A treatise on the medical virtues of the alga marina, a concentrated essence of the sea-weed, as an external remedy for rheumatism and rheumatic gout: also in all cases of weakness of the limbs and joints, deformities of the spine and chest, enlargement of the glands, swellings, tumours, etc., etc., and in all that extensive class of diseases for which the sea-side is usually prescribed / by James Coles.

#### **Contributors**

Coles, James. Royal College of Surgeons of England

#### **Publication/Creation**

London: Houlston & Stoneman, 1855.

#### **Persistent URL**

https://wellcomecollection.org/works/kursy6tb

#### **Provider**

Royal College of Surgeons

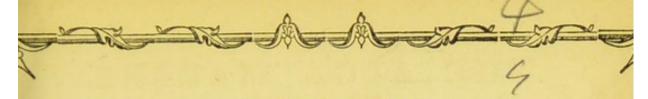
#### License and attribution

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org



## A TREATISE

ON

## THE MEDICAL VIRTUES

OF THE

# ALGA MARINA.

A CONCENTRATED

# ESSENCE OF THE SEA-WEED,

AS AN EXTERNAL REMEDY FOR

## RHEUMATISM AND RHEUMATIC GOUT,

ALSO IN ALL CASES OF WEAKNESS OF THE LIMBS AND JOINTS, DEFORMITIES OF THE SPINE AND CHEST, ENLARGEMENT OF THE GLANDS, SWELLINGS, TUMOURS, ETC., ETC.,

AND IN ALL THAT EXTENSIVE CLASS OF DISEASES FOR WHICH

THE SEA-SIDE IS USUALLY PRESCRIBED.

BY

# JAMES COLES, M.R.C.S.E.,

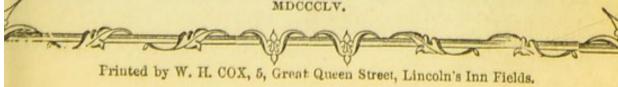
Late Senior Surgeon to the Hospital for Deformities, London; Author of "Spinal Affections and the Prone System of treating them;" Inventor of the Patent Prone Couch, and of the Orthopædic Sofa for the cure of Lateral Curvature of the Spine, &c.

THE SIXTIETH THOUSAND.

LONDON:

HOULSTON & STONEMAN, 65, PATERNOSTER ROW.

MDCCCLV.



# A TREATISE

THE MEDICAL VIETUES

# ALGA MARINA.

A CONCENTRATED

# ESSENCE OF THE SEATHED.

NAME AND ADDRESS OF THE OWNER, NAME AND

## TUOD DITAMUREE AND RESUMATIO GOUT.

ALSO IS ALL CARREST AND CHEET TO SHEET OF THE ORLINE OF THE ORLINE OF THE ORLESS OF THE STREET OF THE ORLINE OF THE ORLINE OF THE ORLINE OF THE ORLESS OF THE ORIGINAL OR THE

MAIN OF ALL PART STREET, OF SALES OF SHIPS AND ADDRESS.

THE SEA-SIDE IS USUALLY PRESCRIBED

711

## TAMES COLES, M.R.C.S.E.

THE SIXTIETH THOUSAND.

WOLLSTED STRUCK OF STRUCKSHOPS HOLD TO BE STRUCKSHOPS TO STRUCKSHO

# CONTENTS.

Alphabetical List of Agents in Town and Country-On the Covers.

### PART I.

THE ALGA MARINA OF	R SE.	A-WE	ED.		
In Name of House				]	Page
ITS NATURAL HISTORY					3
Uses in Agriculture					7
Uses in the Arts					8
PART II.					
T 35 T					2.0
ITS MEDICAL HISTORY	•••				10
1 1					ib.
					ib.
Modern celebrity in various countries					11
Dr. Richard Russel on its Medical Vir					ib.
Mr. Webb, Surgeon to St. Thomas's H	lospital				ib.
Dr. Lee on its value in Bronchocele					12
Difficulties which prevented its general	use	••			16.
These now overcome	• •				13
It is a perfect Substitute for Iodine					14
Cod Liver Oil					15
ITS EFFECTS IN RHEUMATISM AND RHEUMA	TIC GO	TUT			16
Its pre-eminence in these diseases					ib.
Tatton Community III					ib.
Letter from an Officer at the Cape in t					18
C 1 1 1 T 1					19
Its effects in Scrofula in all its form					
Distance - 11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1					20
0 11: 0.1 0.1 7		••			ib.
Day la la			••		21
W-l- ' d T' 1 1 T'	::	••			ib.
Contractions of Ed				••	ib.
Donalmaia		••			ib.
Liotowwition					10.
Strains and Daniege	••				ib.
Inflammation	••				ib.
And all that class of diseases for which	oh tho	Son S:	do in	**	ib.
and the second s					27.
	• •				ib.
METHODS OF USING IT	••				ib.
TESTIMONIAL DOCUMENTS		22			99

Digitized by the Internet Archive in 2016

## A TREATISE

ON

# THE MEDICAL VIRTUES

OF THE

# ALGA MARINA;

A CONCENTRATED ESSENCE OF THE SEAWEED, ETC.

## PART I.

As a preliminary to a treatise on the medical virtues of the Seaweed, it will not, I trust, be considered out of place or uninteresting if I delay the reader for a brief space, whilst I endeavour to make him acquainted with the history and some of the general

characters of this hitherto little known family of plants.

There are some, however, who may not feel disposed to devote their time and attention to this part of the subject, but may be anxious to obtain as speedily as possible the information which the title of this pamphlet promises them. For such, the division of my subject into two distinct parts, the first relating to the natural, and the second to the medical history of the Sea-weed, will be found a convenience. Those who may wish to do so can at once turn to that second part, commencing at page 10 and with which the first has no necessary connection.

It will be especially convenient that I should here acknowledge generally those sources of information from which I have so largely drawn for the strengthening and confirming my own more limited experience, and which space will not admit of my always

referring to individually.

The writings of Drs. Walker, Greville, and Neill, of Ray, Lightfoot, Hooker, and others, contain stores of information on this interesting subject; and although, until a recent period, this information has been confined to the few who have possessed the inclination and leisure to seek it at the fountain-head, whilst the general public have remained profoundly ignorant of the nature

and qualities of this large family of plants, the subject has been now made most attractive and accessible by the popular writings of several modern botanists, amongst whom the late Miss Hutchins, and that "Queen of Algologists" (as she is termed by the Rev. D. Landsborough), Mrs. Griffiths, of Torquay, hold a foremost rank. The reader will also be well repaid by a perusal of "A Popular History of British Sea-weeds," lately published by the latter gentleman, which is calculated to convey a large amount of both instruction and amusement.

Sea-weed forms a part of the large family of Algæ, which belongs to the Cryptogamous or flowerless order of plants; as do also the Ferns and Mosses. It occupies, perhaps, the largest geographical range of any known vegetable production, being found in more or less abundance wherever there is sea to nourish it. Like land plants, it varies in different latitudes; but although presenting very different appearances in different seas, as well as at different depths of the same sea, it preserves, under all circumstances, certain peculiarities of structure and habits which differ very materially from all other vegetable productions, and render

it a very interesting study for the lovers of nature. There are included under the general head of Sea-weeds a great variety of marine plants, which differ widely in outward form, in bulk, and in colour. They are found, frequently in great profusion, in every quarter which is adapted to their growth, but it would appear as if the temperate regions were the least congenial to their largest development, as both in the Arctic and in the Torrid Zone they acquire a magnitude unknown in European seas. Dr. Hooper, in "the Botany of the Arctic Expedition of Sir James Clarke Ross," gives an interesting representation of a submarine forest, formed of gigantic species of Algæ inhabiting those seas, in which the trunks of the Lessonia, which grow under water in the erect position, are from five to ten feet high, and of the thickness of a man's thigh. As another example of the magnitude to which the Sea-weed of these regions arrives, Dr. Hooper states that the Macrocystis luxurians, which grows horizontally on the surface of the ocean, ranges between 200 and 700 feet in length. In the Falkland Islands, the beach is lined for many miles with huge entangled cables of this plant, much thicker than the human body.

Mr. Landsborough gives the following account of the large accumulations of Sea-weed, which are found floating on each side of the equator, which is better known as the Gulf Weed, and which historical readers may remember had such an alarming effect upon the sailors of Christopher Columbus upon his first voyage to America, as to lead them to imagine they had arrived upon the confines of the navigable ocean, and in their despair, almost to mutiny against their immortal commander. "The Mar do

Sargasso, of the Portugese, stretches between the 18th and 32nd parallels of north latitude, and the 25th and 40th meridians of west longitude. It is often called the Grassy Sea, for in it the ocean, for several days' sailing, is literally covered with plants. Barrow mentions them in his 'Voyage to Cochin China;' and Humboldt also mentions them in his 'Personal Narrative.' The most extensive bank is near the Azores; vessels returning to Europe from Monte Video, or the Cape of Good Hope, cross it." It is composed principally of the Sargassum vulgare, and not the least remarkable circumstance connected with these huge wandering meadows of Sea-weed is, that although entirely detached from all connection with land, they continue to grow as they float about

upon the waters.

Although soil and climate, which exercise such an important influence upon land plants, may also be supposed to effect the distribution of those of the sea, their influence is much less upon the latter than upon the former; indeed, the marine Algæ possesses many peculiarities in their structure, growth, and fructification, which differ much from land plants. They are entirely composed of cellular tissue, possess no woody fibre, and are not furnished with continuous vessels of circulation, this organization being composed of detached cells, which have no common communication. This is easily demonstrated by placing part of a plant in water and exposing the remainder to the air. That immersed will remain green and fresh, whilst the exposed portion will wither and become dry. So with a dried specimen; the portion placed in water will become distended with it and assume a fresh appearance, whilst the other will continue dry as before.

The absence of woody fibre in Sea-weeds, which is so necessary to enable them to accommodate themselves to the ever-restless swell and often boisterous violence of the ocean in which they dwell (and in which they resemble those more gentle spirits who, amongst mankind, so often escape the disasters which overtake more rigid and unyielding natures, by timely bending to the blast they cannot withstand or escape from), is beautifully provided for by their All-wise Creator, who has furnished them with air-bladders, more or less profusely scattered upon their fronds and leaves, and which support them in that position best adapted for their welfare, either under or upon the surface of the water, according to their nature and the depths at which they grow. Some of these air-vessels are very large, as in the Fucus vesiculosus, others are very minute and variously arranged; but all are admirably adapted for the object they were intended to fulfil.

These air-bladders must not be confounded with other vesicles which will be found growing on the same plant in many varieties, and which in the species above named attain an equal or even a larger size. These are its seed-receptacles, and contain, in addition

to these minute germs of future plants, a thick soapy juice, which, on the seed arriving at maturity and the pods bursting, escapes in considerable quantity, covering the rocks around with its slippery mucus, and appearing to fulfil the double purpose of retaining the seeds, which might otherwise be washed away, in contact with the rocks upon which they are destined to grow, and of protecting them from the powerful rays of the autumn sun, and perhaps from the action of the water, until they are able to

bear both with impunity.

The colours of the different species of Sea-weed are very various, and their distribution is not apparently influenced by the same general laws which affect land plants; with the latter it is well known that the full light of the sun is necessary to the proper development of their colours, and in proportion to the withdrawal of its influence the plant is found to be blanched and delicate. But as regards the Sea-weeds, this order seems to be often reversed, as those are well known to acquire the deepest colours, which arrive at maturity in the deepest waters, where the light of day cannot penetrate. Humboldt mentions a Fucus of a fine grass

green colour, brought up from a depth of 192 feet.

The prevailing colours of Sea-weed are green, olive, and red. The greens are generally found in the shallowest waters; the olives in those that are deeper; and the reds at the greatest depth, though this is not a general rule. The colours of the same plant will also vary, and in apparent contradiction to the before-mentioned law of light. Thus the Ceramium rubrum loses its fine deep red colour when growing in shallow water, and becomes of a dirty white or yellow, and the Chondrus crispus, which is purple in deep water, becomes of a light green near the surface. In the general distribution of the three great varieties of colour in the Sea-weed, it has been observed, says Landsborough, that the olive preponderates in the Tropics, the red in the temperate zone, and the green in the Polar Seas.

The growth of Sea-weed is often very rapid, and in many species their decay is equally so. Like land plants, they are annual, biennial, and perennial; many of the more tender kinds are evidently annual, nay, some of these appear early in the spring,

and have passed away before the summer is far advanced.

The following interesting fact relative to the rapid growth of the Sea-weed is furnished by Dr. P. Neill, in his article on Fuci.\* The experiment was made by that celebrated civil engineer, the late Mr. Stephenson, at the request of his friend Dr. Neill, on the occasion of erecting a beacon on the Carr Rock, in the Frith of Forth, a most arduous undertaking. The Carr Rock is at the entrance of the Frith, and is about twenty feet broad by sixty feet long;

<sup>\*</sup> Edinburgh Encyclopedia.

it is uncovered only at the lowest ebb of spring tide. When operations were begun, it was covered entirely with large Sea-weeds, especially with the great Tangle, Laminaria digitata and Alaria esculenta, or Badderlocks. In the course of 1813 the workmen had cleared and levelled a considerable portion of the foundation of the building, but in the beginning of November operations were abandoned for the winter. At this time the rocks by pick and axe had been made quite bare; the Sea-weeds had been cut away, the roots trampled, and much of the rocks had been chiselled, so that the very stumps had been cleared away. On returning to the rock in May, 1814, to resume operations, it was a matter of no small surprise to find the rock as completely covered with large Sea-weeds as when they first landed upon it, though little more than six months had elapsed since they left it quite bare. In particular, it was observed that the renewed Alaria esculenta measured six feet in length, and the common Tangle two feet, both these specimens being taken from that portion of the rock which had been dressed with the pick and chisel before the workmen left in the autumn, so that they must have grown from the seed brought there floating on the waves, and grown thus rapidly during a winter which many are old enough to remember was one of the greatest severity.

Sea-weed shows a decided preference for certain kinds of rock, their growth being more luxuriant when found upon those they prefer. Limestone is a great favourite with many kinds, and where it abounds the coast is always most profusely covered with

them.

The uses to which the Sea-weed is applied are very numerous, although Dr. Johnson speaks of them as plants that are "noxious and useless." They are largely used in agriculture. In the Isle of Arran, so valuable are they, that the factor of the Duke of Hamilton assigns to each of his tenants a certain portion of the sea shore, according to the extent of his land, from which he may collect Sea-weed for manure. In Ireland it is still more valuable, and is the chief manure for thousands of acres of potato ground. In the town of Galway, boats discharge their cargoes of Sea-weed collected from Slyne Head, a place fifty or sixty miles distant, and purchasers for these cargoes often come from thirty miles inland to fetch it. According to Inglis, the collecting of Sea-weed in the Channel Islands, there called Vraic, is so important, that the seasons for cutting it are appointed by law. The same author tells us, that in these islands it is the chief article of fuel, and that it makes a hot if not a cheerful fire.

Sea-weed is employed both in Ireland and Scotland as food for man and cattle. Some kinds are much eaten by the Highlanders, though not so much as formerly, when the cry of "Dulse and Tangle" was as common in the streets of Edinburgh and Glasgow

as that of water-cresses now is in London. It was supplanted in the estimation of the Highlanders by the introduction of tobacco, a much less wholesome substitute. The Quarterly Review states that Dulse is a plant of considerable importance to the Icelanders, who prepare from it a food, which, packed in casks and kept from the air, is easily preserved, and very palatable. Cattle are also very fond of this Sea-weed, and sheep and deer seek it with so much avidity, that they are not unfrequently drowned by going too far from land in quest of it at low water; the Norwegians, therefore, call it sou-soell, which Bishop Gunner, translating into Latin, terms Fucus Ovinus, or sheep's weed. Another species of Sea-weed, Fucus vesiculosus, of which I shall have to say more hereafter, as being the plant from which the Alga Marina, or CONCENTRATED ESSENCE OF THE SEA-WEED, is principally obtained, forms a considerable part of the winter food of cattle and sheep in the Western Hebrides.

I have only space briefly to mention a few of the other edible species of Sea-weed. The well known Carrageen or Irish moss abounds on all our rocky shores, and from it the Irish make a particularly light and nourishing food, especially adapted for invalids. There is a Sea-weed which is now imported from China, the native name of which is Agal-Agal, that is a still greater dainty than the Irish moss. It is stated in "The Voyage of H. M. S. Samarang," that the celebrated edible swallows' nests, which are regarded as such a luxury in China as to sell for their weight in gold, are composed principally of this species of Sea-weed. Porphyra is much used for culinary purposes in England, under the name of Laver, in Ireland as Sloke, and in Scotland as Slaak. makes a most wholesome and very palatable dish, which latter is perhaps more than English bon-vivans would say of some of the other species; with the aid of good condiments and a good appetite, however, perhaps all may be made passable, verifying, as Mr. Landsborough observes, the good old Scotch proverb, "If you boil stanes in butter you may sup the broo."

The contributions of Sea-weed to the fine arts are as yet but few, more, I am disposed to think, from a want of research in that direction, than from a want of capability in the article. It forms a considerable article of commerce in China, particularly in the northern provinces of Chinchew. A kind of gum is sent from these parts to Canton, from which their celebrated lanterns are made in the following manner: over a framework of gauze this gum is spread, and when dry it resembles a very fine transparent horn. It is, however, very brittle, cracking even under slight deviations of temperature. It possesses one advantage, that of being unpalatable to insects and worms.

This species of Sea-weed has been tried at Glasgow lately, by the manufacturers of webs, as a substitute for sago flour, in the stiffening of their articles, for which it seems to be well fitted. Dr. Greville mentions a variety of the British Sea-weed, which was at one time used in Ireland as a substitute for size in the manufacture of paper; and Dr. Stenhouse has produced from another kind, Laminaria saccharina, the substance mannite, which is the characteristic principle of manna, from which he has manufactured an

article as purely white as loaf-sugar, and almost as sweet.

In a commercial view, the British Sea-weed was at one period an article of national importance, on account of the kelp which was made from it, and so much employed in the soap and glass manufactures. Of late years, kelp has been superseded in these manufactures by the importation of barilla, which, since the duty upon it has been taken off, has reduced the price of kelp from £22 to £2 per ton, and rendered its manufacture for these purposes unremunerative. It is now almost solely manufactured for the iodine which it contains, and for which purpose 3,000 tons a year are worked up in Glasgow alone by upwards of twenty establishments. This article (iodine), which is contained in all the varieties of Sea-weed, and to which it is now well known most of their medicinal powers are to be ascribed, is a drug at once the most powerful and uncertain in its effects of any in medicine, and the evil as well as good effects of which render it a dangerous remedy at all times. It will be presently shown that one of the most valuable results of the discovery of the virtues of the ALGA MARINA, OR CONCENTRATED ESSENCE OF THE SEA-WEED, is that it places at our command a form of using the principle of iodine in its natural, and therefore perfectly safe and efficient state, which, whilst even the most scientific will find it to be entirely effective in the cure of disease, the most ignorant may use without the risk or possibility of abusing.

The vapour of iodine is also largely used in the process of daguer-

rectype and calotype likeness-taking.

The space allotted to this part of my task being exhausted, I must not enlarge further upon a subject, in itself so deeply interesting, but proceed to the more immediate object of this pamphlet, An Account of the Medical Virtues of the Alga Marina, the name which I have given to a concentrated essence made from the juice of the Sea-weed. I trust, however, that I have succeeded in interesting my readers in my subject sufficiently to induce them to turn their attention to this hitherto neglected branch of botany, and thus to open to themselves a new and exhaustless source of gratification, whilst they rescue themselves from the charge of neglecting a very important and beautiful portion of their Almighty Creator's bounty; a charge which not half a century ago might have been made even against the occupants of academic chairs. "We have heard," says Mr. Landsborough, "of a student about that period, who, having collected some beautiful Algæ on

the shore, showed the contents of his vasculum to the Professor of Botany, whose lectures he attended, expressing a wish to get some information respecting them. The Professor looked at them, and putting on his spectacles, again looked at them, when, pushing them from him, he exclaimed, 'Pooh! a parcel of Sea-weeds, sir, a parcel of Sea-weeds!'"

## PART II.

THE following pages are not written for the purpose of advocating the merits of a new remedy, nor are they intended to advertise

the discovery of a new method of treating disease.

The medical virtues of several varieties of the Sea-weed were known in very ancient times, as we find by the writings of many eminent men; and we are told that one of the generic names of the plant, "Fucus," was given to the species in consequence of their well-known power of deterging or dispersing swellings. A different derivation is, however, given to this word by Mr. Landsborough, who states that the Latin word "Fucus" is derived from a Greek name given to Sea-weed, and signifying "paint," probably

referring to the beautiful colours in some of the species.

The ancients mention several sorts of Alga or Sea Wrack. Nicander states the Alga fæniculata was esteemed good against the sting of the scorpion; a connection with which belief may be traced to the present custom of our fishermen, who, when stung by the Pastinaca marina, apply the same species of Alga to the swelling to assuage the pain and to disperse the tumour. Garidelicis informs us, that the inhabitants of Provence applied the weed to bruises to disperse the contusion. Pliny states that it was used in his time in cases of accident, and for the dispersion of swellings. Other ancient writers recommend the Sea-weed to dissolve tumours; and Dioscorides, who flourished about the time of Vespasian, recommends its use in gout and rheumatism.

It is a remarkable fact that the ancients derived almost all their remedies for diseases of the Glands from the sea; it deserves notice, for we may naturally suppose that their known virtues were the causes of their being almost universally used, especially as the practice of the ancients was not founded upon any particular hypothesis, but was rather derived from that mistress of all

art, experience.

From these ancient times to the present, the juice of the Seaweed has maintained a certain degree of celebrity as a remedy in Glandular diseases, and in general and local Debility, at one time being highly extolled, and again sinking into neglect on account of the difficulties attending its use, but never entirely losing its good name, and still continuing to be used to some extent by the

bathing women and nurses at most watering-places.

Nor is it in this country alone that the Sea-weed has maintained its ancient celebrity, for whilst, according to Dr. Neill, there is a common saying in Stronza, that "he who eats of the Dulse of Guerdie and drinks of the wells of Kildingie, will escape all maladies except black death," the inhabitants of the Alps, who are afflicted with Goitre, a disease consisting of an enlargement of the glands of the neck, chew the stem of a particular species, which they carry about with them, as a remedy; the Chinese and the inhabitants of Borneo manufacture from it several varieties of delicate food adapted for invalids; the North American Indians burn it to ashes, with which they cure swellings of the Glands; and the Siamese have so great an esteem for it, that they mix it with their famous areca, which they are almost continually chewing.

In the year 1752, a very interesting work, written in Latin, was published by Dr. Richard Russel, entitled "A Dissertation on the Use of the Quercus Marina, or Sea Wrack, in Diseases of the Glands;" and as this well-known physician bestowed great pains and deep attention upon the subject, and was likewise eminently successful in his treatment of many diseases with this remedy, even under all the difficulties which he acknowledges to have attended its use, and more especially as I have submitted all he has written on the subject to the test of careful experiment, with the most satisfactory conviction of its accuracy, I shall transcribe his opinions and experience in illustration of the virtues of the juice

of the Sea-weed in corroboration of my own.

In explanation of his reasons for publishing his work, he says:
"As some persons, perhaps, will be desirous of knowing how I came first to take notice of this medicine, and upon what authorities I was induced to apply my studies to discover its use, I shall

add a few lines upon this matter.

"In the first place, I had long since observed that the inhabitants of the sea-coast made use of it in disorders of the Glands, etc. I also found that Dioscorides employed a whole chapter in reciting its virtues, and that other ancient authors recommended it; and these circumstances pointed out some extraordinary observations of its virtues, which led the way to these diligent inquiries; besides, I had experienced its virtues in many disorders, and resolved to try its effects in others, and I presently found it was an excellent medicine in all disorders of the Glands. Afterwards, in 1730, I read a book entitled 'The Domestic Companion,' which advises its use, and commends it; and, lastly, some years ago, having some conversation with Mr. Webb, an excellent surgeon,\* and who had

<sup>\*</sup> Mr. Webb was a well-known surgeon in London at this period, attached to several public institutions, and in extensive practice.

tried the virtues of this medicine, he pressed me to try further

and consider it more accurately.

"And these are the reasons and authorities which first led me to use the medicine, and afterwards confirmed me in the knowledge of its virtues; and indeed I have employed much labour, study, and diligence in this matter, in repeating various and almost infinite experiments."

The conclusion at which he arrives, as the result of his expe-

rience, he thus sums up:-

"Nature herself supplies us with the best medicine for dissolving Tumours, and restoring the strength of debilitated parts, in the Quercus Marina, or Sea Wrack, at one season of the year; for in July this plant bears a certain soapy juice, and nothing exceeds this in the removal of Tumours, for it disperses all hardnesses, etc.; and I persuade parents to rub the necks of children with moist Sea-weed, upon the growth of Tumours and enlargement of Glands, for nothing, as far as I can judge, is so beneficial."

Again: "There is no other medicine that I could ever discover which may be safely continued for so long a time, nor that cleanses and relieves the obstructed tubes so well, for it has a certain soapy quality as powerful as the saline, which cleanses and disperses those viscid humours which stop and obstruct the mouths of the cutaneous vessels, and successfully stimulates them to perform their proper

offices, and to preserve a healthy state."

And again: "It would be unjust in me to pass by the use of this method in a Bronchocele, because it is here of the greatest service; and whilst I was writing this, I received a letter from my learned friend Dr. Lee, which confirms my experience. 'I have known,' says he, 'a Bronchocele which was fixed many years, so that the breathing was greatly affected thereby, either by

speaking or moving, cured by this remedy."

Dr. Russel concludes with the following observations:—"Unless the patient has resolution to continue this method of treatment a proper time, so as to finish the cure, it is very probable that, upon a return of a new plenitude of humours, the disorder may be renewed; for the glands being weakened by the former disease, have as yet but little strength to resist a new fluxion. I must acknowledge there is often required some constancy and resolution to support the tediousness of a cure, but I think it is better to bear this, than suffer from a languishing malady. Experience shows that in all those cases which properly belong to the medical art, the physician seldom wants success but when the patient wants constancy."

The success which attended the use of the juice of the Sea-weed, by Dr. Russel, and his friends, was, however, greatly circumscribed and for the greater part of the year, wholly interrupted by two important difficulties, which have, from that period to the present time, proved insurmountable; and to which alone is to be ascribed the fact of the remedy not having maintained the fame it acquired

in the hands of that celebrated physician.

The first of these difficulties is caused by the rapidity with which fermentation and decomposition of the Sea-weed and its juices take place, and which so entirely alter its nature as to convert, even in a few days, that which was a bland, saponaceous, and fragrant alkaline liquid, into an acrid, irritating, and disgusting matter. Its preservation has been thus rendered impossible, even for a short period, without loss of its medicinal qualities, and persons residing at even a short distance from the localities where it is obtainable have been prevented from using it, unless during a limited stay at the sea-side, whilst the many thousands who dwell further inland, and who are from various circumstances prevented from leaving their homes, are still quite unacquainted withits virtues, or at least are debarred from all benefit from them.

Again, the very diluted state in which the juices exist in the weed, in consequence of the free mixture with sea-water and other impurities, renders so large a quantity necessary to be used for producing any great benefit, that these two causes combining to confine its use to a daily collection of it at the sea-side, and to a very troublesome and disagreeable mode of application, have procured for it but a languid popularity even under the most favourable circumstances of time and place, when compared with

its real merits as a remedy for disease.

Numerous experiments, which he describes at great length, were undertaken by Dr. Russel for the purpose of discovering a method of preserving the "soapy juice" pure and bland throughout the year, which he used so successfully in the month of July, but they were not attended with that success which he so ardently desired, and he was obliged to confess his failure, and to confine his use and recommendation of the juice of the Sea-weed to "that season of the year" when alone it was to be obtained in perfection from the recent plant.

It is for the discovery of a means of overcoming these two evils in the preparation of the Alga Marina, that the author alone claims any merit, having, after much time and labour bestowed upon the subject, succeeded even beyond his expectation in thoroughly accomplishing this important object, rendering the juice of the Sea-weed available to all persons at all seasons, and all localities, whenever and wherever its beneficial aid is required

in the cure of disease.

In this process concentration is a natural result, and the strength of the essence will always be found to exist in proportion to its purity.

It need scarcely be remarked how much this quality must increase the efficacy of the medicine, and render it a still more

excellent and certain remedy for a large class of diseases which have hitherto been generally considered to be without the pale of successful treatment.

The Alga Marina, or Concentrated Essence of the Seaweed, is a bright transparent liquid, of a rich colour in the bottle, though colourless upon the skin when used. It will keep well for any length of time and in any climate, and retains the peculiar aroma of the Sea-weed in all its freshness, a perfume which cannot be mistaken by those who have once inhaled the healthful and refreshing breeze impregnated with it, amongst its native rocks. It is quite stainless both to the skin and linen, and its peculiar soapy nature renders it a most agreeable application, which greatly facilitates friction, and renders the skin soft and white.

We will now proceed to enumerate some of the numerous affections for which the Alga Marina has been proved to be a most invaluable remedy. The first and most important of its

merits being that

### IT IS A PERFECT SUBSTITUTE FOR IODINE.

This powerful drug, which was accidentally discovered by a French chemist whilst manufacturing soda from the Sea-weed, is now generally known to contain the concentrated medicinal qualities of all the old remedies which were found to be beneficial in that class of diseases for which it is employed, such as Scrofula, Glandular enlargements, etc., etc., and for which sea-bathing, burnt-sponge, etc., had been previously prescribed. But although its power over these diseases is doubtless very great, yet their removal by its means are so often accomplished at the sacrifice of the constitution and to the serious injury of the general health, not to mention the local injuries which it has been known to produce, as to have occasioned, even amongst the unprofessional public, a general and not unfounded dread of its use, which is daily becoming more widely spread. It has been found, in fact, that what has been gained by the concentration has been more than counterbalanced by the loss of those controlling agents which exist with it in the original combination from which this active principle is extracted, and that the very dilution to which in its natural state Iodine is subjected, is its most valuable quality as a medicine, and alone renders its administration safe.

The author at one time largely used this drug, and his experience of its good and bad effects has been great, the former having been so evident as to have rendered his regret at the frequency of the latter the greater, and to have induced him to study the subject with deep interest, for the purpose of endeavouring to ascertain the causes of its being so uncertain and dangerous a remedy. His researches were commenced some years ago, and

they soon taught him this great truth—that Nature, in all her ways and in all her gifts, is no less perfect than she is bountiful, and that it is only when man's imperfect knowledge and boasted science are brought to interfere with her laws, that imperfection and uncertainty are found to have taken the place of order and regularity.

Armed with this knowledge, he was led to retrace the chemist's steps, and to seek at the fountain-head for that good without alloy, which was not to be found in the crucible or the retort. Here he found it in the language of Dr. Russel, prepared by the hand of nature herself. His experiments taught him that the Sea-weed from which Iodine is formed, is the best form for administering Iodine.

By a singular coincidence, the views here advocated respecting the use of the Alga Marina as a substitute for Iodine in external diseases, have received the most ample confirmation by the revival, almost simultaneously, of a long-neglected internal remedy for the same class of diseases, which is daily becoming more celebrated, and which owes its entire beneficial influence to the same combination of its principal component parts. This remedy is—

### COD LIVER OIL.

A very careful analysis has proved that the composition of Cod Liver Oil and of the Alga Marina are as closely allied as it is possible for an animal and a vegetable production to be, and that each is peculiarly adapted for producing the same medicinal effects upon the human constitution, the one as an internal, and the other as an external remedy. The most important active principles in each are Iodine and Bromine, and these principles are similarly assimilated and diffused throughout each, being incorporated in the one case with a bland and powerfully nutrient animal oil, which renders the Cod Liver Oil so successful a remedy for all internal diseases of a scrofulous or otherwise debilitating nature; and in the other, with an equally powerful and peculiar vegetable mucilage, the soapy nature of which pre-eminently adapts the Alga Marina for an external application in the same class of diseases.

Armed with these two kindred remedies, there is no disease, either external or internal, for which that dangerous drug Iodine has heretofore been given, which may not now, with ease and perfect safety, be cured without having recourse to it; and as those states of the constitution for which the Cod Liver Oil is generally prescribed are always combined with more or less of local Debility, weakness of the Joints and Limbs, enlargements of the Glands, either of the throat, neck, or abdomen, Tumours, Contractions, and similar affections, there are no cases in which

the two remedies are not calculated mutually to assist each other, and by being combined, they are rendered doubly beneficial and certain of success.

The limits of a pamphlet will not admit of more than an allusion to a few of the most important diseases for which the Alga Marina has been found not only beneficial, but pre-eminent; amongst these must be classed—

### RHEUMATISM AND RHEUMATIC GOUT.

It will be seen from what has been already stated, that the juice of the Sea-weed was known to the ancients as a remedy for Rheumatism and Gout, and was used by them for that purpose. The great obstacle to its extensive application, its not keeping, probably caused it to be gradually neglected, and at length almost forgotten in the treatment of these diseases, although it never quite ceased to be recommended by those who, in favourable localities, were able to test its virtues.

Some years ago, a French physician visited this country for the purpose of introducing to the English faculty the juice of the Sea-weed which he had found to be eminently successful as a remedy for Rheumatism and Gout, both acute and chronic; he met with so little encouragement, however, from the medical gentlemen whom he consulted, that he abandoned his design of bringing it before the public, and thus another opportunity

was lost of confering a great boon upon mankind.

From the nature of the author's practice, his experience of the medical virtues of the Alga Marina was, previous to his making it public, principally confined to those cases of Glandular diseases, Deformities, Paralysis, and General Debility, for which he is so much consulted by the public; and as he was so anxious to avoid the suspicion of undue partiality in promulgating his remedy for these complaints, he contented himself with stating his own experience only of the remedy in Rheumatism and Gout, which was necessarily limited when the earlier editions of this pamphlet were written.

The feeling of surprise and gratification which the author experienced may therefore be easily imagined, when such letters as the

following began to pour in upon him,

"Sir,—I am a poor British seaman, and have been an unfortunate cripple from that dreadful malady, Rheumatic Gout, or inflammatory Rheumatism, all over my frame, for the last ten years, entirely unable to provide for myself or family. I have been discharged from St.Bartholomew's Hospital as incurable, and given up by the Doctors of the Royal Dispensary in Aldersgate-street. For the last fifteen months I have been confined to my bed, unable to put my foot to the ground. In this truly miserable condition, I read a pamphlet on the medical virtues of COLES'S

ALGA MARINA, a Concentrated Essence of the Sea-weed, and was, strongly recommended by a number of persons to make a trial of the same. I now beg leave respectfully to inform you that your ALGA MARINA is worth its weight in gold! I assure you, Sir, that it has made a new man of me already. I can now set up and take my food with comfort, which I have not been able to do for many months before, and I can again stand upon my feet, whereas, before, I did not dare to set my foot to the floor for pain. I rub the whole of my frame with the ALGA MARINA, and I cannot describe the comfort that I feel from it after well rubbing. I feel confident that it will soon restore me entirely to health again. I am, Sir, your most grateful and very humble servant, "WILLIAM HUNT."

This poor fellow's expectations were fully realized, and his disease entirely cured. Since then, public experience has fully developed the efficacy of the remedy, and brought to light its wonderful powers over these hitherto unmanageable, because improperly treated, diseases.

The following short explanation will render its mode of action, and its superiority over all other remedies, hitherto known,

apparent to the intelligent reader.

The pain, redness, and swelling of Rheumatism, or Rheumatic Gout, are the results of inflammation; this inflammation, however, is not the disease, but only a consequence of it—the real disease is Debility. This debility most frequently commences in the digestive organs, and the local suffering is preceded usually by

derangement of the stomach or liver.

The minute network of blood-vessels which cover the whole surface of the body, and which are called the capillaries, are endowed in a state of health with a peculiar power of contraction, which enables them to resist the impetus communicated to the blood by the beating of the heart and arteries, and to regulate its passage through them in such a manner as to prevent them becoming overloaded, and injuriously distended. This power is dependent upon a healthy state of the digestive organs, and can only exist so long as the stomach discharges its proper functions. In this manner, then, in a rheumatic or gouty person, the capillary vessels in one or more of the extremities or larger joints being deprived of their healthy power of contraction, become relaxed and distended with blood, which is no longer carried forward into the veins with sufficient velocity. Swelling from distention, redness and heat from the quantity of blood accumulated, and pain from the pressure thus made upon the nerves of the part, in short inflammation is the result.

Now, how does the physician proceed to remedy this state of things internally? Does he attempt to cure the debility in the stomach by the use of brandy or other stimulants?. Certainly not. His remedies are tonics, not stimulants. Bark, quinine, colchicum, &c., &c., are resorted to, and generally, so far as the internal de-

bility is concerned, with success; but this is not enough. It is necessary, by local or external means, to cure the local disease, which, be it always remembered, is also debility, and here commences the anomaly in the physician's treatment of Rheumatism and Rheumatic Gout.

All the external applications hitherto employed for the cure of these diseases are stimulants, and some of them very powerful ones. The camphor liniment, spirituous embrocations, and irritating ointments of the medical man, are imitated by the essences, balsams, and medicated creams of the chemist, and the like unsatisfactory results have attended the use of all. The only effect obtainable by this class of remedies, and the friction that accompanies them, is that of partially emptying the overloaded capillary vessels of the blood already accumulated in them, and thus procuring temporary relief from the pain which its distention caused. But they exercise no tonic influence upon the vessels themselves. They do not restore to them their own healthy power of contraction, whereby they would be able to resist the impetus of the blood continually flowing into them, and which in undue quantity again quickly distends their debilitated and delicate textures. Thus, though temporary relief is obtained, no permanent cure is effected, the parts again become swollen, red, and painful, and, at length, the patient most probably abandons all remedies in despair, and his disease is pronounced, both by himself and his medical attendant, to be incurable, only because no proper remedy has been applied for its removal.

Now this proper and most invaluable remedy is at length brought to light in the Alga Marina; its mode of action is not stimulant, but powerfully tonic. When applied to the diseased part it is immediately conveyed by the absorbents to the capillary vessels, upon which its action is powerful and permanent, it restores them to health by reviving their own natural contractile powers, and thus the equilibrium of the parts is restored, and a cure promptly effected.

The following letter will illustrate this explanation, as well as show the power of the Alga Marina in another class of diseases where a like result is necessary to a perfect cure.

THE CAFFRE WAR AT THE CAPE.—Extract of a letter from an Officer.

"Your timely present of Coles's Alga Marina has proved quite a Godsend here. The Rheumatism had so increased since my last, from constant exposure, that I suffered agony day and night, and was about to invalid, being quite helpless. Three days' use of the Essence has entirely set me up, and I am now as well as ever. In our last affair at Waterkloof, Serjeant - came hand to hand with a black fellow, who tried hard to master his weapon; in the struggle, the serjeant received a severe strain in his wrist, which gave him intense pain, and rendered

his arm useless: it was becoming daily worse, when I sent him the remains of my first bottle; within a week, he was again on duty, and his wrist as sound as the other. I have been quite besieged since by applicants for the Essence, but I have handed it over to our doctor, who is so much pleased with it, that he intends applying to head-quarters for a good supply."

In this officer's case, no doubt all the usual remedies had been employed under the direction of an experienced army surgeon; they were doubtless all stimulants, and they all failed; but no sooner was the tonic application resorted to, than a cure, alike

prompt and permanent, was effected.

The sergeant's strain was cured by the same agency, the powerful effect of the tonic Alga Marina accomplished that which all the stimulants in the medicine chest failed to effect, and such will always continue to be the result of the use of these two opposite remedies.

One parting word of advice the author would here offer to all

sufferers.

There is no remedy in existence, nor ever will be, which will cure every case of disease; some there must be which are beyond the reach of medicine, and for such the Alga Marina possesses no supernatural power. It is the fate of the most celebrated remedies to be oftenest used in the most hopeless cases, and hence their failure in one case is not unfrequently brought forward as an argument against their use in another. This is as unreasonable as it is unwise, on the part of both adviser and sufferer, and the following case will, it is hoped, prevent the reader from

falling into a similar error.

A lady residing in the country, who has great experience of the efficacy of the Alga Marina in the cure of Rheumatism, had occasion to change her cook; a few mornings after the new servant. had arrived, she was unable to leave her bed from acute rheumatism in her feet and ankles, and which quickly extended to the whole of the lower extremities; on inquiring, she confessed that she had been thus suffering for a long time, sometimes being better, and able to get about, and at other times confined to her bed; her mistress immediately advised her to use the Alga Marina, and supplied her with some from her own store for the purpose. The cook, however, on seeing the bottle, declined to use it, saying she knew from experience, that it would do her no good. On further inquiring, she acknowledged that she had never tried it. upon herself, but that her last mistress, who was a very old lady, and had suffered from the same disease for many years, had used great quantities of the Alga Marina; it had certainly, she said, afforded temporary relief to her mistress when ever she used it, but the complaint was always returning, and she had therefore no faith in the remedy. Her new mistress then proposed sending

her to an hospital; this induced the woman to yield, and to beg for a trial of the Alga Marina first. The lady, thus circumstanced, was resolved to give the remedy fair play, and herself superintended its application. It was at once well rubbed into the affected parts by a fellow-servant, and this was again repeated at bedtime. On the following morning, the cook was up and at her work, and as loud in praise of the Alga Marina as she had previously been prejudiced against it. A few more applications, which she was now most eager to have recourse to, entirely cured her, and she has had no return of the disease now for many months.

I will only add that I am authorized to give this lady's address to any one wishing to have the case corroborated.

#### SCROFULA.

This disease shows itself in a great variety of forms in this country, and is in reality the basis of the greater part of those affections which will be here enumerated. It generally makes its appearance in childhood, or before puberty; in the former cases, its most prominent and frequent symptoms are swelling and suppuration of the glands in various parts of the body, and in the

latter its most fatal is pulmonary consumption.

The Cod Liver Oil is now considered the most efficacious internal remedy for scrofulous affections, and the external use of the Alga Marina is equally beneficial and important. The mode of applying it depends upon the nature and seat of the disease, and will be described immediately. It may be here remarked, however, that its general effects are the same as those produced by Sea-air and Sea-bathing, which from the time of the celebrated Cullen to the present have been universally prescribed for these diseases; and that its local influence resembles that of Iodine,

without its dangerous consequences.

But although the Cod Liver Oil is here recommended in combination with the external use of the Alga Marina in the more aggravated forms of Scrofula, there exists a very large number of diseases which can be cured by the Alga Marina, without the necessity of taking any internal medicines; such are all cases of WEAKNESS, whether of the BACK, CHEST, LIMBS, Or JOINTS, in YOUNG CHILDREN OF ADULTS, and which, in the former, are so often the forerunners of DEFORMITIES OF CONSUMPTION, and in the latter, of PARALYSIS OF CONTRACTIONS. All those DEFORMITIES OF CONTRACTIONS themselves, PARALYSIS of the LIMBS OF Of the WHOLE BODY, CURVATURES of the SPINE OF Of the EXTREMITIES. Those DEFORMITIES of the JOINTS with which INFANTS ARE SO OFTEN BORN, such as the TURNING IN OR OUT OF THE ANKLES OF WRISTS, and which, if not removed at the time, always become permanent; all CONTRACTIONS of the MUSCLES OF TENDONS, whether in the young

or old cicatrixes and callosities, swellings, etc. In all which the application of the Alga Marina alone, accompanied by vigorous friction as directed on the bottles, will, when human means can avail, effect a cure.

For all enlargements, whether of the glands or bones, bronchocele, swellings of the neck and face, mumps, tumours, dropsy of the joints, housemaid's knee, nodes, concretions, chalkstones, and other morbid growths, the Alga Marina

should be applied in the following manner:

The usual quantity being rubbed into the part twice a day, as before directed, the enlargement should be afterwards enveloped in linen soaked with the Essence, or a Poultice made with the Alga Marina mixed with meal or bran, should be applied and continued night and day, as the most expeditious means of removing the disease; but when this is inconvenient, the poultice

should invariably be applied at night.

After the subsidence of the first inflammation which follows strains or bruises, great weakness in the part is the most difficult symptom to remove. For this, the Alga Marina is the most powerful remedy, bracing up the relaxed ligaments, and imparting vigour to the muscles and tendons. In this way it also restores the use and strength of joints weakened by attacks of rheumatism and gout, and protects them from danger of a relapse.

In these and similar cases, it should be rubbed into the part as before directed, and the joint should be afterwards enveloped in flannel. As the STRENGTH INCREASES, the weakened solution, as directed below, should be first poured upon the part from a jug

held at some distance, previous to the rubbing.

Applied hot, as a poultice or fomentation, it allays pain, and is the best application for BRUISES or STRAINS on their first occurrence, as well as for INFLAMED GLANDS, and all PAINFUL SWELLINGS.

Mixed with water, in the proportions of one ounce to a Quart, it makes an excellent local bath, equal to Sea-water; for which it may be substituted in cases of GENERAL DEBILITY; and in these proportions it is an excellent STRENGTHENER, poured upon the BACK or LIMBS of WEAKLY CHILDREN from a jug or (what is still better) from a small watering-pot with a fine rose, which makes a convenient local shower-bath.

In conclusion, it is only necessary to add that it is applicable in one or other of these forms for all that large class of diseases for which the sea-side is usually prescribed. Possessing within itself all the virtues for which these localities are sought, it may be employed as a substitute in an almost endless variety of ways which will present themselves to an intelligent mind, but which it would be tedious, and exceed the limits of this pamphlet, to enumerate further.

## TESTIMONIALS

IN FAVOUR OF

## COLES'S ALGA MARINA.

LADY ELIZABETH TUFTON presents her compliments to Mr. Coles, and is able to testify to the great benefit which Coles's Alga Marina has been to the bearer, William Sloman; he had not the use of his limbs till Mr. Coles prescribed for him; since his complete recovery, Lady E. T. wants, if able, to get him out apprentice. Should Mr. Coles be out he will call again to-morrow.

11, Great Cumberland Street, 10th August, 1848.

From Mr. William Piper, Publisher, Paternoster Row, London.

Having been for some time (about six months) suffering severely from Rheumatism, and having taken a variety of medicines and used several kinds of liniments without any good effects, I was induced, through reading a Pamphlet upon the medical virtues of Coles's Alga Marina, a Concentrated Essence of the Sea Weed, to try some of it in my own case; and in justice to that remedy, I have much pleasure in testifying, that after using it for only a few times all pain left me, and I am now entirely recovered.

23, Paternoster Row. (Signed) WILLIAM PIPER.

Chronic Rheumatism completely cured by the use of Coles's Alga Marina.

Teignbridge House, near Newton Abbott, Devon, May 1st, 1855.

Sir,—After suffering for more than seven years from Chronic Rheumatism, and having tried numerous remedies with little benefit, I was induced to try Coles's Alga Marina, and after applying it as directed for about six weeks, I was relieved, and in a short time quite free from pain. I have allowed more than a year to pass, and not felt the least return of my previous sufferings. I think it right you should know of this perfect cure. You are at liberty to add this testimony of the benefit of your preparation. I am, Sir, yours faithfully, James Coles, Esq. (Signed) JOHN WINTER.

To Mr. Keating.

Dear Sir,—I cannot refrain from informing you of the benefit I have received from the use of Coles's Alga Marina. Having some time suffered severely from Rheumatism, I procured about a month since, at your establishment, a bottle of the Essence, applied it at once, and have not since had the slightest recurrence of my distressing pains. Wishing you every success, I am, dear Sir, yours truly,

THOMAS DENNIS.

Grange Road, Bermondsey, 20th Feb., 1851.

To Mr. Keating.

Dear Sir,—I have much satisfaction in certifying to the great benefit my little boy has derived from the use of Coles's Alga Marina. He had been for a long time suffering from great Weakness in the Lower Limbs, accompanied with Curvature of the Bones, &c., from which he is now entirely restored by the use of this excellent remedy.

(Signed) E. ST. JOHN.

Claremont Place, Pentonville, March 26, 1851.

