

way, accuracy of knowledge will be insured for the student, and for the tutor experience in the art of teaching. At the end of two years, if his examinations are satisfactory, the student may be allowed to commence the study of the art of medicine. During the next two years instruction by recitation should be continued by the tutorial staff, while the professors of each department should confine themselves chiefly to the supervising of the work of their subordinates, and to clinical instruction of their classes in the clinical amphitheater or at the bedside. At the end of the third year the qualifications of the class should be fully ascertained, and no one should be permitted to enter the graduating class in the fourth year until he has given satisfactory evidence of sufficient preparation for such candidacy. In this way it will become possible to avoid many of the ruinous disappointments which now occur, when all sorts of loose fish are coaxed into the graduating net only to be rejected at the final examination. The sifting of students should precede their matriculation, and should be continued during the whole of their course, instead of being postponed till the final examination, leaving the unfortunate dullard in ignorance of his fate till time and money have irrevocably vanished, with nothing to show in exchange for the sacrifice.

A REMINISCENCE OF THE NICARAGUAN FILIBUSTERS.

BY L. C. LANE, M.D.

SAN FRANCISCO.

Acceptó con gusto la leche, queso y pan de maíz que le ofrecieron: mientras él devoraba estos manjares, ocupado esclusivamente en satisfacer la primera necesidad de la naturaleza, no se caraba de modo alguno de sus discursos.

(He accepted with pleasure the milk, corn bread and cheese which they offered him, and while he ate this food, occupied wholly in satisfying the first wants of nature, he took no heed of their discourse.)—From Campo Alange's *Novela*: "Pamplona y Elizondo."

When an Assistant Surgeon in the United States Navy, in 1858, and connected with the sloop of war *Decatur*, the writer was on the western coast of Central America, at the close of General Walker's invasion of Nicaragua. The older reader will remember this freebooting expedition, which was composed of bold, reckless, fearless and unscrupulous fortune hunters; and whose operations, as was evident to the writer, had the sanction of President Buchanan's administration, and the aid of the Navy, as far as it was possible to go without arousing international suspicions. And in this movement the sloops of war *Decatur* and *St. Mary*, and frigate *Merrimac*, so famous afterward in the Confederate service, quietly acted their respective parts. These vessels were moving from port to port for the purpose of aiding or protecting Americans who might be found in distress.

On the arrival of the *Decatur* at Punta Arenas, the Pacific port of Costa Rica, our commander was informed that a body of American filibusters, who had been conquered by the Costa Ricans, were held as prisoners at that place. These men were young; few of them had reached the age of 30 years; they were half naked and of cadaverous paleness, for in their blood, to an undue measure, the leucocyte had replaced the red globule. As prisoners, they were fed by the Costa Rican Government; and for this purpose were provided for in the manner which the robber would usually receive from him whom he

had failed to rob, viz.: they were each given a dime a day with which a sufficiency of bread, bananas and plantains could be purchased to stave off, or rather prolong, starvation. And as dessert, each evening their eyes feasted on a sunset picture unequaled by nature or painter in Italy. It is probable that in that scene of sublimity, cloud-forms tinted with opal, amber and rose, did little towards appeasing the fierce qualms which tormented those starvelings.

The predominating diseases of these men, apart from numerous minor lesions received in sacrificing to Venus, were malarial fever and an ulcer of peculiar and unusual characteristics.

The fever was of remittent or intermittent type, and was much milder in form than that which occurs at the North in the robust subject who has been exposed to malarial influence. From the writer's observation every white immigrant from the temperate zone to Central America soon fell a victim to this fever. After a few years' residence there they became emaciated, bloodless and spiritless. A few succumbed at once and died soon after arriving in the country. A Minister to Guatemala from the United States died in two weeks after reaching his destination. To live there the Northerner must be provided with quinin, and from time to time, take enough to counterpoise the malarial poison with which he is becoming saturated.

The ulcers with which the filibusters were affected were seated chiefly on the arms and legs, and their causation and commencement were to be found in some lesion which was of a trivial nature; for example, the prick of a thorn, the bite of an insect, and in a few cases the wound had arisen from a knife-thrust or gunshot missile. In the Central American forest one encounters at every step trailing vines and shrubs which are armed with small spines or thorns, the contact with which lacerates the skin. And in these men such wounds quickly enlarged, and assumed the form of an unhealing ulcer.

These ulcers presented characters which the writer has not seen elsewhere. They consisted of half-formed tissue which, in the exuberance of its growth rose two or three lines above the adjacent surface. They were of a pale yellow color, and so non-vascular that when touched they did not bleed. This pseudo-formation differed widely from any form of granulative tissue, and in appearance it resembled a thick emulsion rather than an organized animal tissue. In fact, it was a new type of structure, so low in organization that it was the analogue of a fungoid plant, and was no more sentient than the latter. This fungoid neoplasm had arisen in the human body that was saturated with malarial poison, half starved and living on a non-nitrogenous food.

The commander of the *Decatur* gave orders that a few of these men who were in the worst condition should be taken on board and cared for. A small number were selected, and were given treatment. Little was done except to place them on the man-of-war's rations, and under this improved regimen, and simple cleanliness, the ulcers vanished like magic. These cases afford an illustration that food and not medicine may give health to the sick, reversing the initial sentence of Celsus.

Of the men who were left ashore in Punta Arenas, a considerable company took a large boat and came alongside of the *Decatur*, hoping thus they would

also be received. When denied permission, these men indulged in profane comments against our commander and the United States, in the form of studied curses which would have shocked even ears which had become obtuse to marine blasphemy. Volleys of imprecations were heard which reverberated back from the neighboring Cordilleras; and, borrowing the words of the Homeric Muse, they resembled that shout

"That moved Heaven's concave and above
Shook the fixed splendors of the throne of Jove."

Or perhaps their action were better expressed in the words of Virgil's suppliant: "*Flectere si nequeo superos. Acheronto movebo.*"—(If I can not move heaven I will try hell.)

The men who remained at Punta Arenas, after a longer or shorter sojourn, either died or managed to escape, and in their invasion of Nicaragua they learned, or taught others, the lesson of the embarrassment which may beset the attempt to conquer a Central American republic; and that the latter, though weak in military resources, has numerous other allies in the pricking thorn, the stinging ant, the chigoe, the vertical sun-ray, and of potency equal to these, the atypical ulcer and the microphyte of malarial poison

TREATMENT OF SEA SICKNESS.

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SEA VOYAGES.

Sea life is not new to me. I commenced my professional career by acting for nearly two years as Surgeon in the Peninsular and Oriental Company's service, and my autumnal holiday since then has never appeared to me to be satisfactory or complete, unless part of it has been spent on board ship.

I never was seasick. I love the sea in its calm and pleasant mood, when the waves lazily lap the steamer with the kiss of friendship, and I am not distressed when they turn upon it as an intruder and lashed by the fury of a storm seek to bury it in the ocean's depths. In all its moods, bright or dark, the sea has for me a wonderful charm, for I admire its vastness, its grandeur, and its boundless power, except when the fog horn is heard or an iceberg looms in sight.

So when I had the honor of being placed upon the Advisory Council of the Medico-Climatological Section of this great Exposition I elected to address you upon a subject with which I was very familiar—sea voyages.

INFLUENCE OF A SEA VOYAGE IN CERTAIN DISEASES.

The sea atmosphere has certain marked features. It is pure, it is equable. There is freedom from the risk of chills when on deck. Day by day the traveler breathes in saline particles, abundance of ozone, a slight quantity of bromin and iodine, and all these tend to have a salutary action on the general system. By increased appetite and good digestion the health improves, and this improvement is manifested by gain in weight, by a better color, and by more bodily vigor.

In causing increase in weight, the ocean climate surpasses all others, and it is not uncommon in a long voyage to find that a man increases more than fourteen pounds in weight.

In what cases, then, is a sea voyage to be recommended?

We would answer this inquiry by stating:

1. That it is very serviceable in certain pulmonary affections. The moist atmosphere does good in chronic bronchitis with little expectoration, for it tends then to relieve the dry cough by relaxing the bronchial tubes.

In chronic pleurisy it appears to facilitate absorption and in chronic empyema it effects a marvelous change. Empyematous patients have embarked with drainage tubes in their chests and in the course of the voyage the discharge gradually ceases, and the cavity granulates up sufficiently to allow of the removal of the tube.

The late Dr. Walshe stated: "A sea voyage, especially in the case of young adult males, will occasionally work more effectual change in the phthisical organism, than any other single influence, or any combination of influences with which I am acquainted." The experience of many observers has confirmed this opinion, and it is now an acknowledged fact that the progress of tubercular mischief in the early stage can be completely arrested by a timely and prolonged voyage.

Experience has also shown that a voyage does good in cases of phthisis when there is a single cavity without great local irritation, and that it is very beneficial in that form of phthisis which is seen with scrofula.

2. A sea voyage operates like a charm in the case of patients recovering from acute dysentery, and in aiding convalescence from an acute inflammatory affection. The recuperative efforts of nature are then assisted by the exceptional advantages of an unsurpassed atmosphere and by an improved digestion. So, also, in the various sequelæ of influenza, a sea voyage is unquestionably a better remedial agent than any drug or combination of drugs that can be prescribed.

3. In chronic Bright's disease, if it be not marked by much loss of albumen, the regular diet at sea, the systematic exercise on deck, the impossibility of any chill being caught there, combine to make conditions which render recovery more possible than any residence on land can effect.

4. Above all, a sea voyage is the unquestioned cure for nervous derangements which result from overwork and are attended with sleeplessness. In a voyage there is leisured recreation. There is an unequalled holiday. There are no business cares and no professional worries. There is complete physical rest which in the end brings gradually but surely mental repose. Soothed by the breezes of the ocean, a tired man, professional or mercantile, acquires a new physique, while real or fancied ailments disappear under a tonic which art can never supply.

THE GREAT DISADVANTAGE IN SEA VOYAGES IS SEA SICKNESS.—ITS NATURE AND SYMPTOMS.

In these, and other diseases mentioned, physicians recognize that the sea air and the mode of living at sea are potent therapeutic agents. Yet many physicians justly hesitate to recommend its adoption and many patients, even if it be recommended, hesitate to undertake a voyage, from dread of the familiar physical disturbances associated with the sea.

In advising a voyage, sea sickness can not be ignored, and unconquerable sea sickness is acknowl-