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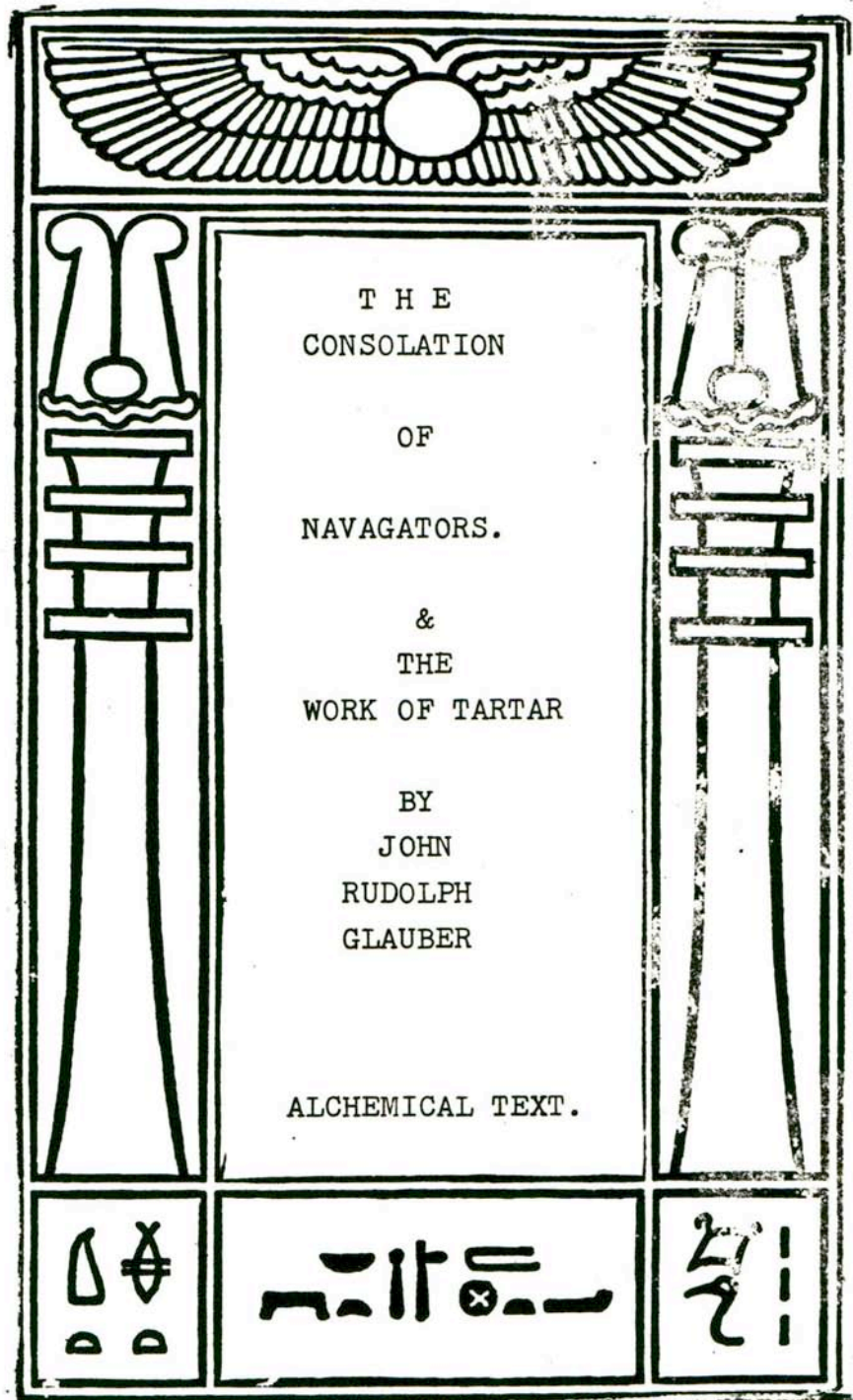
RUDOLPH  
GLAUER

trans: Chris. Packe



THE CONSOLATION  
OF NAVIGATORS





T H E  
CONSOLATION

O F  
NAVAGATORS.

&  
T H E  
W O R K O F T A R T A R

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A L C H E M I C A L T E X T .

PRODUCED BY:

**R A M S**

1982

**THE  
CONSOLATION  
OF NAVIGATORS**

**In which is Taught:**

**How they who Travel by Sea may preserve themselves from Hunger and Thirst, as also from Diseases, which are wont to happen to them in long Voyages.**

**Written for the help, Comfort, and Solace of all those who make long Voyages for the God of their Country.**

**THE PREFACE**

Reader,

OUR SAVIOUR CHRIST hath prescribed to us this Doctrine, that we should behave our selves towards our Neighbour, as we would that he should do to us; yea, that we should love him as our selves: This He hath earnestly commended unto us, as the indispensable Will of God, contained in the Law and the Prophets. But although there be few who consider this, and all men seek only their own, yet one or other is still found, who calleth this duty to mind, and as far as he can, taketh every opportunity or occasion of serving his Neighbour. Although also there may be some who bear a love to others, and desire to assist them with their counsel and help, and yet are destitute of a power of giving them any thing; for no man can distribute more than he hath. Moreover, Covetiousness year to year, for the publick Good, and being affected towards my Neighbour, have made them publick. I have also determined, if time shall permit, to publish yet more and better things of this nature. But after that some described Voyages to the EAST and WEST-INDIES, and other far distant places, had happened into my hands, I perceived, not with great admirations what immense dangers occur on the Seas, not only from Robbers and Pirates, but also the adversitys of violent Winds, (to pass by many other Calamities in silence) by which the Ship, together with all in it that draw breath, are overwhelmed, and perish: And when I further contemplate those things with an intent mind, nothing seems to me more grievous and intolerable than Hunger and Thirst, or the want of Meat and Drink, which sometimes happeneth to Ships by adverse Fortune: For when they are overcome by the hand of an Enemy, they are wont indeed

to suffer the loss of their Goods, but the Lives of the men are for the most part saved; which loss of Goods they may again easily repair by Merchandizing; and although they should be adjudged to death, yet their pain would quickly have an end. But if through an ill fate of necessity one be destitute of Bread and Water, and be forced to tear another in pieces to eat, that is of all the highest misfortune and death it self were more desirable, than to sustain extremities and miseries of this sort. And although the want of Food doth not so frequently happen, yet the want of Water often falls out, whence Seamen are grievously tormented with Thirst, to whom, as in a most urgent Calamity, Mercy and Christian Compassion ought to be administred; but, Who can carry them succour afar off, and in a tempestuous Sea? And seeing that the Prosperity of Maritime Countries (where for the most part there is no Wine, no Fruits, no Mines, as in the upper GERMANY, and other places) consisting only in Navigation, it were very well worth the while that this should be promoted to the utmost. I have therefore diligently considered the matter with my self, and have found that a Remedy may be applied to this Evil, viz. the want of Meat and Drink, by providing in time an APPARATUS, or cetyain matter to be carried in Ships, which is of far greater efficacy in mitigating HUNGER and THIRST, than common Bread and Water; yea, is able to prevent and expel that Disease which is familiar to Seamen, to wit, the SCURVY, which is often a great hindrance to Sailing: So that this matter may be carried together with the usual Provisions, as a Preservative, and in case of necessity, as if the Ship be overmuch harrassed with Storms, or be hindred by other infelicities, or detained longer in the Voyage than expected, it may be taken and used. It were indeed to be wished, that these materials might never be wanted in any Ships, but as the old Proverb hath it, A SUPERFLUOUS CAUTION NEVER DOTH HURT; therefore it is always better to have a thing in readiness, which we do not use, than to want it when its use is necessary. But what those materials are, of which I speak, and how they are to be used when need is, I shall communicate to my Neighbour, for the publick Good, not at all doubting, but that this invention will prove highly profitable to many who use the Seas.

The Reader now understands what hath moved me to write this Treatise, viz. the love of my Neighbour, and that I have not composed it only for the sake of some few, but that I have emitted it to the publick to the end, that those highly profitable Inventions might afford help and comfort to all Mankind, and especially to all that use the Seas, and

such who are infirm in their health: Nor do I doubt but that this my sincerity of mind will be a great preservative, comfort, and relief to those who pass the Seas, when they are in danger, by the benefit of which, they may escape various Chances and many Misfortunes, or beware of them for the future: For by this means which I shall here produce against Hunger and Thirst, or other Diseases which are wont to afflict Sailors, it will be found, that what I ascribe to them may be fully deduced to the desired effect. And therefore many Thousands of men may thence receive Fruit and Profit, as long as the World shall endure; so that all who travel the Ocean, and are afflicted with any Disease, ought to rejoice, and give Thanks to God.

Now, if any one should yet doubt of the success of this matter, (which nevertheless is shewed from so clear and irrefragable Fundamentals) I leave him to his freedom, whether he will put the matter into examination, and certifie himself of the Truth, before he give credit to it: Which also may be proved in a small quantity, and not only on the Seas in Voyages, but on the Land also in the House, among both the Sound and the Sick. Therefore let no man vilifie what he doth not understand, but let him commit the thing to trial, and set its reason and quality, before he contemneth it, or pass an immature Judgement, lest his curiosity or imaginary Wisdom from a vain instinct, deceive him, or confound him with shame, when the proof shall shew it to be better than he could perswade himself.

But that in some places I have used obscure words, and have not proposed all things so clearly, as that every man will be able to understand them, let no man wonder at this for I have certain reasons for so doing; for no man will have any prejudice or injury thereby, seeing that nevertheless there are such points of this sort elucidated, which will remain after me safe and sound; Therefore whatsoever the Reader shall here find written, let him esteem it worthy to be received and embraced, as the Gift of God; the which, if I find to be gratefully accepted, more (God willing) shall follow. Also to all those who shall have need, I offer the Medicaments aforesaid, profitable against Hunger and Thirst, and all Seafaring Diseases, a good quantity of which I will cause to be prepared, that every man may use them that will, and thence satisfie his desire.

Wherefore it is the interest of any to whom I have comitted the Preparation of this Medicine, to betake himself to it, and when need shall be, he will not be unwilling to use it. I have not sought my self

in these things, being content to serve my Neighbour out of Christian Charity. And although this my good Will shall not be accepted by foolish and ungratefull men, nevertheless God shall have the praise, who hath committed to us a mutual participation of love and good will, which also in his own time will grant the benefit of this to be derived and redound to my Children after me, by some pious Souls, of which I make no doubt; and therefore readily acquiesce in my present condition.

### **The Consolation of Navigators, & etc.**

Now to come to the Work it self, we will point out the Remedies, whose use is so necessarily required in Navigation, and which is able to preserve us not only from the pressures of Hunger and Thirst, but also from the injury of Diseases; and they are no other than Corn and Water concentrated, or reduced into a more compact and narrow compass, the one for the extinguishing of Hunger, the other of Thirst; and how they are both to be concentrated; and administred in case of necessity, I will exactly describe and teach. And:

#### I. Of the Concentration of Corn or Grain.

As for this, it is sufficiently explained in the FIRST PART OF THE PROSPERITY OF GERMANY; so that it might be here passed over; nevertheless I will make this short repetition.

Make a Malt of Wheat, Barley, Oats, or other Grain, as is usual for the brewing of Beer, (See the full Description, PROSPERITY OF GERMANY, p. I, cap. 2.) and extract all the strength with Water, as if Beer were to be made thereof: Afterwards boil this Liquor away gently in broad and shallow Vessels or Coppers, to the consistency of Honey: The Dreggs or Grains serve for Food for Cattle, but the inspissated liquor or juice may be commodiously carried by Sea, and at pleasure may be made into Beer with a mixture of Hops and Water. And because for the most part eight Tons of Grain afford one Ton of the inspissated Juice, every Ton of Grain maketh a Ton and an half, yea, two Tons of Beer, for every Ton of Liquor maketh at the least eight, ten, twelve, or more Tons of Beer, according as you will have it stronger or smaller. Therefore it is easier and cheaper to carry in a ship one Ton of this Juice, then ten or twelve Hogsheads of Beer, which easily corrupts and grows sowre; but on the contrary, this Liquor being kept from the Air, retaineth its

goodness; and this is of singular advantage, seeing that good fresh Beer may be made of this juice. To this also belongs another great Commodity, viz. that if this Juice be mixed instead of Water, with Wheat-flower, and baked, it makes an efficacious Bread, which affordeth far more nourishment to sailers, than their common Bread, and containeth in it self so great power, that it can refresh and cheer the Sick: For which reason our Ancestors did not in vain use to temper fine Flower with clarified Honey instead of Water, and make Bread thereof, which they called Cakes of Life, because they were a great support to the Humane Body and, as it were excited the Life it self: But in our days all things being subservient to AVARICE, you may see those sweet Cakes, made up with common, impure, and unclarified Honey, which cannot generate much good Blood, or juices; but this our Bread will prove it self to be of a greater sweetness, nobility, and efficacy, inasmuch as the elicted juice of Grain, affordeth a far better nourishment than Honey. But if any desire to proceed farther with it, this concentrated Liquor of Corn will yet afford a greater utility, viz. if being inspissated or brought to a thick consistency, it be mingled with fine Flower of the best Mault, and Bread made thereof, which after it is baked, is to be cut into pieces, and again put into the Oven, till it be dry and hard, and then put up into Chests or Hogsheads, to preserve it from the Air, and so carried to Sea; for then this Bread, when necessity requires, may be infused in warm Water with a few Hops, and excited to the separation of its faeces, and it will acquire the substance of Beer: But that which doth not pass into the Liquor, nor become Beer, may be heated in a Kettle, and some Butter put to it, which will very much comfort the languishing stomachs of Seamen, as well, or better than the eating of Bread Softened in Beer. But in regard that bitter Potions are not agreeable to all Palates, it may also be made into Beer without Hops, by mixing the bread with good water only, and afterwards boiling it for the evaporating the more phlegmatick part, which will have a pleasant taste, But this Bisket also, or twice baked Bread, may be ground small in a Mill, and put up close in Casks, and preserved on shipboard. Afterwards, when need shall require, you may temper it with warm water, and in an open Hogs-head; which yet must have a bottom, suffer it to settle, and clear it self; so the flower ascendeth upwards, and the water attracteth the sweet liquor, and hence becometh excellent and wholesome Beer, which if it be drawn out at the bottom of the Hogshead runneth as clear, as if it had been made some months; for there is now a separation made of the

pure part of the Bread, from the impure or gross, and when that which is fine is drawn off, the gross part may also be drawn out of the Vessel, which being boiled with butter, affords a singular pleasantness to the taste; yea, also is of a greater salubrity, and better digestion in the stomach, than Pease, Beans, or French Barley boiled: So that here is nothing lost, Bread or Meal of this sort affording good Beer, and also a wholsom Food to eat. And thus on shipboard one may at any time of the year not only have good fresh Beer, but also thence may be made good Vinegar. And this may suffice to have briefly taught the manner of mitigating Hunger and Thirst by concentrated Corn.

I shall now treat of the Cure of Diseases, to which Seamen are liable, and which often bring death.

Now if you regard the Nature of Man, you shall generally find, that he useth no measure or mediocrity in eating and drinking, but rather puts down so much till his belly will hold no more. Which Vice one man obtrudeth upon another, under the shew of kindness and good will, from an old custom and enormous abuse, although in this one offends more than another. Therefore while the Appetite is more liberally indulged, than admitteth of a good digestion, the Liver assumeth a Chyle which is scarce half concocted: Whence also a gross blood is generated; and so in process of time the Viscera are filled and obstructed with crass and viscous humours; hence they cannot perform their office as they ought, but rather many and divers Diseases do arise, according as the heap of crudities encompass the flesh covering the Joints, obstructing the Veins and Nerves, and deprave all the MEDIUMS of nourishment; therefore when the Evil cometh to that pass, and grows prevalent, the whole body is sensible of it, but chiefly in that place where it fixeth its seat: And hence necessarily one part suffereth by the hurt of another, till at length all the powers go to decay, and the whole body languisheth, and cannot help it self, and unless succoured by Art, dyeth.

For these causes Physick was invented, that those Diseases arising from intemperate eating and drinking, might be met in the way, the perverse Enemy or primogenial Vice of the body be removed, the viscous and phlegmatic SALARRA of the depraved humours dissolved and opened, and the oppressed Members expurged, that so the body may again recover its former healthfull estate; the which is wont to be done by divers means, and in various manners, according as the Physican understandeth the Disease to be, so he also affords his help, viz. taking it away by Evacuations upwards or downwards, by Sweat or Urine, or by other means,



as the nature of the Disease requireth. But by which way soever the recrements of the malignity be dissipated and expelled, and the inwards parts be freed from them, it is well and the Physican hath performed his Office, also meriteth Thanks and a due Reward. Therefore whosoever well understandeth the nature, rise, and birth of diseases, and also possesseth a good Medicine, or can obtain one, is fitly qualified for a Physican; but he who knoweth not the disease, nor is also furnished with fit and efficacious Medicines, nor knoweth how to obtain them, grievously erreth by trying Experiments so long, till the Evil more and more encreasing, the Sick at length expires; the which is so well known that it needeth no proof; so that many who have contracted diseases from immoderate eating and drinking, are afraid to commit themselves to an unskillfull Physican, but chuse rather to cure themselves by abstinence and fasting, which way is indeed safe, although it be tedious and full of delay.

Others again use vulgar and trifling Medicines, and yet recover their health, tho' late, thinking that this happened by the use of their Medicine, when nevertheless the length of time, and the sparingness of their meat and drink, during their illness, whence the superfluous pravity of humours hath gradually wasted, hath effected this; which also sometimes happens to those who take no Physick; but by how much the greater the pravity of the humours is, by so much the longer it will be before Nature will be able without help to overcome and expel them. The which, if it take 4, 5, or 6 weeks to accomplish, a Physican (by the benefit of good Medicines) might effect it in 2 or 3 days. So great is the difference between a Cure which Nature performeth in a long time, and that which is quickly done by Art.

But here it may be objected, that all diseases take not their beginning so much from an evil and superfluous humidity, as from manifold other causes, one being derived from this, another from another cause. To this I answer, that all those affects of the Body which exist in the skin, and do not proceed from external accidents, as wounds, bruises, falls, & etc. whence the brusing of the body, and also Death, at length happens, do draw their original from the intemperance of eating and drinking, which administer occasion, and furnish matter to noxious humours, which hence occupy and infect divers Members, for one part affecteth another, till the whole body abounds, and is imbued with a multitude of viscous humours. When the Stomach is over-gorged, and its tone is spoiled, it contracteth cold crudities, and falls into a

dangerous estate. How then should it rightly digest the Food? And, What good can it transmit to the Liver? And seeing the Liver receiveth nothing but what is evil and depraved, What can that procreate of good, and diffuse throughout the whole body? Therefore as I have said, one Member must suffer by another, till the error become common. Whilst a Tree or an Herb in the ground remains temperate, that it be neither too wet nor too dry, its root draweth from the earth virtue, and imparteth it to the trunk, and the trunk to the branches, leaves, flowers, and fruit, and is able to produce fruit conducive to health, for many years. But if the root be ill placed, the Salt being ill disposed, whatsoever the stock there finds, it associates to it self, and also communicateth the same, and no better to the branches: And if it stand too wet, it brings forth an insalubrious Fruit, which by reason of too much moisture, falleth off before it is ripe, in whose stead fungous protuberances arising from putrefaction, spring up, and such Plants do not endure long.

Again, if the Root stand too dry, it cannot thence have juice sufficient to nourish the Tree, and bring forth Fruit, but will by degrees wither away and die. So also it is with Men, and their Diseases; for according as their Bodies are treated, they are healthfull and fruitfull, or else diseasie. Now seeing that I have proved Diseases from redundancy or humidity, or from driness, it will be easie to provide preventive Remedies against them; or if any error or delay should happen in this, it may be amended in the curative part, by which the Evil may be abolished. These are required to be of that nature and property, that they attract the superfluous and pernicious humours from all the Viscera and principal Internal Members of the whole Body, into the Ventricle, conciliate a new concoction or digestion, separate the pure from the impure, adjoin the one to the Liver, and eject the other by Seige: And so the body is not only freed from depraved burthensom humours, but also recovereth its strength, and is cured of all Infirmities. Which manner of Curing, at this day, the more the pity, is known but to few; seeing that it is not to be effected with common Herbs, but somewhat better is required, than what the Philosophy of old Women prescribeth: Nevertheless there is a great efficacy in certain Simples; as may be seen in HELLEBORE or HELLEBORASTER, by whose benefit the Ancients prolonged their lives, by the daily use of a certain dose of it. Moreover, Tabacco where it cometh to maturity, effecteth things to be admired, being rightly prepared and administred; yea, even that

which (being crude) is taken in Pipes, cooleth and refresheth the body, and also in some measure relieves against Hunger and Thirst; which common experience daily witnesseth. But whence this Virtue happens. Tabacco takers neither know nor care, but acquiesce, in that they either receive pleasure or profit by it: Therefore, If Tabacco, or any other vulgar Plant can perform so many and so great things, being yet crude, without any preparation, What would not an Extract or concentrated Essence of all the Vegetables do, being rightly made? Which nevertheless ought to be of that nature, that it may not only dispel every heap of malignant humours, but also strengthen the inward parts, and preserve from all things which may happen in the generating of a Disease.

Such a Medicine is that which I here present to all those who continually use the Seas, and besides the Scurvy, undergo many other Diseases, by which they may not only efficaciously protect themselves against the assaults of Distempers, and hinder their progress when already began, but also under the present want of Meat and Drink, may make sound an infirm body: But how, and from what Ingredients this Euporist may be made and prepared, needs not to be manifested to every one. This is a great Gift of God, which ought to be honoured, and not prostituted to the Unworthy. Let it suffice at this time, that such a Medicament may be obtained at a small price; I will not suffer it to be buried with me, but will leave it to others, who may keep it, and sell it to those who desire it at a reasonable rate.

This is given in form of an Electuary, and may be taken for a Preservative, daily or every second, third or fourth day, as occasion requireth, in the quantity of half or a whole Pease, upon an empty stomach, fasting two hours after it, if need be, but if not, Food may be taken presently after it, although it is better to abstain some hours: But when a Disease hath already invaded a man, whether it be FEVER, SCURBY, HEADACHE, CATARRH, or any other Disease infesting Seamen, let the Patient forthwith swallow down of this Electuary the magnitude of an ordinary Pease (for it hath no unpleasant taste) and sweat if he can; if not, let him keep however a very moderate Diet all the day, and in Summer time, as much as he can, avoid the intense heat, and in Winter, the extremity of Cold; the next day let him take the quantity of a Pease or two, and so let him encrease or diminish the dose, according to the state of the Disease. These things being well observed, all Sicknesses will give place.

If a man carry with him but half an ounce of this Medicine to Sea,

in a long Voyage, he will possess a PANACEA, both for the preventing and curing all Diseases incident to his body.

This is of very great use and profit especially for Masters of Ships, to whom I also highly recommend it as such, and not to them only, but also to all the Inhabitants of the Earth, to whom it promiseth no less success. If a Medicine can be invented, (besides that universal one of the Philosophers) accommodated to all diseases, truly this is one, and will perform all, or even more than I have attributed to my CATHOLICIA in the SECOND PART OF MY PHARMACOPIA SPAGYRICA, that is a Powder, but this, of which I now discourse, an Electuary prepared of certain good Ingredients and Sugar. I affirm again, That there is no disease, whether internal or external, for the curing of which this Medicine doth not suffice; for it doth not only resist the FEAVER, SCURVY, and POX, but even the GOUT and LEPROSIE it self, provided they be not too much fixed and radicated; yea, although -they be very inveterate, and cannot be throughly rooted out by this Medicine, nevertheless it gives relief in them, and renders them more tolerable, and hinders the accession of the daily fits, and keeps it under. Certainly where this Medicine can yield no help, Nature must be wholly ruined and tired out. What I have here written, is the Truth, which I am able to prove by experience; however it is free for every one to believe or not believe me, as he pleaseth: Christian Charity to my Neighbour hath compelled me, if it be well taken, it is well, if not, I have done my part, and discharged my Conscience. Nor will I insist any farther on the praise of this PANACEA, I have said enough to those who believe, or can understand me.

And thus I have set before the whole World, that Medicament which can preserve from, and cure the most grievous Diseases accompanying Ships and Voyages, and also relieve in the extremity of Hunger. This being done, there yet remains another Remedy whereby the Body may be relieved, and refreshed in extremity of Thirst, when drink is wanting; and this is done by Water concentrated, which is of so great virtue, that it giveth such a refrigeration to a thirsty Palate, that in the whole World there is not the like. Seeing therefore that in long Voyages Water is often wanting, and putrefieth and stinketh, it will be very necessary here to declare and shew, how Thirst may be restrained and rendered tolerable in time of necessity. Then also how common Water may be preserved from corruption; moreover, that one Ton may effect as much for the quenching of Thirst, as otherwise 2 or 3 Tons of common

Water can. Which is not only my saying, but the Truth it self; as I will here prove by manifest testimonies: And this is to be done as I have said, by Water concentrated and coagulated. But what that is, I will first shew, and then by what means it is to be prepared and used.

To explain the genuine Property of concentrated Water to many, may seem unnecessary, in regard that Seamen are not skilled in such discourses, nor carefull about them; and that they rather belong to Philosophers, and the Contemplators of Nature, that they may render the knowledge of them familiar to themselves: But this Treatise without doubt will come into the hands of wise and experienced men, as well as into those who use the Seas, and therefore perhaps I shall not lose my labour, if I somewhat more exactly describe the nature of that water.

It is sufficiently evident to all those who have saluted but the Thresholds of Nature, that the Omnipotent God, in the first Creation of the World, hath separated the Elements from the rude CHAOS, as also the Elements from one another, plating the Earth in the bottom or foundation of the Center, and over that the Water, over the Water the Air, and over the Air the Fire; so that every of them holdeth its own receptacle and seat, from whence, without the will of God, it cannot recede. Nevertheless, we find that one always participates of the other, and none is found without another, although one be predominant and visible; but the rest exist in it invisibly, and by the skill of an Artist, may visibly be deduced from it. So from the Earth we elicit Air, Water, and Fire; from the visible Water, natural Earth, Air, and Fire; again, from the Air, Earth, Water and Fire; and from the Fire, Air, Water, and Earth. Hence the Elements are continually circulated from one species into another, which indeed we do not observe or perceive, and no Element can want an Element, but draweth its life and nutriment from another. The Fire cannot burn without Air; the Fire operateth upon the Water, and of it maketh Air; the Water resteth in the Earth, and moisteneth the same; the Fire impregnateth the Air; the Air insinuateth the Seed into the Earth; the Earth nourisheth and cherisheth the Seed unto perfection, and afterwards bringeth to light what it hath conceived, and carried in its belly.

These things are only hinted at by the way, and not without cause.

But to return to our concentrated water, that we may explain its nature, know, that water is the PRINCIPIUM or beginning of all the Elements; which thing is sufficiently manifest, and may be seen daily, especially in the SUBTERRANEAN Mines of Metals, whose inward bowels are

so penetrated, that there is not only water, but we also see it to be quickly transmuted into various forms of Mineral Bodies, the which without is familiar; and the more limpid or clear the water is, the brighter Stones and purer Minerals it generateth: Of which you may read more in that Treatise, (THE SECOND PART OF THE MINERAL WORK) where I have described the generation of Minerals; also that Flints, and Sand, in the Earth, Rivers, and Seas, receive their encrease from water, is sufficiently manifest; for all sand was primitively water only, and hath passed out of water into hard sand or stones, and into which it may again be changed. But this is not to be used as a Remedy against Thirst, because it is now too hard, and difficultly returneth to its first matter, viz. Water, except by the benefit of another subject, which is a MEDIUM between Sand, Flints, Crystal, and common Water, viz. Salt, which hath an agreement with the nature both of common water and that of stones, and may be easily changed into either of them; as you shall hereafter hear. But this concentrated Water, which I here propose for the vanquishing of Thirst, and refreshing of the body, is salt prepared and concentrated, either of the waters of Mountains, or of the Sea, which are of the same goodness: Of which afterwards is prepared by Art a water so excellent, that for repressing of Thirst and refreshing a languid body, there is no Remedy in the world may be compared to it.

Here some one ignorant of natural things may object, and say, How can it be that Salt should repel Thirst, seeing that when it is eaten, it exciteth and encreaseth the same? To this I answer, That common salt, as it is first extracted or boiled, can in no wise restrain the Appetite of drinking, but rather provoke it, except its pravity be first corrected and depurated; for every salt seems to have laid aside its nature and property, so long as it contains earthy and gross faeces, which nevertheless may be removed from it by solution, filtration, and coagulation; whence also it is bitter, astringent, and hard; but this harshness and terrestreity being removed, the salt remaineth no longer hard, but is reduced into a soft and fluid Liquor, not sweet, but pleasantly acid, tasting like an Apple or the stones of Grapes. And this purification must be made by the force of Fire, viz. when the salt in distilling is sublimed in earthen Vessels, by strong Flames; and then the purest and most noble part only ascendeth, and the more gross and earthy remaineth in the bottom, and is of no use; but the purer part is of great power and virtues, not only against Thirst, but is also very necessary for many other things, as shall hereafter be demonstrated.

That otherwise in impure common salt a great Virtue is latent, let no man doubt, seeing that it may be daily observed: Wherefore that excellent Philosopher PLATO writeth, THAT IN SALT THERE IS SOMEWHAT DIVINE; and according to the opinion of other great and wise men, GOD hath openly manifested Himself in Fire and Salt, and the ancient Philosophers were hence taught to prepare their UNIVERSAL MEDICINE; which Art of preparing they have called ALCHYMY, or THE MELTING OF SALT; but I speak not this by experience, in regard that I never yet durst attempt so great a Secret, being contented with smaller things; but this I know, and have divers times done, viz. that by a certain Artifice, I have precipitated from common Salt some corporeal Gold, although without profit, and only to see the possibility, which without those precipitations remaineth spiritual, and at length by them obtaineth a corporeal substance.

Indeed the greatest Mystery of the whole World consisteth in Fire and Salt, and with those two (after God) nothing may be compared; for the Flame raiseth Light out of Darkness, which otherwise none but God can do. It is also fit to restore life to the dead, no otherwise than the warm Sun or Oven reviveth Worms, Frogs, Serpents, Flies, and other Insects, which have been killed by the Cold; of which I have made mention in the second part of my PHARM. SPAGYR, as well as also in MIRACULUM MUNDI, and its EXPLICATION. Many men use Fire, yet know not what they have or use: So also it happeneth with salt, all men use it out of custom, but observe not what they taste. Salt is a thing of great moment, by it we give strength to resist Corruption, both to the living and the dead.

And so it is, that if men had not salt, or at the least those Plants and Fruits, in which it dwells, they would putrefie while yet living. Which would also happen to Cattle, if they did not eat Grass, which contains in it self its own salt, and sufficeth them in feeding; nevertheless if something better were given them with it, it would be very profitable for them; for if to horned Beasts, as also Hogs, some saltness were given with their meat and drink, they would thereby acquire much strength and fatness.

Seeing therefore that Salt, whilst it is yet gross and rude, and defiled with many impurities, performeth such things in living Creatures, and preserveth Flesh and Fish, as also all Herbs and Grass, long from Corruption: What could not such a salt do, which by the help of Art hath received a greater purity than Nature hath bestowed upon it?

For the Fire containeth a power of correcting and purifying salt, and converting it into a finer and better substance. The common salts which we daily use, do indeed give a relish to all Edibles, and preserve them from putrefaction; yet nevertheless they dry, astringe, and bind the belly; also excite Thirst; but salt being rectified and depurated, communicateth a sweet and gratefull taste, also more powerfully resisteth Corruption than the other, neither doth it bind the belly, but keepeth it soluble, expelleth Urine, nor doth it cause Thirst, but rather taketh it away both from the sick and sound: So great a difference is there between the common and corrected and depurated salt, which Rusticks little understand. The nature and property of common salt is known to every one, as far as concerns the Kitchin, but the rectified is known to few: And the Spirit of Salt, which is in use in Apothecaries shops, and which they also sell, being for the most part not rightly prepared, effecteth little, and therefore not frequently used: But if it were made and rectified as it should be, it would not only have a pleasanter taste, but also a better operation. So many things bear Names which are not agreeable to the thing, and therefore cannot perform what is expected from them.

The Ancients have ascribed great Virtues to Spirit of Salt in Medicine, which it indeed hath, if after its distillation it be well rectified and dephlegmed; but if it be administred so crude as it ascends the first time, it may perhaps do more harm than good, Inasmuch as a great deal of terrestreity comes over with it, which in the rectifying remaineth in the bottom of the Glass, as an insipid, bitter, or astringent salt. And although this be well enough known to some, nevertheless they abhor to rectifie their spirit, because the spirit in rectification loseth a great part of its weight, by separating its superfluties.

I taught, many years since, how to prepare the spirit of salt in quantity, whose description is also exactly set down in the FIRST AND SECOND PART OF MY FURNACES. It also demonstrateth its utility in Metallicks; as manifestly appears in the FIRST PART OF MY MINERAL WORK, where the manner of extracting Gold from Stones, by its help, is taught. Altho' the spirit for that work should be prepared after another manner, than that which is to be used at Sea, or on shore, for the curing Diseases or repressing of Thirst; wherefore I'll first teach the way of making this, and then also shew its Use.

As for the manner of anatomising Salt by Fire and Art, and



transmuting it into a pure and sweet spirit, it is various, for one useth this, another another way, as I also have taught divers ways, In the FIRST AND SECOND PART OF MY FURNACES; but here. I will appoint another, which is the best and most commodious for the uses treated of in this Book, and is thus to be performed.

Get some strong Retorts made of good Earth (but Glass is better) fill them with the following mixture of Salt and Earth, then according to Art, distill thence a spirit gratefully acid, which duly rectifie, and it will be prepared for Use. The salt is to be thus prepared for distillation: Fill a great Crucible with Seasalt, which cover with an earthen Cover, and by degrees put Fire about it of flaming Coals; encreasing it, until the salt be all over red-hot; this being done, presently remove it from the fire, and let it cool; by this means, if any greasie sordes, or other combustible impurities, adhere to the salt, they will be consumed and vanish. Dissolve the salt in common water, filter or strain it through a fine close Linen Cloth, that the faeces may be separated; the clear Liquor evaporate in an earthen glazed Vessel, till the Cuticula appear, then make little balls of clay and sand, about the bigness of Walnuts or Pigeons Eggs; dry them, and heat them red-hot in an earthen Vessel, and so the fat spirit of the Earth will be burnt away; then imbibe those balls with your strong salt water, by letting them remain in it for some hours, that they may drink in as much of it as they can, then take them out, and dry them: With these fill your Retorts, and administer Fire by degrees, and at length urge with the strongest flames, so long, till they emit no more fume, for then all the spirit is come forth: The Receiver must be of Glass, and very large, in whose bottom must also be a little water, to attract and condense the spirit. The Distillation being finished, the spirit is to be rectified by it self in a low Cucurbit in sand, and first the water or phlegm will come over, (which you may keep for another distillation) then the pure and sweet spirit will rise limpid and clear, and an unpleasant salt will remain in the bottom, which is to be cast away, and the spirit to be kept for the uses to be shewed hereafter.

But if you desire to have the spirit yet more pure and efficacious, you may rectifie it again upon calcined or powdered Flints, which will retain in the bottom whatsoever is yet gross or impure, and the spirit will be rendered very pure and subtile; for the Flint at the first was Water and Salt, and hence both contain in themselves so streight a communion. This may be seen among the Glass makers, who reduce Sand or

Flints into clearness by melting, that thence they may make pure Glass; for Salt in the Fire dissolveth Sand, Flint, Crystals, and together with them receiveth the Essence of Glass; yea, and these very species and matters, by the help of an ALKALY Salt, are resolved into a diaphanous Glass, which being put into common Water, melt like Salt; of which I have discoursed in the THIRD PART OF MY FURNACES. When we distill the aforesaid rectified Spirit of Salt again from powdered Flints, from the innate love which it hath to the Flints, it carrieth some part of them upwards with it self, and is made better for use in all Diseases, especially in the DROPSIE, STONE, and GOUT it is an excellent Medicine. The Flints remaining in the bottom, yield a water which dissolveth the hardest Crystals, and is acid like the spirit of Salt, and nothing else but part of it coagulated with them, and may be administred in all cases as the Spirit of Salt.

Let no man wonder that I ascribe more to this Spirit rectified with Flints, than to any other common spirit of salt; for few know what Virtues are latent in flints or sand. All Birds and four footed Animals use sand. Many men administer the powder of Flints and Crystal, for the corroborating of weak stomachs. Hens devour Sand and small Pebbles, that they may thence have matter for their Eggshells, and being debarred of it, lay Eggs without shells. Wherefore I affirm, That this spirit of Salt, abstracted from flints, to be better in many Diseases than the common spirit and especially the Crystals, or spirit of salt coagulated, of which we have above made mention.

Let this suffice concerning the Preparation of spirit of salt. Now we will also teach, how it is to be administred either at Sea or on Shore, for the repelling of Thirst, and the Cure of Diseases: To what other purposes the spirit of salt serves, besides Medicine, I have shewed elsewhere; here my intention is only to signifie of what great use and profit it may be in Voyages to Sea, which was the only occasion of writing this Treatise.

#### **Of the Use of SPIRIT OF SALT in Ships, against Thirst, and also the Scurvy.**

In the first place, this spirit is profitable to the body, when a small quantity of it is put into the Hogsheads of Water, whereof Seamen and Soldiers drink, to which it gives a gratefull acidity, like that of Wine, and is far more effectual in quenching of Thirst, and in less

quantity than other Water, and besides preserves the Water from corruption and stinking, which otherwise in long Voyages it is wont to suffer, contracting a muddiness, blackness, and breeding Worms, which generate the SCURVY; for the Water containing the spirit of salt, cannot corrupt; which spirit also preserveth other things, both living and dead, from putrefaction. And because the water with the acid spirit of salt extinguisheth Thirst more than any other, it necessarily follows, that so great a quantity of water need not be carried for a Voyage, as otherwise is usual. Moreover, seeing that the spirit of salt resisteth all putrefaction, it suffereth not the SCURVY to take root, for it refresheth and exhilarateth a man with great vigour, corroborateth the stomach, and all the members of the body, it consumeth pituitous matter in the Reins and Bladder, expelleth Urine and Stone, keepeth the Belly soluble, promoteth digestion; it seffereth no Disease to grow from corruption of the Blood, to which otherwise Sea-faring men are subject: Moreover, it exereth its salutiferous Virtues, if a little of it be mingled with Wine and Beer, in Ships, which will long preserve it in its goodness and sincerity, causing it the better to repress Thirst, and therefore to go the farther in use. Also Beef, Mutton, and Veal may by it be preserved a long time, viz. if they be put into stone pots, and powdered or condited with some salt, dissolved in the spirit of salt. Nevertheless it behoveth that the Flesh be without many Bones, and that all the legs, shins, or shanks be cut off. Moreover, a very small quantity of the spirit being added to the water in which Fish is to be boiled, maketh the Fish eat firm and close, and of a much solider relish than when sprinkled with Vinegar. So also Raisins being put into water impregnated with spirit of salt, will grow soft, and swell, and will recover their strength, and sweetness, as if they were fresh plucked from the Vine, which will afford a great refreshment to those who frequent the Seas.

In a word, this spirit may commodiously be used, not only in Water, Wine, or Beer, but also in all sorts of Food in Ships; for it giveth a very pleasant taste to all meat and drink, and correcteth them so, that they become more wholesome. It hath also another very profitable use, viz. If in hot weather but one drop, or so small a part of the coagulated spirit, as the magnitude of an Hempseed, be mixed with sugar and held upon the Tongue; for it so cooleth the mouth, and allayeth Thirst, that there will be no need of bad Water or Beer, by which the body is more violated than corroborated, through drinking often and much

of them. Nor is this the least of its virtues, that when in a long Voyage there is a want of water, a little more of the spirit of salt may be put into it than will serve for a gratefull acidity; for so it will quench Thirst for a longer time, and in a less quantity than otherwise a greater quantity of water can do. Yea, although the Ship should be cast away, and the men forced to betake themselves to their Boat, or broken pieces of the Ship, as it often happens, if they have but an ounce of the spirit of salt in a Glass, or half so much of it coagulated, in defect of Drinks, they may sustain their lives and health therewith so long, till it please God to afford them a means of getting to shore; nor will they be forced to drink their own Urine, or Sea-water, which is pernicious.

These and the like Virtues the spirit of salt sheweth in Ships, which for brevity sake, are not all declared.

I have also meditated how the SEA-WATER may be made sweet and drinkable by precipitation, which would be very desirable in want of water: And so far I have ATTAINED, that I can precipitate a good quantity of the salt from the water, which also becomes much sweeter, but yet not so fully, but some saltness remains in it. Although in case of necessity this water may be used in Ships for the boiling of Pease and Beans, as also for the fermenting of CONCENTRATED CORN. What I now know concerning this precipitation, I will make manifest for the good of my Neighbour, and shew a good beginning how Sea-water may be made fit to drink.

There is a certain kind of Mineral called MARY'S ICE; it is not the MUSCOVIAN Glass, as perhaps some may think, but another thing; when it is heated red-hot in the fire, and so cast into Sea-water, it is presently reduced to a tender and white powder; which being done, the Water will be agitated and moved hither and thither, then the Powder attracteth to it self part of the Salt from the Water, and settleth to the bottom of the Vessel, and the Water groweth clear, which may be poured out, and if this labour be once or twice repeated, the Water, by this precipitation, will indeed be made sweeter, but not altogether potable. Also the salt or solution of SATURN dismisseth much of the salt from Sea-water, yet by that it is not rendered drinkable. The best way which I now know, is this which follows, but it is somewhat costly: Nevertheless when necessity urgeth, sweet and good water profiteth a man more than a Bond of an hundred pieces of Gold. Hence this Art deserveth to be honoured, although it be costly; for a man ready to die with

Thirst would give all he hath for a draught of Water to save his Life: Wherefore somewhat of this precipitation may be committed to Ships, for their preservation, which may be used in great necessity, but if no such be, it may be brought home again, and kept for another Voyage, seeing that it will in no wise decay, but be as good after an hundred years, as the first day of its preparation.

But what this is, there is no need openly to divulge, but he who desireth it, may come to me and have it: But for the information of those who are skillfull in CHYMISTRY, I will intimate this: That the precipitation of Salt from Water, is necessarily to be performed by a singular sand, which doth not only drive salt downwards, but also all Phlegm, Sordes, and Impurities; so that although the water should be like to a Fen or Dunghill in filth and stink, by the benefit of this precipitation, in a few hours, it should become like clear Fountain water, because the evil odour and taste would also be precipitated.

The same may be done in all Waters, how nasty and muddy soever, and not only in Waters, but also in all potable Liquors, as Wine and Beer, although the Wine were red, seeing that the precipitation casteth to the bottom all muddiness, colour, and stink. And hence not only those Liquors, which are changed red by corruption, or other accident, but also Crystals, which are red by nature, may be reduced to a perspicuous clarity; which is a thing very profitable for Vintners; for otherwise the Sea-waters become sweet when they are carried far thought common sand, which imbibeth their salt; for those two have a mutual communion and communication, seeing that both are generated of Water; hence also by the fire, they are resolved into a dry Water, or pellucid Glass. Whence any man knowing in the nature of things, may apprehend, that this precipitation of Sea-water is built upon a foundation agreeable to Nature.

My ALEXIPHARMAC, or Mineral-Electuary, before mentioned, as also the Spirit and Crystals of Salt, may be administred, as well at Land as on Sea, against the SCURVY, FEVERS, and other Diseases.

And although in the SECOND PART OF MY PHARMACOP. I have already described a certain Mineral Remedy, under the Title of a PANACAEA, and commended it against all Diseases, by which admirable Cures are every where done, yet I prefer my Mineral Electuary before that, because it is more accommodated to use, seeing that when need requires, it may be taken out of a Box with a Knife only; neither is there need of any Vehicle, as Wine, Beef, or others, which are necessary to be used with

the PANACEA; neither is there need of weighing it, but may be proportioned by the Eye, according to the age and strength of the sick. Those who are of full age and strength, may take as much of the Electuary upon a fasting stomach as will equal the magnitude of a Pease, and fast some hours after it, if time and opportunity permit; also let the Patient avoid the cold Air, and the heat of the Sun in hot seasons. It is to be taken twice, four times, or oftner, in a week, according to the necessity of the sick, to which it must also be proportioned by encreasing or diminishing the Dose; for if one grain should not work, the Patient may take two, ascending to 3 or 4, if need be. When a small Dose is administred, it works insensibly, if a little more, then it worketh by stool, and sometimes by vomit, when it findeth diseasie matter in the stomach; if it findeth depraved salt humours, it casteth them out by sweat, spitting, or urine, and throughly purgeth the body from every evil. In brief, I say, it greatly purifieth the Blood, openeth all obstructions of the internal principal members, as the LIVER, SPLEEN, and LUNGS, beyond all PHLEGMAGOGUES: It hindereth the groweth of all APOSTEMATATIONS both within and without the body; it consumeth FLUXES and CATARRHS, which fall upon the Eyes, Ears, and Teeth, it exterminateth the venereal POX in a short time; it also cureth the DROPSIE, LEPROSIE, GOUT, AND FALLING-SICKNESS, both in old and young; expelleth the STONE both of the KIDNEYS and BLADDAR; cureth all sorts of FEVERS; and lastly, it healeth all inward and outward WOUNDS and ULCERS, being taken inwardly, and a due Diet observed.

This is a safe and approved Medicine in the cure of all curable diseases, nor doth it fail to help in inveterate affects, viz. when a disease hath been long growing, and is now firmly rooted and fixed, that it cannot be totally expelled, as the GOUT and STONE, yet then this Medicine mitigateth the pain, and maketh the Fits slower and more tolerable, and suffereth not the DISEASE to encrease, but to be more and more abated and diminished. It cures all SCABS and RINGWORMS, or TETERS, proceeding from an impure Blood and Liver, only by taking it inwardly, without any outward unctions. What shall I say more? This Medicine cannot be sufficiently praised, seeing that it operateth universally against all the diseases both of Men and Beasts: But I must forbear, for if I should shew all its Virtues, this Treatise would swell to too great a bulk.

In MARITIME Towns, and other places where the SCURVY is regnant, a better Medicine than this cannot be found, for it removeth all pravity

of Humours, from which such diseases proceed; it preserveth from the PLAGUE, and other Contagions, and happily cureth their Infections; it strengtheneth the Memory, Heart, and Brain; preserveth from the PALSIE and its Concomitants: In time it restoreth those who have their Members contracted, and their Nerves repressed and immovable, after the being anointed with Mercury, for the cure of the POX. He that will take it every week or once in 3 or 4 weeks as a preservative, shall not have the TOOTH-ACHE, nor shall his Ears be troubled with ringing or other noises, nor shall his Eyes be troubled with sharp Rheuins, but by the benefit of this, those continual inveterate Corroders of the Body, CATARRH, FISTULA, CANCER, and other almost incurable sumptoms, are throughly cured.

Hence both Rich and Poor, and those especially who go long Voyages to Sea, and want Physicans, ought to esteem this ALEXIPHARMAC, and provide themselves with it against a time of necessity. If any man carries with him half an ounce of it, it will be sufficient for preservation and curation for more than a year, in many diseases. If a Ship going to the EAST or WEST INDIES, carry with them half a pound of it, they may save the Lives of many men; one of which is of ten times more value than the price of the Medicine, by help of which the lives and health of many Hundreds of Men may be preserved, and being sick, may be reduced to their former health.

Now it is farther necessary to describe the Virtues which the Spirit of Salt sheweth on Shore; for that which is profitable to the sick on shipboard, is not hurtfull for those who dwell at Land: For this spirit may be used in all Houses in their usual drink, as Beer or Wine, especially in these moist Regions, where the Scurvy commonly reigneth; so that there is scarcely an House to be found, in which there is not one at the least infected with this Disease; for the drink is hereby made clear, so that it well dilateth the Urinary passages, moreover hindereth the growing of the stone in the Kidneys and Bladdar; it also gives a pleasant taste to the Wine, removeth its superfluous Tartar and precipitateth it to the bottom, so that SPANISH and FRENCH Wine acquire a clearness like to RHENISH wine. In Summer time, after Liquors have once wrought, it suffereth them not to fret, grow mucous, or work again, but keepeth them from many Accidents. FRENCH Wines as sold in many places, have neither odour nor taste, but good Wine is endowed both with a Vinous relish, and a grateful odour; and when these are wanting, the name agrees not with the thing. But the Spirit of Salt, with the Essence

of Wine, conciliates to FRENCH wine the smell, taste, and colour of RHENISH wine. Hence also being so meliorated, it will, like RHENISH, keep many years, which otherwise will hardly hold good two years. Moreover, by the spirit of salt that quality may be taken away from Honey, which renders its taste somewhat ungratefull, and its hidden Impurities may be precipitated, so that an excellent wholsom drink may be made of it. Which is a famous Art to be used in those places where there is no wine; for when Honey is well depurated, and the unpleasant taste taken from it, it becomes as a comforting Balsam to Man; as that old Solder had experienced, whom ALEXANDER asked what he had used to prolong his Life to so great an Age, he answered, That inwardly he had used Honey, and outwardly Oil. And it is evident to many, that there is a great virtue in Honey, but by reason of the unpleasant taste, it is loathed; which yet is removed by the spirit of salt, so that a drink prepared of such pure Honey, is as wholsom as the best wine: which hath also this benefit, that every Housekeeper may have this drink at his Table, at any time of the year. This honied Nectar also holdeth good many years, after the manner of the best RHENISH wine, and is made for a small charge, and will be a great comfort to those who are not able to go to the price of wine. Moreover, every one may make his own drink as strong and as sweet as he pleaseth; which is the principal head of the Art, to take away the ungratefull taste from the Honey, which being removed by the spirit of salt, the drink will become clear, to which you may add a little FRENCH or RHENISH wine for taste sake. You may thence also make good Beer, which will hold its goodness 10 or 20 years, or more, viz. if instead of common water you take, the water of Hops, to dissolve the purified Honey, to which (if you please) you may give divers tastes, by putting into it divers Herbs, as is wont to be done in wine and beer. But this you are especially to regard, That for this business you do not use unrectified spirit of salt, for such would spoil the taste, and corrupt the drink, but always take that which is well rectified, which I have sufficiently taught the manner of doing of both in this Treatise, and divers other places of my Writings.

N.B. There is no need to put the spirit into a Vessel of Wine or Beer, but it sufficeth to keep it in a small glass, and as often as you have occasion to put some drops of it into a Bottle of Wine or Beer, and so to drink of it. Every one therefore may make his drink as he will, by putting in more or less of the spirit, according to his Palate; which doth not only serve to make the wine and beer clear and diuretick, but



may also be used in Fountain-water, in hot weather, for the allaying of wine: For if some drops of it be put into a bottle of water, it giveth it a gratefull acidity, not much unlike to the natural Mineral acid waters, and in hot weather allayeth the over great heat of the Blood, and quencheth Thirst, so that there is no need of burdening the stomach with much wine or beer. Also all those drinks, as wine, beer, and water, which are mingled with the well-rectified spirit of salt, are far wholsomer, than other ordinary drinks. If a little pure Steel be dissolved in spirit of Salt, and then put to fair water, it will have almost the same taste with the SPAW-WATER, and if some quantity of it be drank, it looseth the belly, and evacuateth black Excrements, whence a man grows lively and vigorous, as if he had drank of the SPAW-WATERS.

And this benefit may accrue by it to all Travellers, who carrying with them a little spirit of salt in a glass, may at all times, and in all places, correct and amend their beer or wine in their Tuns, and give it a better relish: But because this spirit is more liable to be lost in a liquid form by any accident befalling the glass, therefore being coagulated into a dry form, it may be more commodiously carried about in a Paper or Box, of which the magnitude of a small Pease drank in one cup of water, quencheth Thirst better than a great quantity of water alone. This spirit of salt will be serviceable to men of all sorts, but to none more than to Seamen or Soldiers, in war-like expeditions, of which sometimes more die through want of water, than by the sword, who also for the most part contract thier Diseases from the filths in Ships, which might easily be prevented. What will it profit a Captain of a Man of War, or the Commander of a Merchant-ship, to have many men for his defence and service, if they are disabled by a Disease? Were it not then better to use all diligence to preserve their health, and to restore it when lost? Which may be done with small Labour and Cost. A General brings an Army some time into the Field, of 10, 20, or 30 Thousand Men, and seeing that those observe no due order in eating and drinking, and being destitute of Medicines, if the PLAGUE, FEVER, or BLOODY-FLUX comes among them, they drop off one after another like Flies in Winter; when notwithstanding they might be succoured and helped in those Diseases by my Electuary, (This Electuary I think to be the PANACEA ANTIMONII made up with Sugar). Salt of Salt, or Spirit of Salt, inspissated or thickened with Sugar. The spirit of salt hath always been highly esteemed, both by ancient & modern Physicans, for its great virtues which it sheweth both inwardly & outwardly; besides which, it is of

great use in other Arts, as I have shewed in the FIRST AND SECOND PART OF MY FURNACES. And that the Reader may see that I am not singular in what I have ascribed to the spirit of salt, I will here set down the Experience of that no less learned than famous Physican CONRADUS KUNRATH, of the spirit of salt, as he hath expressed it in his MEDULLA DESTILLATORIA, printed at HAMBURGH, ANNO 1638; in these words, Part I, page 59.

**The Great and Effectual Operations which are attributed to the Spirit or Oil of SALT.**

The Spirit or Oil of Salt is not of so acrimonious a taste, as Salt commonly is: Nor hath it so great an acidity as the Spirit of Vitriol, but it tasteth almost like the juice of wild Apples, with somewhat of sweetness interxnixt. It discusseth, dissolveth, consumeth, and dryeth, yet it doth not heat too much, but hath a temperate nature, mitigating and comforting the natural heat, which it also encreaseth, and dispelleth all things contrary to Nature, preserveth the state of sound humours unhurt, especially profitable for those who are phlegmatick, whose viscous SABURRA of humidities it consumeth, taketh away CATARRHS which fall from the Head, and preserveth from all Diseases which arise from a noxious Pituity, Mucor, and Fluxes. Yea, those who use labour and study, shall perceive their Strength to be restored by it, and as it were renewed.

Experience, the Mistress of things, witnesseth, That it is a present Remedy against the FALLING-SICKNESS, being administred in good AQUA-VITAE: Against the APOPLEXY, PALSIE, or loss of SPEECH; as also the trembling and beating of the Heart, and all dejections of Mind; as also in the time of the PLAGUE, or in any infectious Air, it may be administred with profit, by mixing half an ounce of the Spirit or Oil of Salt with two ounces of the Juice of Violets, and as much of the Electuary of Juniper-berries, in a Stone or Glass Morter, and the Patient taking the quantity of a Filberd in the morning upon an empty stomach.

This Compound Medicine being given to Women with Child, facilitateth the Birth, and is highly profitable against various symptoms of Women in Child-bed, without any danger. If any desire to preserve their native heat, let them often use this ALEXIPHARMACK.

Whoever is burdened with superfluous moisture, let him take this

Spirit or Oil of Salt daily, in Wine or some other Vehicle.

In Coldness, and continual Fluxes, which stop up the Breast, it conduceth much, and taketh away inveterate Coughs and grievous ASHMA'S, which are stirred up by those Fluxes. It dissolveth, consumeth, and dissipateth depraved humours, collected and indurated in the stomach; and although of it self it communicateth little nourishment, yet it excites the Stomach to a good Appetite, and disposeth the Meat to a good digestion and passage through the body.

It helpeth in the Tartarous and indurated Obstructions of the Liver and Spleen, which it openeth and relieveth, and hence removeth and taketh away the JAUNDICE, DROPSIE, HYPOCONDRIACK MELANCHOLY, and pains and affects of the RIBS and VISCERA, and also whatsoever ariseth from Wind and Flatulency, and other symptoms proceeding from the said causes, it especially absumeth the ANASARCA, or Water under the skin, and throughly removeth watery Tumours in the Genital Members or Legs, which for the most part happen to those who are Hydropical, Phthisical, or labour under a Distemper of the Liver. It also taketh away the great Thirst in those, which otherwise in this kind of diseases doth not lightly afflict, so that the Patient shall have no desire of drinking, but may remain some days without. The same is also a Remedy against all putrid FEAVERS.

In tormenting Pains of the Belly, and CHOLICK, which are excited by the viscosity of humours, or in temperature of flatulency, or force of cold, and a dense and tough Phlegm driven into the Intestines; this spirit resolveth and consumeth, and so openeth the stopt passages of the Bowels, and looseneth the Belly, that it easeth the Illiack pains, whether it be taken at the mouth, or administred Clysterwise. In the LIENTERY, DYSENTERY, or HEMMORRAGE, it is to be given in Clysters; in like manner in NEPHRITICK Diseases, and the dolorous Stone in the Bladder, which it dispelleth and exterminateth.

In RUPTURES, as the HERNIA and ENTEROCELE, let some drops be given daily in good Wine; let the Tumour of the SCROTUM be also often anointed with this Spirit or Oil, and cherished by a fit Truss, or some other bandage, and in a few days the sick will recover his former health. It killeth all WORMS in the Body, casteth them out and prohibits their breeding again.

It is most effectual as a preservative against the contagion of the PLAGUE; and also is very conducible to those who are already infected. It also wonderfully profitteth such as have eaten Poisonous Mushrooms or

Opium, as also those who are hurt by Scorpions, Vipers, Spiders, and the like venomous Insects, it is accommodated both to inward and outward use, because it consumeth virulent humidities. For the stinging of Wasps and Hornets, it is to be applied topically.

For fat Women, and those who are troubled with impurities of the Matrix, from a superfluous phlegmatick humour, it is very profitable; for by the benefit of it, every redundancy and incommodity of Phlegm is purified, consumed, and dried up, so that the seed may more easily rest in the Womb, and fertility be greatly promoted.

In protuberent Excrescencies of the Eyes, FILMS, CATARACTS, BLISTERS, PUSTLES, OR SPOTS, DIMNESS or DARKNESS OF SIGHT, it is to be used in a good Collyry or other commodious Vehicle. In BLOWS, BRUISES, or FALLS, when the Blood is congealed, (which we call black and blue) in the Eyes or Face, let a bit of a Sponge or Lint be wetted with the Spirit or Oil of Salt, and applied to the place affected; or else dissolve in the same a little red Myrrh, and with the Dissolution mix a little Honey, and anoint with it. It driveth away noise and pain of the Ears, also when the Ears send forth an ulcerous and purulent matter, the same Medicine may be administred with an happy success. And in these Symptoms it is to be mixed with Wine-Vinegar, and dropped into the Ears, and rubbed upon the diseased parts.

In the THRUSH, and other sore mouths of sucking Children, also in the glandular or kernelly Swellings of the Neck, foulness of the Tongue, swelled and rotten Gums, SCURVY in the Mouth, TOOTHACHE, superfluous humours and filths adhering to the Teeth and Gums, this Spirit or Oil of Salt is an excellent Remedy; as also in preserving from those Evils, it is to be conjoined with clarified Honey, and the Mouth, or parts affected in it, to be anointed therewith. Against the evil Affects and Ulcers of Womens Breasts, some linen rags are to be hurnected with the Spirit or Oil of Salt, and they will be quickly healed. The moist ITCH, TETTERS, RING-WORMS, and other contagious Affects of the Skin, are happily cured by both the inward and outward use of this Spirit. ULCERS and fungous TUMOURS in the Venereal Disease, or others, if we would bring them to a supparation, the Oil of Salt will effect it, being applied either alone, or mixed with other convenient Remedies. For the healing of venomous Ulcers, which pierce the Bone it self, as also all virulent Apostems, the Spirit or Oil of Salt is to be mixed with White-wine, and Barley-flour, into the consistency of a Plaster, which is to be applied to the Sore.

Also in cancerous, eating, and spreading Ulcers, it is very profitable, being mixed with the juice of Rhue, and aptly applied. That I may summarily express its use both inwardly and outwardly, it resisteth all fluid and corroding Vices, and Layeth the foundation of thier Cure. In luxated, shortened, or contracted members and joints, it affordeth present help, being used alone, or joined with fit fomentations or Epithems.

In the taking away of WARTS, this Spirit is to be mixed with the juice of Marigolds, and applied to them: It also taketh away Corns, if after they are softened with warm water, they be well cut and anointed with this Oil. In the ERYSIPELAS, ST. ANTHONY'S FIRE, this being mixed with Elder-Venegar, and applied, is of great virtue.

The Hands of Feet being corrupted or chapt by Cold, are recovered by the benefit of this Medicine. This Spirit or Oil greatly conduceth to help the weariness and weakness of the Feet or other Members, restoring to them their strength and vigour, if they be well bathed therewith before the fire.

Moreover, in the dolorous GOUT it is a famous Remedy, and a profitable ANODINE for allaying the pain, if besides its internal use it be also applied topically: For to this our Medicine are to be joined Oil of Turpentine, Oil of Wax, Oil of Camomile, or also Oil of Cowslips, with which the parts affected are to be well anointed. But where the members are contracted by FLUXIONS and CATARRHS, fit Fomentations are also to be used, and besides our Oil or Spirit, the dulcified Oil of Vitriol, and pure Oil of Turpentine, are to be mixed together, and the parts to be therewith anointed before the fire. And hence the Nerves and Joints are so comforted, that they will not so easily admit such Fluxions again. Also if there be TOPHES or NODES in the Joints, they will be discussed beyond belief, being duly anointed with this Oil, mixed with the dulcified Oil of Vitriol.

It is also used with great profit both inwardly and outwardly, against the CRAMP and CONVULSION OF THE NERVES by Cold.

In external Wounds and Sumptoms there often happens a Putretude, and also proud Flesh sometimes starteth up, and causeth great pain. These Protuberances being anointed with this Oil or Spirit are presently dissolved and consumed, and also preserved from future corruptions.

In brief, this is a most excellent Medicine, overcoming many Diseases. Moreover, the Reader is to know, that this Spirit or Oil of Salt, (besides those Virtues which I have declared) if it be diligently

prepared, and rightly prescribed, may be used for the preparing of many excellent and precious things in the Chymical Art; for it dissolveth Gold, Gemms, and other Stones, Pearls, Corals, & etc. So that they are reduced into excellent Medicines, in a liquid or potable form, highly usefull for Mankind: But how those Processes are to be instituted, I shall here pretermit. But he that hath drawn a good foundation of working from that information which my MEDULLA DESTILLATORIA hath faithfully propounded, let him weigh the matter with an accurate mind, and put his hand to the Work, there is nothing in it so tedious, but he will easily conceive; moreover, let him associate himself with honest, sincere, and skillfull Artists, and take their counsel, then he will find out many Secrets of Nature, and singular Arcana's, and will see that his care and diligence hath not been in vain: Then let him use that Experience to the Glory of God, and the help of his needy Neighbour.

**The Virtues or most efficacious Operations of the SPIRIT or OIL OF SALT, in which Gold is rightly dissolved, according to Art; or when it shall be made an AURUM POTABILE.**

Philosophers and Physicans, endowed with the great Exercise and Knowledge of Things, have attributed to the Spirit or Oil of Salt, in which Gold is rightly dissolved, or the AURUM POTABILE made with it, very great operations in the body of Man, inasmuch as in all Diseases and Infirmities, of what name soever, it giveth present help, and in all dejections of the vital spirit, although they tend to the fatal period, it giveth such relief, that life and vigour may be yet somewhat farther protracted, if two, three, or four drops be administred as occasion shall serve in a good AQUA VITAE or Cordial Water, In like manner, if three drops be administred once a week in generous Wine, or AQUA VITAE, or other fit Vehicle, it renovateth a man, makes him youthfull, changeth gray Hairs, produceth new Nails, and Skin, preserveth from various and diverse symptoms of Diseases, and preserveth the body in such a state, even to the prefixed hour of the Divine appointment.

These are the very words of that famous Philosopher and Chymical Physican CONRADUS KUNRATH, in his MEDULLA DESTILLATORIA; as the Reader may there see.

Now any may easily conjecture, that although this learned man had found out many things, yet that he knew not all, but what was known to him, that he divulged. But that as yet more might be done by that Spirit

or Oil of Salt, than what he had set down, easily appeareth from that which he sheweth at the end, concerning the oil or Liquor of Gold, prepared by the Spirit of Salt, which words are Truth it self, and much more may be done by the benefit of that solution. He hath written what Experience hath taught him, the rest he hath less to the study and searches of others.

Seeing therefore that I also (not to speak boastingly) have often handled Furnaces and Coals, and among others, have found this Liquor of Gold or AURUM POTABILE, made with Oil of Salt, to be of great virtue, and knowing its great use, power, and virtue by experience, I will describe it in an open stile, lest so noble a Medicine should be buried. Such a Liquor of Gold as is here mentioned, is compounded of the purest Sol, and the most highly rectified and again concentrated Spirit of Salt: The Sol is to be first melted, and throughly purged with Antimony, then to be dissolved in AQUA REGIA, and precipitated with MERCURY, to beedulcorated and brought into a subtile Calx, which must be heated red hot (to free it from the MERCURY) and then dissolved in strong and well-prepared Oil of Salt; being dissolved, abstract part of the spirit of salt from it, and a very yellow Liquor of Gold will remain at the bottom, which yet is not, fit for use alone, seeing that the Oil of Salt containeth too much Acrimony; therefore a drop of it is to be mixed, with a spoonfull of Beer, Wine, or warm Broth, before it be administred to weaken the spirit of salt; but if any desire to have it sweeter, instead of Wine, Beer, or Broth, it may be mixed with melted Sugar, or syrup of Roses. The Dose for a man of ripe age, is two or three drops, which if he shall perceive not to operate sufficiently, he may encrease to three or four drops, so long, till he shall find an evident operation, which appearing, let him encrease the Dose no longer, but rather diminish it a drop; and when the Oil of Gold rightly performeth its operations, these signs will appear: In the first use, a certain loathing or nauseousness of the stomach, will be perceived, when the Oil of Gold findeth there a vitious pituity, and endeavouring to expell it, driveth it downwards, and ejecteth it by stool.

2. The Excrements are as black as a Coal, and during the use of the Medicine, the sick maketh a discharge by stools at least twice, sometimes three or four times, without any impediment or sence of necessity, as is wont to be in the working of Purges. The Urine will also be thick and turbid, because the Medicine dissolveth the Tartar and Phlegm in the Reins and Bladder, and by degrees expelleth it.

N.B. That by the black Excrements, it is manifest, that Gold may be radically dissolved in the stomach of a Man, which some think to be impossible. The humane stomach hath a greater power in the destruction of things than the strongest fire, as may be here seen by the Gold: Yea, all things which are eaten or drank, in the space of 24 hours, it throughly dissolveth and transmuteth into a new form of Excrements.

If the stomach of a man can effect such things, why not Art also? Yea, hence it is expressly proved, that the colours of Gold, at length, when it is radically dissolved and destroyed, do appear, and may be known, seeing that in Colours Blackness hath as it were the first and chief place, and containeth all others hidden and concentrated under It.

N.B. That these black Excrements should not be cast away, but the radically dissolved Gold ought to be separated from them, with which perhaps some great thing may be effected.

I some time since administred this Oil of Gold, for eight or ten days successively, to a certain Infant, for the freeing his body from Mercury, which had been imprudently given him for the Worms; I ordered the Excrements to be saved, for some Experiment, which nevertheless, because they stood long and bred Worms, I could not use, but commanded them to be put to the Roots of a young Vine, which had not yet born Grapes, being but of two years growth, which produced a small Grape with large stones, which had golden spots like Stars, admirable to behold. This Example is worthy of a profound consideration. It also seems to me, that the Urine of those who continually use the aforesaid golden Liquor should be auriferous, although it appear not in the colour. The thing is out of doubt, seeing that men, in the use of the said Medicine, attract only a certain hidden virtue, from the Gold, and again send the rest forth of the body, that that Gold is better than other common Gold: The Benignity of the Divine Being hath disposed and ordained every thing in the World for the best.

Seeing that in the Stomach of Man or Beast the Food is destroyed and putrefied, Nature taking a little from it only for nourishment sake, casteth out the rest by siege, which yet is not of so abject a condition, as to want its virtues? For if these Excrements be mixed with any Earth, moistened with Rain-water, and exposed to the open Air, there will thence spring forth divers Herbs, without the addition of any seed; but if the seed of any Herb be adjoined, then is also brought forth fruit of the same substance and quality; so that these Excrements may degenerate, and be converted into whatsoever Fruits we will: From which



Fountain the multiplication of Herbs and Metals may perhaps take its original. Therefore it is necessary, that Putrefaction should go before Multiplication; which our Saviour himself told his Disciples, saying, EXCEPT A GRAIN OF WHEAT SHALL FALL INTO THE EARTH, AND DIE, IT REMAINETH ALONE: BUT IF IT DIE, IT BRINGETH FORTH MUCH FRUIT. The Axiom of Philosophers is, WHERE NATURE ENDETH, AND LEAVETH THE WORK IMPERFECT, THERE ART OUGHT TO BEGIN. But the manner of proceeding farther they have involved in silence. Nature from the beginning hath sublimed a Mineral ENS, or first matter of Metals, as much as it could, and brought it to the royal seat, or highest perfection: Art hath destroyed the most perfect body of Gold by corrosives, and being destroyed, hath again dissolved it in the body of Man: But if any know the manner of proceeding farther with it, he may easily reduce that Essence of the dissolved Gold into a better, and multiply it: But I would not have this taken for an Oracle, seeing these are only my Cogitations.

The Use of this Medicine is to be continued till the body is freed from all ill symptoms; nor are any other Remedies to be intermixed with it, that its operation may not be hindred: But before this Medicine be administred, a Dose or two of my PANACEA ought to be given, (of which the SECOND PART of my PHARMACOP. treateth) for then its effects are to be admired.

This Oil of Gold, or AURUM POTABILE, is of much greater force in all those Diseases in which the simple spirit of salt is conducibile, because the Oil of salt hath double the strength of the spirit, and also dissuseth its virtues much better, by reason of the Gold which is anatomized in it; the which, because it is of a hot and dry property, agreeth very well with the Oil of salt, whose nature is hot and moist: and hence it effectually resisteth all Corruption which may arise in the humane body.

Besides, the Virtues which the spirit of salt, and especially the Oil of Gold prepared with it, manifest both within and without the body; It is an egregious preservative against Drunkenness.

NOTE: Spirit of Salt, a Remedy against Drunkenness.- which is the root of many Diseases, and the gate by which many evils enter; For strong Wine or stale Beer being drank, suffer nothing in the stomach, because it cannot restrain their subtile spirit, which presently flieth up into the Head, and disordereth and confoundeth all the senses. But if in the drinking, a little spirit of salt be mixed with the Wine, it openeth the Orifice of the stomach, and suffers not the spirits to fly upward, but

restraineth and bindeth them, also mitigateth and represseth that unnatural Thirst, which otherwise the Wine causeth in excessive drinkings: Nor doth the Wine, which is mixed with spirit of salt, so easily hurt the Liver; for as the spirit of wine heats and inflames the Liver, so the spirit of salt corrects and cools it. Add that the spirit of salt permits not the liquor to lie lurking in the stomach, but presently casteth it out by Urine: and the sooner the superfluous Wine is cast out of the body, the less hurt it can do. But this is to be understood of the spirit of salt well rectified, and subtilly prepared.

In short, I might sooner want Paper to write, than matter to express what good the spirit of salt coagulated can do, being taken in drink; I have said enough for the present; in my VEGETABLE WORK I will more fully discourse of this matter, in which I now acquiesce. Whatsoever I have here written of a Medicine against all Sea-faring Diseases, and of the concentration of Corn and Water, against Hunger and Thirst; as also of the most efficacious use of spirit of Salt, against Drunkenness, and of the melioration of Wine, Beer, Water, and other Drinks, is built upon the pure foundation of Truth, which Experience it self will sufficiently testifie; with which I put an End to this Discourse.