,
Laudanum, 30 drops,
Water, 1/2 ounce.

Mix. To be taken at one dose, and may be repeated in three hours afterwards, if necessary.

APERIENT PILLS, NO. 5.

Take of—Powdered Aloes, ½ drachm,
Common hard Soap, 10 grains,
Powdered Ginger, 12 grains,
Essence of Peppermint, 12 drops,

Make into a mass with a small quantity of treacle, and then divide into 12 pills, one or two of which may be taken when the bowels are costive.

CALOMEL AND OPIUM PILLS, NO. 6.

Take of—Calomel, 24 grains, Powdered Opium, 6 grains,

Mix them well together and make them into a mass, with a small quantity of treacle or conserve of roses, and then divide into 12 pills.

MERCURIAL PILLS, NO. 7.

Take of—Blue Pill, 1 drachm,
Calomel, 6 grains,
Powdered Opium, 4 grains,
Rub them together, and divide into 12 pills.

PURGING POWDERS, No. 8.

Mix, and then divide into three equal powders, one of which may be taken every third hour until they purge.

SWEATING POWDER, NO. 9.

Take of—Dover's Powder, 1 drachm,
Antimonial Powder, 9 grains,
Calomel, 6 grains,

Mix, and divide into six powders, one to be taken every third hour in bed, and to be followed by the use of warm barley-water as drink.

EMETIC POWDER, NO. 10.

Take of—Powdered Ipecacuanha, 1 scruple,

Tartar Emetic, 1 grain.

Mix. To be taken in cold water.

ANODYNE, OR SOOTHING LINIMENT, NO. 11.

Take of—Olive Oil, 1½ ounce,
Spirits of Hartshorn, ½ ounce,
Laudanum, 2 drachms.

Mix. May be rubbed 2 or 3 times a-day on a pained part.

PEPPERMINT WATER, No. 12.

Take of—Essence of Peppermint 12 drops.

Loaf Sugar 1 drachm.

Rub these together in the mortar, and then add gradually half-a-pint of water.

SOLUTION OF CITRIC ACID.

Take of—Citric Acid, 10 drachms, Water, 1 pint.

Mix. Whenever lemon juice cannot be obtained this solution forms an excellent substitute, and seems to answer almost equally well.

FUMIGATING MIXTURE.

Take of—Common Salt, (dried,) 4 ounces,
Nitre, 4 ounces,
Oil of Vitriol, 1 ounce,
Water, 1 ounce,

Mix. When used for purifying cabins, berths, &c., these ingredients should be put into an earthenware vessel, which should be placed in a pan of hot sand; the doors and windows should be kept closed for six or eight hours, and no person allowed to enter until an hour after the fumigation has been removed by free ventilation.

EFFERVESCING DRAUGHT.

Dissolve a scruple and a half of carbonate of potass in 4 ounces of water in a tumbler; and, dissolve 25 grains of citric acid with 2 drachms of sugar in 4 ounces of water, in another tumbler. The two solutions may then be mixed, and if drank while frothing, will make a very agreeable substitute for soda water.

LIME WATER.

Put half a pound of quick lime into a stone jar containing a gallon and a half of water; cork it tightly, shaking the mixture pretty often, and after it has stood three hours the clear fluid will be fit for use.

PREPARATION OF SICK DIET,

AND

VARIOUS ARTICLES OF FOOD.

FULL DIET.

Full diet means that the patient may be safely indulged in food of a wholesome quality, and is allowed during a convalescence from a severe illness. The breakfast may consist of a pint of milk, tea, cocoa, chocolate, coffee, or boiled rice, with bread in proportion. Dinner one pound of fresh meat, with bread or vegetables in proportion, with a pint of ale or porter, or half a pint of white or red wine. Supper, the same as breakfast.

HALF DIET

Signifies the half of the above, and may be taken when the appetite first returns after severe illness. The wine and porter, however, had better not be included.

LOW DIET

Is absolutely necessary during a severe and dangerous illness. Sometimes it should consist of nothing but cold water, toast-water, or barley-water; but, as some diseases are of long continuance, and as the sensation of hunger must be appeased, bread, rice, sago, arrow-root, or even weak broth may be sparingly allowed.

SOUINS OR SOUENS.

This is an article of diet well-known in Scotland, and in Ireland, is termed flummery. It is prepared by putting some oatmeal into a wooden vessel, pouring hot water upon it, allowing it to stand in a warm place till the liquor begins to taste sourish, i. e. till a fermentation comes on, which in a place moderately warm, may be in the space of two days. The water is then poured off from the grounds, and boiled down to the consistence of jelly.

SOUR KRAUT.

This is a very excellent method of preserving cabbages in an eatable state for a very considerable time; and as a coutinued supply of vegetables is most essential to the preservation of the crew's health it is of course desirable to know the best mode of securing such a necessary. Sour kraut is commonly made in the following manner: Cut some large cabbages into thin slices; put them into a tub, and leave them to ferment for at least twelve hours, but not more than twenty-four; then squeeze them sufficiently to force out the juice, with which they are filled, through a hole in the tub that they may remain quite dry. Have ready a cask sufficiently large to contain the quantity of cabbage you intend to prepare; open it at one end, put a layer of salt at the bottom, on which you lay some slices of cabbage; on this put another handful of salt, a little pepper, and a few very ripe juniper berries; then put another layer of cabbage, and so on, alternately, till the cask is nearly full; put it in a cellar, or some other cool place. Get a piece of wood, just large

enough to enter the opening in the cask, put it on the cabbages, with one hundred and twenty or one hundred and forty pounds weight on the top of it, that the cabbages may be equally pressed. In a short time, the water, extracted by this pressure, will form a sort of crust on the top of the lid; and then it is that the kraut is fit to use. Be careful, when you take any of the sour kraut out of the cask, to use a wooden spoon, and not only to put the lid and weight on again, but to close the opening very carefully with a wet cloth, so that no air can possibly penetrate. Leave only just sufficient brine to cover the sour kraut, and frequently wash the lid with salt and water, and empty part of the cask. When you use any sour kraut, let it steep some hours, to take out the salt.

WATER GRUEL.

Add to 4 ounces of oatmeal $\frac{1}{2}$ a pint of cold water, and when thoroughly mixed pour it into a gallon of boiling water, then boil the whole for a few minutes, stirring it carefully the whole time, and strain it for use.

COOLING DRINKS, &c.

ALUM WHEY.

Boil a pint of new milk, and add two drachms of powdered alum; let the curd sink, and then pour off the whey which may be sweetened according to the taste.

TO PREPARE BARLEY-WATER.

Two ounces of pearl barley should be boiled with one gallon of water in a closely covered vessel, until reduced to three quarts, and then strained. It may be rendered more palatable by adding a few figs, raisins, or a little liquorice-root, and by squeezing a lemon or two into it when boiled.

LINSEED TEA.

Let 2 ounces of linseed be boiled with 4 quarts of water, until reduced to 3, then strain and sweeten with sugar.

LEMONADE.

Dissolve half an ounce of citric acid and three ounces of lump sugar in six pints of boiling: when cold it will form a very pleasant cooling drink.

TOAST AND WATER.

Toast some thin slices of bread on both sides very carefully; pour some boiling water on the bread, and when cold it may be used as a very excellent drink in all fevers or inflammatory diseases, where the thirst is distressing.

WINE WHEY.

Boil a pint of new milk, and then pour as much sherry or other wine to it as will curdle the milk. Remove it from the fire, and when the curd sinks, pour off the whey and sweeten it with sugar.

PREPARATION

OF

POULTICES, FOMENTATIONS, &c.

SIMPLE FOMENTATIONS.

In cases of simple inflammation, unattended by any severe pain, hot water, applied by cloths constantly wet with it, is the safest and best fomentation.

ANODYNE FOMENTATION.

An ounce of laudanum, added to a quart of boiling water, forms a very good soothing fomentation, which may be used in cases of local inflammation, when the pain is very intense, as in boils, abscesses, &c.

BREAD POULTICES.

Put the soft part of a roll into a basin and pour upon it sufficient boiling water to cover it; allow it to stand until very well soaked then pour off the water and beat up the bread into a soft paste. This is a very excellent poultice in cases of inflammation, where matter is not forming; but as it is liable to become sour, and to prove troublesome by adhering to the skin when dry, it should be changed at least every three hours.

LINSEED MEAL POULTICE.

Take the necessary quantity of linseed meal, and pour on it, by degrees, sufficient water to make it into a mass of the consistence of honey; while mixing it, the meal should be well rubbed with the water. For boils, abscesses, or any cases where matter is forming, this is the best kind of poultice, and when used its surface may be smeared with a little oil, lard, or butter. It may be changed every four or five hours.

LIST OF MEDICINES

INDICATING THE RELATIVE QUANTITIES REQUIRED, FOR A THREE MONTHS' VOYAGE, BY A CREW CONSISTING OF

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		52 Men.			24 Men.			16 Men.			o Men.		
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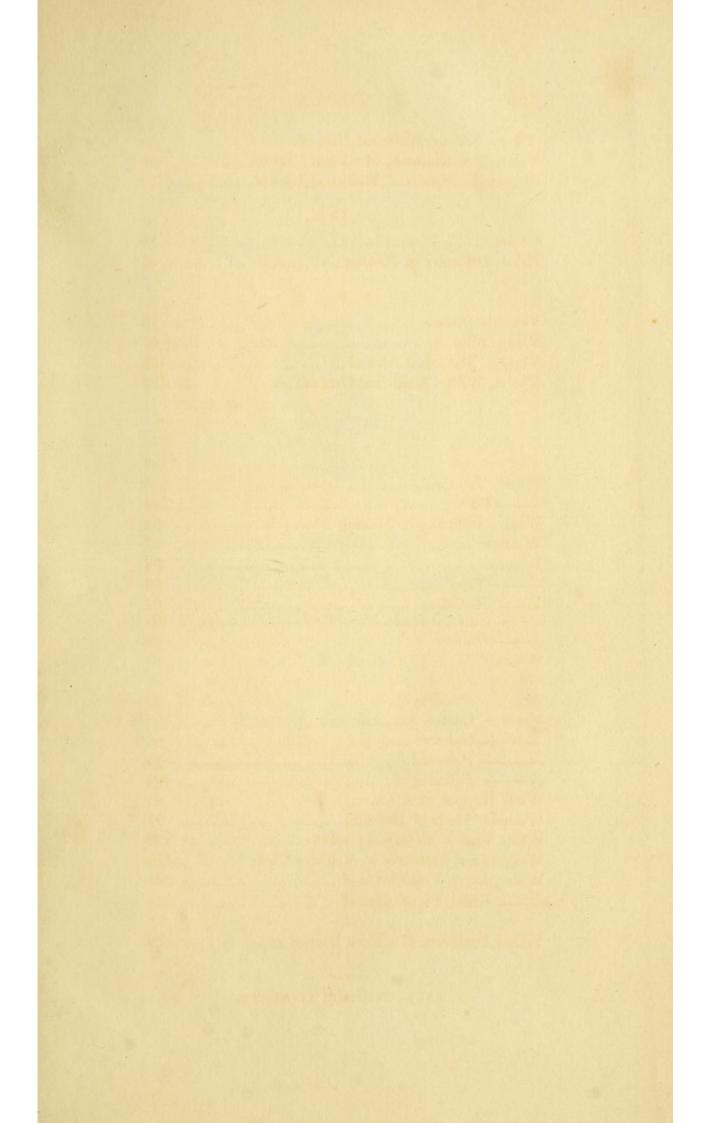
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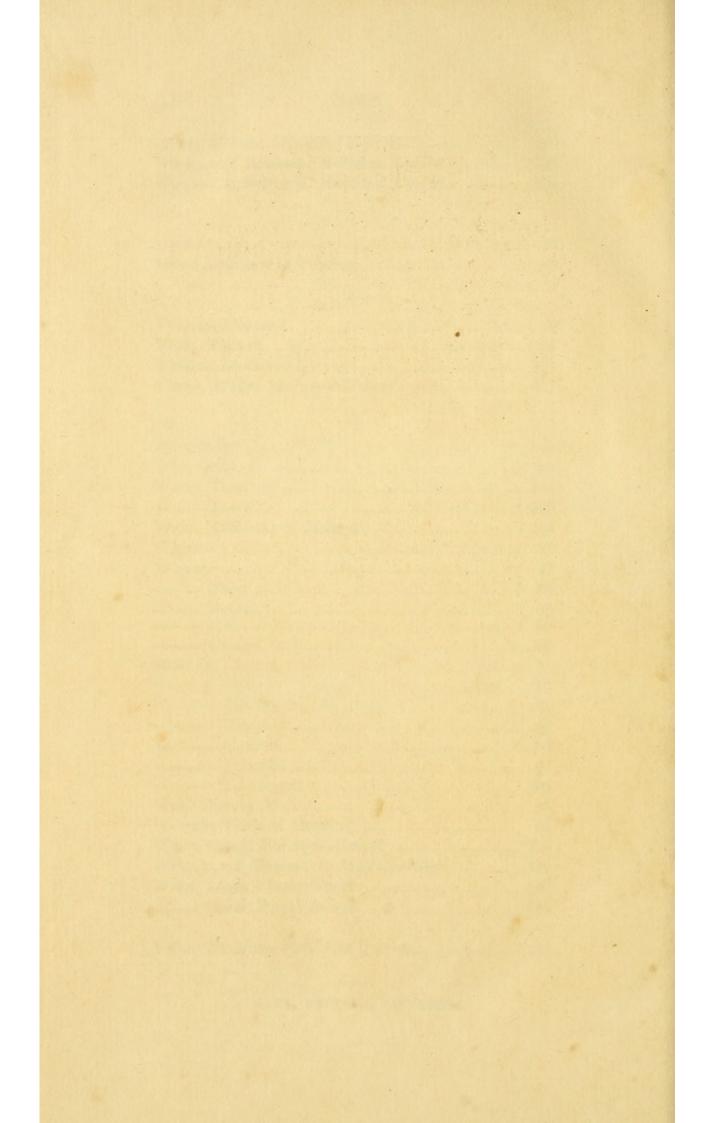
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