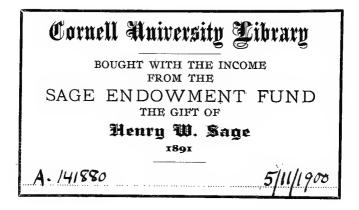
THE MEN OF THE MERCHANT SERVICE D FRANK T. BULLEN



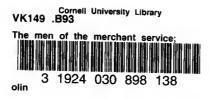


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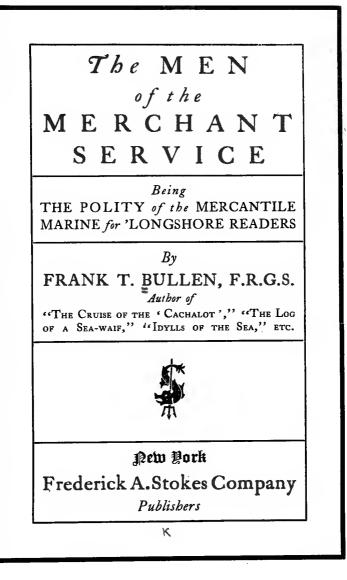
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THE MEN OF THE MERCHANT SERVICE



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Rudyard Kipling in grateful recognition of both his wonderful genius and his great kindness

to

the Author.

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Preface.

IT has been repeatedly represented to me by disinterested friends that among the innumerable works of both fact and fiction dealing with the sea there are none telling in a comprehensive way what are the conditions of life in the Merchant Service: in other words, that there is no work to which a parent yielding to his son's importunity to be allowed to go to sea, and seeking to know something of the nature of things on board of a merchant ship in detail, can turn with the assurance that he may there find what he needs. Nor can the youth, anxious to go to sea in the Merchant Service, find any guidance, which will at once be comprehensive and reliable, compacted into one handy volume. And as these same friends have done me the honour to suggest that I have the qualifications necessary for producing such a work, I have not at all unwillingly acceded to their suggestions and undertaken the task.

The recollection of many kindly criticisms on the preface to the "Log of a Sea Waif," scolding me goodnaturedly for what it has pleased the critics to term my exaggerated modesty, prevents me from sinning now in that direction. I will merely say that I have

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done my best to justify my friends' confidence in me, and that I earnestly hope the book will not fall too far short of their expectations.

The planning of such a work seems to be comparatively easy. The first thing that suggested itself was the setting forth in a series of chapters the duties, required qualifications, difficulties, privileges, etc., of the various members of a ship's company.

A doubt has naturally arisen in my mind as to how far it is justifiable to deal with sailing-ships in these latter days. My own personal knowledge and predilections are on the side of the "wind-jammer," and consequently I feel the less inclined to deal with her perfunctorily. I cannot, however, conceal from myself the fact that the passing of the sailing-ship is being greatly accelerated of late years, and that in all probability another twenty years will witness her final disappearance. On the other hand, I should not be at all surprised to see a sudden recrudescence of sailing-ship building. Considering the sailing-ship's economy, her vast carrying capacity, the fact that her very slowness as compared with the steamer is actually no mean advantage in a great number of instances; viz., to quote one, where goods are bought in a low market and are not required by the buyer for some months, so that their shipment by a sailer actually saves warehouse charges as well as freight, I cannot understand, why the sailer should be suffered to disappear. Nevertheless, as engineering science advances, economies will doubtless be found possible in steamships which will so greatly lessen their expenses as to make the competition of sailers out of the question. The

opening of a Panama Canal, too, which will certainly not be much longer delayed, will deal a tremendous blow at the vast sailing trade around Cape Horn. It seems indeed destined to be the final factor in the elimination of the sailing-ship.

Meanwhile the white-winged fleets come and go in far greater numbers than landsmen have any idea of, and as nearly all authorities are agreed that, in spite of the immense strides taken by steam navigation, the sailing-ship is still the only school wherein to train a thorough seafarer, she will certainly receive her full meed of attention here.

Care has been taken to avoid as far as possible all technical treatment of the subject. I have not assumed the possession of too much nautical knowledge on the part of my prospective readers,—not nearly as much, for instance, as would be permissible in a work of fiction. Having before me, too, the hope that sons as well as parents will be able to read and enjoy as well as thoroughly grasp the meaning of this book, I have aimed at making it entertaining, giving a plentiful supply of anecdotes, as well to illustrate as to lighten what might easily become rather "stodgy."

Finally, I feel constrained to add that, even if my friends are wrong and there are works with which they, as well as myself, are not acquainted, better calculated to serve the purpose for which this book is intended, I have the temerity to believe that no apology is necessary for its appearance. The overwhelming importance of our over-sea commerce to Great Britain cannot be too greatly emphasized, while the astounding ignorance of maritime matters manifested by British peo-

PREFACE.

ple generally makes one gasp in amazement. Any book, therefore, that does anything to popularise knowledge of Mercantile Marine details cannot be superfluous in this country, and should this present one succeed in bringing home to our inland dwellers with any clearness the conditions of life on board the vessels upon whose regular advent depend our supplies of daily food, I shall feel abundantly justified in issuing it to my countrymen.

DULWICH, July, 1900.

The Men of the Merchant Service.

CHAPTER I.

THE RISE OF THE MASTER (IDEAL).

VIEWED from whatever standpoint we may choose, it is impossible to arrive at any other conclusion than that the British Mercantile Marine is not only the greatest British industry, but that, for its overwhelming importance and far-reaching effect upon mankind, it is the most stupendous monument of human energy and enterprise that the world has ever seen. Yet, with that peculiar absence of pride in our own institutions, that easy-going magnanimity which, in spite of what not only foreign writers but many of our own authors assert, is really the most distinctive characteristic of the British race, we show but little appreciation of this marvel of commercial genius and concentrated effort. Dependent by our own action upon our ships for food, we evince no alarm at the possibility of disaster to these main arteries of our national life. Go where you will, up and down this country of ours. you will find scarcely any knowledge of the British Merchant Service at all, except among people directly engaged in the shipping business, or among a few earnest souls who think it is their duty to know something

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of the conditions under which their dear ones live. The vast majority of people know of but one form of seafaring, *the* Navy as they call it, *par excellence*, and if a man tells them that he is a sailor they are disinclined to believe him unless he wear the familiar loose blue clothing and gold-lettered cap of the man-o'-war's man.

But this is a trivial matter compared with the ignorance of the great matters of life and death wrapped up in our Mercantile Marine. That lads eager to get out upon what has tacitly come to be regarded as our peculiar domain-the open sea-and there uphold the traditions of the race, should not know where to go for information concerning it that can be relied upon, seems strange to-day. Stranger still is it that, instead of all manner of facilities being given to our own youths who wish to become seamen, all manner of disheartening hindrances should be put in their way. And what shall we say, in face of the almost universal manifestation of malevolence towards us by foreign powers in what they believe to be our hour of tribulation, of a British Minister who from his high position declares he sees no cause for alarm in the prospect of our merchant ships being entirely manned by foreigners. It is only one more proof that the ignorance of our greatest industry is universal, that from the highest class to the lowest our people have grown to look upon this most important of our national assets, this indispensable bridging of the ocean for the supply of our daily food, as something no more needing our thoughtful attention than the recurrence of the seasons or the incidence of day and night.

And yet books about the sea are usually popular. In spite of the technicalities involved (usually wrong, owing to the want of a first-hand acquaintance with the subject) almost any sea-fiction will sell. So long as the story be good, the plot workmanlike, the great mass of the reading public will not criticise the nautical technique from lack of ability; they take it for granted, and learn nothing from it. Exceptions may be gratefully remembered, especially Kipling, whose nautical stories, like his engineering ones, have no flaws. They might have been written by a man who had spent his life upon the sea and had served in all grades. In like manner did R. L. Stevenson grasp detail in "The Wrecker" and "The Ebb-tide," while to read Morley Roberts's work in this direction is to sit again in the dim fo'c's'le with the reek of the slush lamp mingled with most pungent tobacco-smoke and a dozen other unholy odours making your nostrils tingle, while outside the sea voices murmur their accompaniment to the long yarn being spun within. There are others, but of them only one can be here mentioned, that brilliant, wayward man of splendid abilities and attainments, J. F. Keene. He has gone and left no one to fill his place. Intolerant of civilised life, he fled from it to the freedom of the tramp or the fo'c's'le scallawag and drank deep of the cup of life as he loved it. But his books do not make light reading. They are compounded of blood and iron, and bitter as the brine that stained his manuscript.

But this preliminary digression is keeping us from consideration of the important character we have to

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become acquainted with,-the shipmaster, or captain as he is, by courtesy only, usually styled. No commander of a merchant vessel, no matter how magnificent she may be, is legally entitled to be called captain. That honourable title belongs only to the Royal Navy. Mr. So-and-so, master of the ship So-and-so, is all that the most experienced and highly-placed, merchant seaman may claim. And yet it may well be doubted whether even the proudest captain of a ship of war has more varied qualifications for his splendid post than the ideal shipmaster. Difficulties that never trouble the naval man meet his "opposite number" in the merchant service at every turn, not to be evaded but met and justified by success, or else loss of appointment and the pinch of poverty follows promptly.

The road to this eminent position is a plain and simple one. In its most favourable traversing the would-be master has parents who can afford to send him direct from school to such a nautical trainingcollege as H.M.S. Worcester or H.M.S. Conway,-the former a splendid vessel of the old wooden-wall type, moored in the Thames off Greenhithe, and commanded by a most able merchant seaman, David Wilson-Barker, Esq., F.R.S.E., F.R.G.S., F.Z.S., etc., himself an alumnus of the Worcester; and the latter a kindred vessel moored in the Mersey. Here the aspirant is thoroughly taught the theory and practice of navigation in all its ramifications, while those branches of study which he was pursuing at school are carried on in a generous spirit. Seamanship, as far as it can be taught on board of a stationary vessel, takes naturally a most prominent place in the training scheme, while naval architecture, languages, engineering, and nautical science all have their allotted place.

So useful to the average man are all the subjects taught, that one is tempted to believe that no college course in the country is more admirably calculated to fit him for the battle of life whether he goes to sea or not. Dull indeed must the youngster be who does not emerge from the Worcester or the Conway, upon the completion of his three years, better calculated to make his way in the world than any lad of the same age is upon leaving a public school. The Board of Trade has frankly recognised this by allowing the course on board these training-ships to count as one year's seaservice in the required qualification for second mate. That is to say, while the ordinary candidate for a second mate's certificate must produce either completed apprentice indentures for four years, or certificates of discharge for the same length of sea-service, one year of which must have been served as an able seaman, the old Worcester or Conway boy need only produce a record of three years' sea-service to entitle him to enter as a candidate. Now, assuming that the youngster has finished his training-ship course with credit and been duly bound as an apprentice in a fine sailing-ship belonging to a good firm, his way is clear before him. Passing through his probationary period vndaunted by the none-too-easy life he has led, he appears before the examiners of the Board of Trade, and if he has only kept up the most cursory acquaintance with the navigation he knew when he left the training-vessel his "passing" is ridiculously easy. I do not propose to discuss here a much vexed question, but will merely state that it has often been proposed as a remedy for what has been considered the too-low status of the shipmaster that the standard set by the Board of Trade should be periodically raised until the amount of education required for successfully passing it would enable those paying for it to demand higher salaries and more honourable recognition of their position. No doubt it would greatly tend to lessen the numbers obtaining certificates of competency, but, alas, there seems also no doubt that, as things are at present, it would greatly increase the number of alien officers in command of British ships.

Well, our young friend has his second mate's certificate, but unless he be exceptionally fortunate he will have to make a voyage as third mate before he takes up the position to which it entitles him. As third mate in his old ship, or a similar one belonging to the same company, he may be gradually permitted to keep a watch, to stand on the quarter-deck in charge of a hundred thousand pounds' worth of property and thirty or forty lives. (Of course throughout I am speaking of the sailing-ship, since she is as yet, in all but two or three instances, the recognised medium for the beginner.) Pursuing his career with care he reaches home ready to take a ship as second mate, and if the firm he serves is what it ought to be, no long time will elapse before such a berth is ready for him. One twelvemonths' voyage as second mate and he may again approach the examiners for his chief mate's certificate. Again he should find not the slightest difficulty in passing, the additional qualifications required from

him being quite simple. Should he be very lucky he will get a berth now as chief officer, but even if he be compelled to go another voyage as second he will be permitted to pass the Board of Trade examination for master on his return, providing he can show that he has acted for two years as second mate. With his master's certificate in his possession it is only a question of time until he stands in the proud position of monarch of his little realm, and that time may be greatly shortened in many cases if he happen to have a comfortable sum of money to invest in the ship.

Should he desire to equip himself with all the certificates which the Board of Trade can grant, he will proceed at once to undergo the examination for "master extra;" he will also "pass in steam,"-an examination most necessary for those masters who propose to take command of steamships,-and he will also take an examination in magnetism. Of all these extra examinations it may also be said that if our friend has kept up his cadet training they will have no terrors for him; they are only difficult to those who find mathematics irksome and never practise more than they are compelled to. Then of course they get rusty, since the amount of mathematics really necessary to keep a ship's position accurately at sea is very small. By the continual invention of clever mathematicians, nautical astronomy has been reduced to mere expertness in handling tables, and the indolent man will avail himself of these aids to the fullest extent.

CHAPTER II.

THE RISE OF THE MASTER (REAL)-THE LINER.

So far I am afraid that, in sketching out the possible rapid rise and progress from college to quarterdeck, I have not been very amusing or enlightening. The non-professional reader will be bewildered by the swift passage of the young sailor through the various grades without any elucidation of the "how" of each process, while the professional seaman reading it will smile sardonically and endeavour to recall any instances within his knowledge of such an upward flight. Feeling this, I hasten to explain that the foregoing is but an impressionist sketch of an ideal condition of things, and that such a smooth attainment of the object of a young sailor's ambition is of the very rarest occurrence. Moreover, it has to be remembered that only the favoured few can have the advantage such as is conferred by a Worcester or Conway training. The great majority of youths who take to a sea life go direct to their apprenticeship from school, go, too, in vessels whose owners have but few ships and consequently small facilities for advancing their apprentices in the profession when once their indentures have expired. As I propose to deal with the apprentice in a chapter devoted to him entirely, I must be careful not to say too much now, so I will merely indicate the undoubted fact that an apprenticeship to any firm of shipowners, no matter what the excellence of the individual apprentice may be, carries with it no guarantee of employment after the apprenticeship is over. In this, as in many other respects, the sea is unlike any other profession. In a large engineering firm, for instance, it would be considered a waste of good material to discharge apprentices when out of their time unless they had proved themselves hopelessly incompetent. But it is not possible for a firm owning, say, four ships, and carrying six apprentices in each of them, to find employment for those apprentices when they are fit to assume the position of officers. The four masters are not at all likely to resign their berths frequently,-masters of ships in an employ such as I am now speaking of usually retaining their commands for many years. They block the flow of promotion, never very rapid, so that it is no infrequent thing to see the same set of three officers-master, mate and second mate-in one ship for several long voyages.

What, then, is the young newly-passed officer to do when, with his creamy new certificate in his pocket, he finds nothing before him in his old firm but a voyage before the mast as an able seaman? Well, if his folks have any acquaintances among shipowners,—in other words, any influence in that direction,—now is the time to use it. Or, if they have any money to invest, they will not find it difficult to purchase a certain amount of interest, which should and generally does result in their son getting an opening for employment. But if neither of these levers are available the aspirant is almost certainly in for a bad time. Probably the best course for him will be to put his pride in his pocket and take a berth before the mast, always keeping his eyes open, when abroad, for an opportunity of slipping into a vacant second mate's berth, where he will get the rough edges worn off his newness and become accustomed to command. In the meantime he must keep carefully in touch with his old firm, so that should he be on hand when there is a vacancy he may not miss it. His great object, of course, will be to get a footing in a good firm owning many ships where promotion is fairly rapid for the smart officer. Of course he will hunger and thirst after a steamer, but unless he makes up his mind to go in the lowest class of tramps and plod painfully onward at very low wages for a long time, he had better stick to sailing-ships until he gets his master's certificate.

This for reasons which will appear later on. Into this stage of the officer's upward progress the element of chance or coincidence enters so largely that it is impossible to do more than generalise as to the probable time which will elapse before he reaches the goal of his desire. But there is one feature in such a career as I am now attempting to sketch that has not its counterpart, so far as I know, in any other form of employment whatever. It is in the seeking for a berth. I know of no more depressing occupation than that of a capable seaman looking for a ship as officer. It does not greatly matter whether he wanders round the docks or goes to the owner's offices, he is made to feel like a mendicant, and on board most ships he is also made to feel like a supplanter when he asks for employment. To go aboard of a likely-looking ship seeking a berth,

say as mate, and to meet the present holder of the office, is the usual experience—and a most awkward one it is.

Here the pushful man will score heavily. Putting all diffidence in his pocket he will broach his message boldly, disregarding the frowning face of the gentleman in charge, who naturally looks upon him as a foe. But the shy, reserved man (and both these qualities are very common among seamen) will stammer and beat about the bush, conceal the true nature of his errand, and retire awkwardly in considerable confusion. Having obtained a berth, however, it will generally rest with himself how far he will be able to raise himself by its means. True, there are many things, which will be treated fully under the different headings of the various officers, which by no fault of his own may hinder and dishearten him, but the unattached officer must not allow them to daunt him. He must persevere, keeping his weather eye lifting for every opportunity of advancement, and especially perfecting himself in all the complicated details of his profession, in anticipation of the day when, a fullblown shipmaster, he will be where his longings have led him.

It may be asked: "But what has all this to do with the master himself, his duties, his position, etc.?" The question is quite reasonable, and I feel the full force of it, but there is a strong temptation to anticipate the succeeding chapters when one remembers the passage over the generally thorny way leading up to the chief position on board ship. However I will do my best to avoid further digression and proceed at

once to give, to the best of my ability, a sketch of that much envied individual's privileges and responsibilities. The first difficulty that presents itself is classification. For although the Board of Trade certificate of "master" qualifies its possessor to take command of the most splendid liner, it is absolutely essential to the assumption of chief charge of a tiny schooner engaged in foreign trade. Yet it must be obvious that between these two positions there is a great gulf fixed. Not in qualification, for there is really no reason why the holders thereof should not change places at any time. In many cases it is accident alone that determines whether a man shall be master of a liner or of a clumsy little brig lumbering painfully across to the West Indies. In spite of this fact one cannot expect that the grand gentleman who commands such a magnificent ship as the *Teutonic* or *Campania*, for instance, should be able to refrain from looking down upon his brother master of the Susan brigantine of 200 tons register. To the liner-master's credit, be it said, he does not show nearly the same hauteur toward his less fortunate fellow that he might reasonably be expected to do. That sort of view of their respective positions is usually taken by people ashore, who know just enough of the conditions to enable them to make such a tactical mistake.

The master of a great liner is in a really enviable position. Not, perhaps, as regards his earnings in solid cash, for it still remains to the discredit of British seafaring that its most highly-placed officers are far worse paid than men greatly their inferiors engaged in business ashore. But in power, in importance in the

eyes of his fellow-men, in comfort, he is far before them. His are the responsibilities; upon him rests the reputation of the ship among the people who pay the piper,-the passengers ; but beyond that his life is rightly looked upon by his less fortunate brethren as one long holiday. No laborious keeping of accounts for him; no worrying about freights or scanty passenger lists; no anxious study of weather charts or calculation of course to be pursued in reference to the time of year and consequent prevalent winds. At the appointed time for sailing he comes upon the bridge and greets most cordially or nods most frigidly to the pilot, according to his temperament. That individual, one of the elect of his fine calling, is paid by the company for his exclusive services, and it is his duty to see the monster ship safely through the intricacies of the river-mouth out into free and open waters. The master's presence on the bridge is a matter of form, necessary, however, because, by some queer twist of maritime law, although ships going foreign are compelled to take a pilot, who is responsible for her safe conduct out to certain limits, the master's responsibility is always alive. Should the pilot lose the ship, and the master not be on deck, the latter would be held equally to blame, although at what precise time his intervention would be permissible is left delightfully ambiguous.

The pilotage limit is reached, and the pilot gets into his own place on board of his own cutter. The voyage is begun. Now is the master lord indeed, but such a ship as this will have at least six officers, of whom most likely all will hold certificates as "master extra."

Each of these in their turn take charge of the ship under the master's orders, subject to certain regulations peculiar to the different companies, and the least tribute that can be paid to them is that every one of them is probably fully as competent to command the ship as is the master himself. It is etiquette, however, for him to remain on the bridge while the vessel is in waters that may by any stretch of nautical terms be called narrow, although he does not interfere in any way, if he be a gentleman, with the handling of the ship. The navigating officer (usually the second officer) works assiduously at nautical astronomy, calculating the position, the error of the compass, etc., continually; but his work is checked by the master and the other officers who work the main details independently of him.

No ships afloat are navigated with more jealous care than these; no ships can show a more splendid record of actual correctness in working; and it needs a strong personality indeed on the part of the master to avoid laxity. Having so fine a set of subordinate officers, why should he trouble himself? The love of holding the reins, jealousy of the slightest encroachment upon his prerogatives, will usually keep him from this, but the temptations to enjoy the charmingly varied society in the midst of which he moves as king is certainly very great. All honour to these capable gentlemen that so few of them succumb to it. Whenever stress of weather demands their presence on the high and lofty bridge ("Mount Misery the wise it call"), they will be found there, cheery and confident, with apparently no sense of weight of responsibility upon them. although they might well be excused if their brows were permanently furrowed with anxious thought. To know that upon you rests the charge of two thousand souls, to say nothing of from half to three-quarters of a million pounds' worth of property being hurled over the howling sea at the rate of twenty-five miles an hour, is surely enough to give even the most jovial heart pause. Yet these splendid men conceal with great ease any appearance of worry, and behave as though they had nothing more serious on their mind than the making of an Atlantic passage pleasant to their guests.

The master of a ship cannot enjoy that peculiar repose common to every other member of his crew. Deeply as they may feel the weight of their special responsibility while on watch, the moment they are relieved the relief is complete. No matter how black the outlook, it is the other fellow's business now. The relieved one goes to his bunk, and, divesting himself of his clothing, passes into dreamland as free from care as if in some cosy bed ashore. Not one vestige of his late anxieties troubles him. They will come on again all too soon; meanwhile he will get as much sleep into the allotted hours as possible, and nothing short of a summons from his commanding officer shall disturb that calm. The poor skipper, on the other hand, has no such relief. He must cultivate confidence in his officers, or want of rest will soon make an old, worn-out man of him; but, in any case, he must be always ready to assume full responsibility. I have often wondered how the masters of swift Atlantic liners can keep up their spirits as they do, knowing

what a number of derelicts there are lurking about the Atlantic. I suppose they say to themselves that, remembering the wideness of the sea, there are an infinity of chances against their striking against any one of those awful shifting dangers, numerous though they be. And they must cultivate a habit of refusing to contemplate possible disasters that are by no means inevitable, else would they soon become unfit for their position.

It must not be forgotten that they are in the last resort also responsible for the performance of the tremendous giants below, the steam engines that thrust the vast fabric through the seas at such headlong speed. But, unlike their brethren in the Navy, they do not think lightly of the engineer. They recognise to the full his wonderful ability and trustworthiness, and I think I am well within the mark in saying that no department of the ship's management gives them less anxiety than the most important of all, the engine and boiler rooms. For it is impossible to conceive of even a second-rate engineer rising to be in command of a liner's engine-room. There is a process of weeding-out in action there that is very efficient, so that while it is conceivable that, by a combination of favourable circumstances and highly placed influence, a duffer *might* come to command a fine ship, the same thing could not happen in the engineering department.

CHAPTER III.

THE MASTER-OF A TRAMP.

FROM the liner to the tramp is by no means the great step that might be imagined. Indeed, so fine are the gradations in the quality and positions of steamships that it is impossible to draw a hard-andfast line anywhere. For even among tramp steamers undoubted there are many shades of difference until we reach the very lowest class of all, run on principles despised by all shipowners of repute. The hierarchy of merchant shipping, the great floating palaces belonging to such concerns as the P. & O., the Cunard, the White Star, and the British India steamship companies-to mention only a few, and without any invidious idea of selection-fall easily into a class by themselves, association with which in almost any capacity confers a sort of brevet rank upon a seaman. But once they are left, and the lines entered upon to whom cargo is the one thing needful and passengers are merely incidental, we get a new order of things entirely. First of all a great reduction of speed, for the sake of economy in running, and consequent upon this a corresponding reduction of staff, both on deck and in the engine-room. Yet in the highest class of cargo-carriers and the lowest class of ocean-going passenger ships the master's position is still a proud one. His vessel is

often of immense size, carrying up to ten thousand tons of freight, and, especially if she be one of the handmaidens of a great company owning swift passenger ships as well, his salary will be fairly good, though probably fifty per cent below that of his more fortunate fellows in the liner pure and simple. Also his work will be increased. For there is no difference at sea in the old axiom that the less a man does, the more money he gets for it. Still, where he is in a regular trade, as in the highest class of cargo ships he will be, his clerical work connected with the ship's earnings will be almost nil, although he may not carry a purser to do the interior accounts of the ship, or such matters as wages, bills, etc.

It may truly be said that the master of a first-class cargo steamer is in much better case than his brother in some small lines of passenger steamers that could be named. He is better paid, better housed, and has far less worry. Some of those small passenger steamers going (for steam vessels) long voyages are run so economically that the master has hard work to keep up any sort of appearance at all. I know, myself, of one firm, which shall be nameless, whose advertisements for passengers were most persistent and alluring, who thought it not shameful to pay their masters \pounds_{12} a month, at the same time insisting that they should invest at least \pounds_{250} in the company. Cases like these are very disheartening to the striving seaman. For where the master's wages are kept so low other economies are conducted in proportion. Such a vessel, say of 1,500 tons register, would carry at most three mates and eight seamen. The latter would be

mostly foreigners, the work for such a small complement being so hard that home-born men worth their salt fight shy of them. And the officers' wages, unfixed as the men's are, would also be cut down deplorably low. Still, even in such a ship as this, the master's clerical work is very small. Agents of the company at each port await the vessel's regular arrival and see to it that she departs on scheduled time, cargo or no cargo, so that the master has no carking care as to how the ship is paying, no responsibility beyond the navigation and management of the ship herself. He has, of course, to consider his passengers, with no buffer between him and their often querulous complaints and constant questionings, such as his exalted brethren in the big liners have in their purser. He is usually a man who has been passed over in the race, and while his ability is of the highest order he feels naturally shelved upon a very much lower ledge of his profession than he once hoped to reach.

In command of these small passenger-carrying, oceangoing steamers are to be found some of the very best of our merchant skippers, whose worth and merit are so great that their reward strikes one as most shockingly inadequate.

Beneath these comes the tramp proper. It has just dawned upon me in time that, often as I have used the word, I have not yet given any definition of it for the benefit of those who I hope will read this book principally—shore people. A "tramp" steamer, then, is a vessel of large cargo-carrying capacity and low power of engines, built upon the most economical principles, and run likewise. She goes wherever freight is to be had, although usually built for certain trades, and this is in itself a sore point with underwriters, who complain bitterly that they are often led to insure a certain type of vessel on the understanding that she will be trading in such waters as the Mediterranean and the Baltic, but presently find her braving the tremendous seas of the Atlantic. The best type of tramp is built and owned in Northeast English ports, where the highest shipbuilding science is brought to bear upon the construction of cargo-carriers that shall be at once cheap, roomy, economical, and seaworthy. And it must be said that many firms up there, by careful attention to tramp building and owning, have made tremendous strides in the direction of safety for the ships and even comfort for the crews, although of the latter there can never be very much in a tramp. The lowest type of tramp, on the other hand, is one that is built to sell to the first bidder, built so as to pass Lloyd's surveyor, but without one single item in her equipment that can be dispensed with. Such vessels as these merit all the hard words that have been said of them. Very slow, very unhandy, with dens for the crew to live in, and upper works of the commonest material, they are always coming to grief. They are mostly owned by single-ship companies, of which the shareholders are generally people knowing absolutely nothing of shipping matters, who have been induced by speciously worded circulars, issued by some deeply interested manager, to invest their scanty capital in these dubious enterprises.

The master of such a ship as this may well feel that his lot is hard. With wages cut down to a point that

could only attract a man upon his last legs financially, the manager always endeavours to get some investment, however small, out of the unfortunate master, to give him an interest in the ship. The food and stores supplied are of such bad quality as to make the life very much harder than it need be (in any case it is hard enough), while the number of men carried in proportion to the vessel's tonnage is appallingly small. Yet the master's work is far more onerous than in better ships. In addition to the necessity he is under of nursing hisungainly, low-powered vessel in heavy weather, he is always being sent to fresh places, entailing upon him the acquisition of an immense amount of local knowledge. The purchase of coal in far-away ports, with all the vicissitudes of price to which that indispensable commodity is subject, makes his hair grey and his face wrinkled before he comes to middle age. If he carries a good supply of coal for fear of a rise in price, at his next port he may have to shut out cargo; if he neglects to do so, expecting to be able to buy well, and be disappointed in his expectations, he is held responsible. Low freights make him unhappy, although he is powerless to alter economic conditions, for his first duty is to make his ship pay. Worst of all his troubles are repairs. Such vessels as these are peculiarly prone to damage from their cheap construction, yet any expense incurred abroad for repairs is looked upon as almost a crime. Then there is the necessity laid upon him for the most careful watching of the freight-markets. Although he may secure a good freight on one passage, he may, upon reaching his port, find that freights there are either unpayably low or

non-obtainable. And his spirits fall, because he knows how such an experience will lower his average earnings for the voyage.

The qualifications that such a master need have are, although nominally the same as in any other branch of his trade, immensely varied. And it may be taken for granted that a successful tramp skipper is always a good all-round man, something of a diplomat, of a lawyer, of an accountant, of a merchant,-all these qualities superadded to his ability to handle his vessel at sea in all weathers, contend with crews of the smallest and of the lowest kind of men, who are as far removed from the popular idea of what a sailor is as day is from night. But such men are of inestimable value to the commerce of the country. They seldom forget that their first duty is to their employers, nor allow the thought of their hard, laborious position to tempt them into neglect of it. Poor fellows, the penalty for want of success is not easy to bear, even though they may be in no way to blame.

These, of course, are the lowest kinds of tramps. But there is an aristocracy among tramp steamers owned by wealthy firms of high reputation, both for well and carefully built cargo-carriers and generous treatment of their faithful servants. Although these ships also go wherever cargo is to be found on which a paying freight can be had, yet the conditions under which the officers serve are very much better. They are not harassed, either, by the fear of making a loss upon the voyage, since such firms will have their correspondents in most ports who make freight arrangements for the skippers. Between owners and

masters in this class of vessel often subsist the most firm friendships, men growing grey in one employ and feeling always that their faithful service is fully appreciated. Of course the pay is not high, but the tenure is good, and there is always the chance of picking up a tow, a fellow-tramp with broken shaft or something of a like disabling nature. And this may mean a small fortune,-often does so, since the skipper never fails to take a most substantial share of the total reward. Besides, there is a prospect, too, that a wellknown skipper may, before he is worn out with seaservice, get a comfortable berth as harbour-master, or dock-master, or ship's husband, or any of the congenial employments for which experienced shipmasters are so eminently fitted. Pilotage, too, may come their way. although this can hardly be looked upon as comfortable retirement after a hard life at sea. But whatever they get as a sort of retiring berth, they may truly be said to have earned it. Unfortunately many of them must leave the sea with advancing years, hav. ing nothing to support them but such scanty savings as they have been able to put by. And as the days when skippers were able to amass fortunes have long passed away, these hard-working seamen are often hardly bestead in their old age,-far more hardly than any one knowing their long period of command, but ignorant of their pay, could possibly imagine.

In leaving the steamer-skipper for him of the windjammer, as sailing-vessels are contemptuously termed by steamer-sailors, a few words may suffice for the ungracious task of dealing with the black sheep. As in all other professions, of course among steamship

masters there are drunken blackguards who in some mysterious way manage to get and keep command. But the proportion is very small. There is hardly any room for them. The conditions of service are too onerous, the necessity for constant care and forethought is too great to admit of many worthless men being in command. Especially is this the case in the Northeast ports, where every man's goings-on are known and discussed, as villagers dissect one another's business in remote inland hamlets. No, taking them "by and large," to use a time-honoured sea phrase, the tramp skippers need not fear comparison with any class of public servants in this country, while for the importance of the duties they fulfil they are certainly second to none.

CHAPTER IV.

THE MASTER-OF A SAILING-SHIP.

So great is the difference in duties to be performed by masters of sailing-ships from those of masters of steamers that they are almost like members of another profession. The range, too, in status is exceedingly Between the man in command of, say, a extensive small brigantine "going foreign," and the commander of the four-masted steel clipper carrying 5,000 tons of cargo to and from the Colonies, there is not only a great gulf of status, but a large number of gradations. Yet it will readily be admitted by all shipmasters that the position of master of even a fifth-rate steamship marks a step upward from the same position on board of the finest sailing-ship afloat. And almost any shipmaster is glad to step down from the exalted pinnacle he may have occupied for years as master of a splendid "wind-jammer" and take a very subordinate position say as second, third, or even fourth officer in a liner as a means of rising to the coveted post of commander of such a ship.

But perhaps we have had enough of steamers for a little while. For my part I shall be only too glad to quit that portion of my subject for the far more congenial one of the "wind-jammer," as she is contemptuously called by steamer-men. It is essential, in order to success as a master here, that a man shall be a *sailor*,

that is, in the original sense of handling ships, a fine art demanding high skill and courage as well as constant practice. A good master nurses his ship under sail with never-ceasing care. If he be ably seconded by his officers his labour is of course greatly lightened, but even then, if a smart passage is to be made, the master must never relax his vigilance,-never, that is, in the sense of allowing his officers to feel that the game is in their hands entirely. To explain this for the benefit of my shore-readers let me give a commonplace instance. I was an "able seaman" on board a fine ship homeward bound from Manila to London. We were commanded by an elderly, taciturn gentleman, whose appearance was as unlike that of the typical sailor as could well be imagined. Yet every man on board knew him to be a consummate shiphandler and cool withal, so that when, on the outward passage, we were tacking under a heavy press of sail to get through the Sunda Straits, and in weathering a point of Thwart-the-Way Island actually touched it with our bilge, the seamed old face never blenched, never lost its sphinx-like mask of serene watchfulness.

We did not know, though, until we had reached the eastern entrance to Sunda Straits again on the passage home, how excellent his seamanship really was. In company with a dozen other ships, most of which had gained upon us, we were becalmed in that dangerous vicinity when night fell. Darkness had shut down, such a darkness as makes it necessary for the sailor to know the running-gear intuitively—to develop some other sense to serve him in lieu of sight. Amidst a guttural growling of thunder which was almost continuous, and a flickering glare of lightning that was bewildering, it began to rain. Not steadily, but as if high overhead were passing a series of nimbus clouds that were letting fall their contents in intermittent lumps. And from all quarters successively came light puffs of wind, never steady for more than ten minutes at a time. We had all the lighter sails made fast in case of a sudden heavy squall and for greater facility of working the ship.

Then, for the whole of that Egyptian night, making a bewildering tangle of courses that was enough to whiten a mathematician's hair to ravel out, we toiled at the braces under the master's direct orders. We had watch and watch, but he was on duty all night. Standing by the compass, watchful and alert in spite of his seventy years, he utilised every favourable catspaw, manœuvred against the unfavourable ones, remembering the possibilities of the unknowable currents beneath, and keeping before his mental vision a picture of the contour of that rugged coast.

When morning dawned he had his reward. For we were almost through the Straits, with the first kiss of the southeast trade wind saluting us, and the broad bosom of the Indian Ocean lying invitingly before us under a canopy of stainless blue. And of our comrades of the previous day only one could be seen, just discerned so far astern that she was only a speck on the horizon. To grasp the significance of such a piece of seamanship it is necessary to remember that in a square-rigged ship the swinging of the great yards is not a momentary affair like the slipping over of a schooner's fore-and-aft sails. Time and much labour are required. Moreover, the closest attention is necessary in order to utilise intermittent wind-breaths, as these were, for a big ship with little motion obeys her helm but slowly, and soon loses, if she be caught aback,—that is, gets the wind on the wrong side of her sails,—what little "way" or forward motion she has, a loss that she is loth to make good.

Again, in a sailing-ship, native courage in the master counts immensely. No amount of experience will atone for a want of this quality. Some men are so prudent-in other words, so lacking in courage-that they will shorten sail at the first premonition of bad weather, instead of reducing canvas as the weight of wind makes it impossible for the ship to carry it with safety. Of course there are circumstances where such prudence is absolutely necessary, as in the case of ships which do not carry sufficient men, or whose crews are of such poor quality that they are hardly competent to handle the sails in fine weather; also when the equipment of the ship has been so shamefully starved that the carrying of sail in anything like a breeze is bound to end in wholesale loss. And this matter of prudence in carrying sail has its dangerous side also. Many a dreadful storm has been endured by a ship that she would have escaped altogether had she kept up her speed; many a ship has been overtaken by a following sea, and left almost derelict by its onslaught, that would have gallantly outraced it had she not been made helpless by the clipping of her broad wings.

Of course, when it is remembered how great is a ship's individuality, how immensely circumstances

vary, even the least knowing of us will have small difficulty in understanding the impossibility of laying down hard-and-fast lines. Every master must needs work out his own salvation in these matters, learn by experience, and keep on learning, happy if he can find a ship whose ways are ways of pleasantness, and which has not either been built with or acquired some devilish habit of sea-spite that makes her an abode of misery to her crew, and the command of her a martyrdom to her master. Such ships abound, possessed by every vice known to seafarers, yet presenting in dock, when newly "got up," an appearance of smartness and seaworthiness that is deceitful to the last degree. Such a ship it was once my evil hap to light upon in London, bound for New Zealand. Every one of my shipmates were ecstatic in their praises of her beauty; none doubted that she would be as comfortable as she was lovely. But oh, the awakening from our pleasant dream! Barely had we cleared the Channel when, meeting the full vigour of the Atlantic swell, she began her antics. There was no dry place on board of her anywhere, except under the hatches among the cargo. For she had not all the vices of a ship : she was well and staunchly built and did not leak. But in finest weather, almost in calm, she invited the sea on board, while in bad weather she was like a half-tide rock, continually awash.

There were five passengers, and I warrant that none of them could ever forget that passage of 117 days, because the after part of the ship was even worse than the fore part. A massive structure of timber, like the palisading of a block-house, was built across the front of the cabin for its protection. She, however, thought nothing of sweeping away the whole erection and flooding the handsome staterooms with a foaming torrent of salt water. Never shall I forget the sight of the podgy skipper, like some unlively porpoise gambolling about the saloon, swimming and scrabbling in water up to his waist in chase of his sextant, which, secure in its box, was gleefully careering about at every roll of the ship. That skipper was both smart and plucky, but his command must have aged him at treble the ordinary speed. When he carried on sail until the masts bent like fishing-rods and the stitchholes in the sails became elongated so that they looked like columns of shining oats placed horizontally, instead of keeping ahead of the sea she took it over in appalling masses, both sides and astern at once. And when it became suicidal to run her any longer and we hove her to,-that is to say, reduced sail to a mere speck and turned her head as near to the wind and sea as it would go,-she acted as viciously as any buck-jumping horse. No one on board ever found their sea-legs, as the saying is, for it needed inch-long spikes or huge sucking-discs on the feet to keep on one's legs at all.

Then there is the needed acquaintance with the best routes at given times of the year,—the ability to direct the course so as to find the minimum of calms with the maximum of favourable winds. This is a prime quality in a successful shipmaster and it cannot be learned from weather-books or weathercharts. I came home once from Australia, second mate of a magnificent ship whose sailing qualities were of the highest order, her crew ample in number, her equipment beyond criticism. The master was a learned man, but his experience of sailing-ships was of the slightest. He had all the weather-charts obtainable, he studied them continually, and faithfully followed their guidance. In the result we made a four and a half months' passage home, while a smaller ship not nearly so smart, sailing from the same port three weeks after our departure, arrived in London nearly four weeks ahead of us. But her master had been sailing ships between England and Australia for many years, all the while accumulating first-hand knowledge of the conditions obtaining over all those seas he traversed, learning by experience the weather signs and all the grammar of the language that the ocean speaks in to its intimate friends. This knowledge it is that constitutes the fine flower of seamanship as it was (and is still in ships that depend upon sail only), but which will soon be looked upon as a lost art, as the sailing-ship is gradually pushed aside by that wonderful outcome of engineering science, the steamship.

How great a factor in the making of a successful passage under sail this personal acquaintance with the route pursued is, may be easily assessed from a superficial study of the ways of the Swansea copper-ore traders. These are—or rather I ought to say were smart barquentines which sail—or sailed—from Swansea, bound round Cape Horn from east to west, for the purpose of bringing home ore to the world-renowned smelting-works of Wales. Their masters were not in any sense of the words fine gentlemen, their calling hardly admitted of the cultivation of the graces of life, but such was their knowledge of this, the most arduous piece of navigation in the whole world, that their passages were made with almost steamer-like regularity. Only seamen themselves could give to these perfect mariners all the praise that was their due. For all sailors know, either by experience or repute, how cruelly hard are the conditions attached to forcing a passage around that awful promontory that reaches down almost to the Antarctic Circle, deep into the chosen habitation of the fiercest and most persistent gales that rage around the planet. Here for weeks on end you shall feel the weight of an unfaltering westerly gale, with all its accompaniments of snow and sleet and darkness. One would say that the attempt to get round the Horn from east to west in the teeth of such prevalent conditions was madness, especially when the long record of disaster attendant upon these attempts is known. Many a case is on record where fine ships, after weeks of abortive struggle to get to the westward round Cape Horn, have at last given up the fight, put the helm hard up and fled before the inexorable westerly gale right round the world to reach such a port as San Francisco, for instance.

Yet these little Swansea-men came and went from year to year with the utmost regularity, their skippers having learned by experience how to out-manœuvre even the terrible monarch of the southern sea. No doubt it was a hard life, but it was exultant, triumphant. These men knew how good their seamanship was, how exact their weather-lore, and they troubled meteorological charts not at all.

So, too, with the navigation of the Bay of Bengal.

While not so severe in any sense as that of Cape Horn, it is difficult, teasing, and calling for constant watchfulness. Men who only go that way occasionally will make a good passage of say from eighty to a hundred days on one voyage, and then, with the same ship a year or two after, make a passage that causes the owner to gnash his teeth as he cons the portage bill. But to the men who used to sail there regularly, how nearly an exact science did their navigation of that baffling bay become. One especially comes to my mind,-Thomas Potts, of Messrs. Brocklebank's famous old East India line. Dozens of that old worthy's log-books have passed through my hands, with their fair unblotted entries of business-like procedure from day to day. And so regular seemed the rate of sailing that I once took the trouble to compile an average of his passages out and between Liverpool and Calcutta for six years, and I found it to be eightyfive days,-a perfectly marvellous achievement in the eves of a seaman.

Of course such splendid work as this presupposes a speedy ship. While it is perfectly true that seamanship and diligence on the part of the master can do great things in the way of passage-making even with a sluggish vessel, yet it is heart-breaking work. And when, tired of the never-ending struggle against adverse circumstances, the master becomes listless and slack in his attentions, the result in such a vessel is that she becomes overdue, and underwriters gamble feverishly on the prospects of her non-arrival. Such vessels are still to be met with in goodly numbers, not all obsolete ships either. One, for instance, that

I have in mind at the present moment, a huge steel ship not a dozen years old, whose last few passages have been the cause of immense sums changing hands among underwriters, owing to her being continually overdue. Another smart-looking barque that I saw in Auckland, New Zealand, once, was actually eight months on the passage from Liverpool thither, having apparently been taken into regions of almost perpetual calm, whence it was a miracle that she ever emerged.

Between these two extremes of swiftness and slowness come all the host of mediocrities making passages of average length, speedy enough to prevent owners from grumbling, yet not sufficiently smart to call for any praise. As in all other professions, these are the vast majority, and the masters who thus quietly perform their duty without hope of honourable mention are none the less worthy because they do not, cannot do anything that shall cause their names to be remembered among seamen as the *élite* of the profession.

CHAPTER V.

THE SAILING-SHIP MASTER-continued.

HITHERTO I have endeavoured to pass lightly over the sailing-ship master's work in making passages, only showing the superior side of these responsible men's characters. But if I were to go no farther in this direction, many masters would rightly feel much aggrieved. They would not feel satisfied that the public should imagine that they were all alike excellent, and that the training and experience necessary for the command of a ship always succeeded in turning out a man who was really fit for the post he is called upon to occupy. Besides, the picture would be a false one. Far too many masters, having once obtained command, instead of utilising their extended opportunities of showing their fitness for such a post, just settle down on their lees and become indolent, careless, and consequently worthless. It must be granted that the temptation is great to a man not naturally energetic. Once freed from the oversight and control of his owners or their agents, and out upon the sea, he is in the position of an almost absolute monarch. His officers are anxious to gain his good word, since upon it depends their future.

This statement needs some explanation. By a rule of the Board of Trade every officer coming up for examination in order to take a certificate of a higher

grade must produce written testimonials from the master he has served with. Wanting these he is not allowed to enter for the examination at all. Now as. by the common law, no master is bound to give his servant a character, it follows that a shipmaster need only withhold that essential scrap of paper from an aspiring officer to put an effectual bar to his rising any higher. I do not profess to criticise the wisdom of this enactment; I merely state the facts as they are. As an instance of how this power is regarded by shipmasters, I may mention that, recently writing upon the subject in the press, I received an indignant letter from a shipmaster, who said that if all shipmasters did their duty far fewer officers would obtain certificates than do now; also that no good officer need fear such treatment at the hands of any shipmaster, -a manifest absurdity, since among shipmasters, as amongst all other classes of men, there must be both bad and good, and the temptation to use arbitrary power like that is far too great to be resisted by a had man.

But to return. Having, then, this potent lever in his grasp, this guarantee for the good behaviour of his officers, the indolent master may, if he will, leave everything to them except just the obtaining of the ship's position each day. Even that it has been my lot to see neglected by a shipmaster. Of course he will occasionally potter about and find fault, if he be, as well as indolent, of a small, mean character. Such a master is a sore trial to both officers and crew. Asked for instructions as to what he wishes done, he will reply that he does not expect his officers to need to be shown their work, and that he would prefer to have men about him who did not want drynursing. Which, being translated, means that he wants his officers to do things on their own initiative, so that he can at any time, if in want of a little recreation, find it in quarrelling with them for doing that which they deemed to be right.

For instance, I was once mate of a barque. While lying in Noumea, failing any instructions from the master, I decided to set up all the rigging, which was so slack as to be dangerous supposing that we encountered any bad weather. The work was well under way when the master came on deck from his cabin, where he had been dozing all the morning, and, seeing what was going on, called out loudly: "Here, Mr. Bullen, just stop that, will you? That can be done any time. I want the ship painted outside." Far too well in hand to make any remark, and really rather glad to get a definite order, I had the gear unrove and put away, and soon we were in the thick of painting. We did not get another opportunity to tighten up that rigging before we left one of the northern ports of the island deep loaded with copper ore. We were hardly outside the harbour, bound to Newcastle. N. S. W., when it came on to blow, the vessel rolled tremendously, the rigging worked slacker and slacker, and in the middle watch that night she rolled her three masts over the side. Then, of course, I was blamed for not having had the rigging set up.

Then there is the indolent skipper who leaves everything to the mate and never finds fault either. Amiable, but lazy, he spends most of his time in sleep.

He scarcely looks at a book, does not meditate, but leads a sort of fungus life, indulging in a perpetual kief, or cessation of all the nobler faculties. Naturally young officers like that kind of skipper, since they have a perfectly free hand, but they despise him and in their inmost heart they know that such a ship is very little good to them. And in times of emergency or danger, when naturally every one on board looks to the head for leadership, it is disconcerting, to say the least, to find him altogether wanting in initiative, either in energy or resource. Of course this is not saying that many masters will not be found who are fussy and meddlesome to the most irritating degree when the weather is fine and the ship is on the high seas, who, when danger looms near and the master's good qualities should shine brightest, are but broken reeds. One master, whom I liked very much, a really good man, but without backbone, was looked upon by all hands with good-natured toleration as a sort of benevolent old female, who, if he did keep himself in evidence pretty much all the time, did not interfere to any great extent. But there came a day, when we were running the easting down (bound to Calcutta), that we were overtaken by a really heavy gale. All our energies were needed to get sail off the deeply laden ship, for she was wallowing dangerously and was not speedy enough to keep ahead of the sea. While we were thus striving with all our powers under the smart mate's direction, the skipper, swathed in many clothes, clung desperately to the weather mizzen rigging, a pitiful picture of fear, his legs bending under him all ways, and his grey beard beslavered with

the foam of fright. A more abject specimen of a coward I never saw. All hands noted his behaviour, and from that day forward he was treated with utter contempt. His authority was a thing of naught, and the discipline of the ship (never very rigid in the merchant service) was entirely gone. At last the men refused to obey a most necessary order, simply because it necessitated work in their watch below. The offence was flagrant, involving as it did the possible loss of the ship and all hands. He summoned the recalcitrant watch aft and reasoned with them. They merely gibed at and taunted him with cowardice and uselessness in reply. When we arrived at Calcutta he had them up before the shipping-master for punishment, and that worthy fined them two days' pay, at which they laughed hugely.

Now such a scene as that would be unthinkable on board of either an American ship or a "Blue-Nose" (British North American vessel). There the traditions are all on the side of stern discipline, which is not based upon law, but upon force. The foremast hand, whoever he may be, that signs in an American ship, realises at once that it is dangerous to play any tricks with his superior officers, because, although he does not reason it out, he feels that it would be useless to invoke the law to protect him against the certain consequences of shirking work, insolence, or laziness.

And this leads me naturally to a consideration of the American skipper, that is to say, the skipper of the sailing-ship, the man who, by dint of seamanship alone, has risen from the lowliest position to command. No better sailors ever lived than the masters of American ships, and it should never be forgotten, when the statistics of our marvellous mercantile marine are studied, that not so many years ago the American merchant navy was more than equal to our own. Not only so, but the shore population was also so deeply tinged with the maritime spirit, that nautical terms were a part of the common speech of those who had never even seen the sea. It is hardly fair to use the past tense, because this is largely the case now,—so much so that a book bristling with nautical phrases will be read in America by both sexes with perfect ease from their familiarity with nautical terminology.

What sailor is there worth his salt who does not cherish proudly the remembrance of those magnificent "down-East" clipper ships and their wonderful passages to and from the Far East and San Francisco? Their doings have passed into proverbs,---the runs they made from day to day, the mountainous press of canvas they carried,-and the smartness of their crews. Many of them were built by "rule of thumb" and were sailed also much in the same way, for their officers prided themselves far more upon their knowledge of sailorising than mathematics; but they flew over the wide sea at a speed that our clumsier wooden vessels could not begin to compete with. In them the master was looked upon almost as a demigod. No man-o'-war's man to-day regards even an admiral with such awe as did the foremast hand of an American packet ship or China clipper the saturnine, deep-browed man who in spotless raiment and with an Olympian air strode up and down the weather side of his immaculate quarter-deck. And a man who had once made a vovage before the mast in such a flyer as the Sovereign of the Seas or the Dreadnought was wont to brag of it loudly ever after. It conferred a sort of brevet rank upon an A. B. that he had successfully survived all the hardships of such a voyage.

The watchwords on board these ships were "Good food and hard work." No cook dare venture on board of them unless he could justify his title, and unless he were clean enough to satisfy those hawk-eyed officers he had better never have been born than have ventured under the Stars and Stripes as cook. I have myself seen a Yankee skipper go into the galley, and, taking up the first saucepan to hand from the rack, wipe it out with a snowy handkerchief brought clean from his drawer on purpose. And if it showed a smear upon inspection there was at once a sound of revelry in that galley. Another one had a pleasant habit of going around the panelling of the saloon and staterooms, poking his handkerchief into the mouldings with a piece of pointed stick and examining it most carefully afterwards for any mark of dust. This, of course, was carrying the Yankee officers' passion for cleanliness to an absurd length, but it may safely be said that nowhere on the sea was freedom from dirt maintained at so high a level as it was on board the now almost extinct American clipper ships.

These masters fought their way up to command by sheer merit and force of character, allied to physical prowess, dauntless courage, and, it must be said in the majority of cases, ruthless cruelty. Laws for the protection of the common seaman undoubtedly existed, but it was an unheard of thing for them to be enforced, and many dark stories are current of men being done to death by incessant brutality, whose murderers, whether officers or master, quietly slipped ashore in the pilot cutter upon reaching the offing of their home port. Then if such an unlikely thing happened as the dead man's shipmates taking the matter of his slaying before the authorities it was hopeless to attempt the murderer's arrest.

But brutal and reckless as Yankee masters undoubtedly were, the fact remains that they were unapproachable for seamanship and speedy passages. Thev skimmed the cream off the Far Eastern trade, and, owing to the generosity with which they were treated by their owners, took no long time to amass comfortable fortunes. The knell of their supremacy was sounded, however, when Britain took to building iron ships. Even before that time, so well had the lessons taught by these dashing Yankee shipmasters and born shipbuilders been learned, that some of our firms had been able to build wooden ships that could hold their own in the swiftest ocean race. Then came the day of the composite ships (wooden planking with iron frame)the famous tea clippers of fo'c's'le story, built by such firms as Hall of Aberdeen, and Steel of Greenock. against which no Yankee clipper had any chance whatever. And when the iron ship appeared in her turn, in spite of the immense difficulty of keeping the hull under water free from encumbrance of weeds and barnacles, she at once sprang into premier place.

This, however, is a part of my subject that belongs to another place in the book. It is necessary to mention it here in passing because it is one of the prime reasons

for the rapid decay and disappearance of a body of men whose seamanship was peerless, men who carried the Stars and Stripes triumphantly over all the seas of the world. It must not be supposed, either, that American skippers were uneducated men. Many of them were, of course, but the proportion was far less than existed in our own service. Navigation as taught in the seaports of the United States on the lines of Bowditch was no mere perfunctory business, and although there were no compulsory certificates of competency necessary in those days there was a good deal of proper pride in mathematical attainment which those who employed officers of ships did their best to foster. And if there was a goodly sprinkling of men among them who did not care so long as they could "fudge" their position out in the most rudimentary way by means of an old wooden quadrant or hog-yoke, a tencent almanac, and the barest acquaintance with a set of nautical tables, why so there was and so there is now among our own people, even with compulsory certificates granted by a vigilant Board of Trade.

CHAPTER VI.

THE MASTER'S QUALITIES.

IF. as is highly improbable, the average landsman ever thinks anything about the duties of a shipmaster, it would be most interesting to know what he imagines them to be. Most intelligent men and women know that the primary duty of a shipmaster is to take his vessel across the trackless ocean to her destined port and return again as speedily as possible. So far so good, but beyond this first reason for a shipmaster's existence there are a host of other duties in all of which he is supposed to be more or less proficient. And there are certain qualities which he must also Failing them, he may be perfect in science. possess. full of energy, and faultless in seamanship, but as a commander he is naught. Of these the ability to command stands unquestionably first. No doubt this quality is hard to define, but the possession or the want of it makes all the difference between a comfortable and a miserable ship. One man will seldom, during a whole voyage, raise his voice loud enough to be heard by any one except the individual to whom he is speaking; the calmness and placidity of his demeanour will be amazing; yet in some mysterious way every one on board is made to feel that the master holds the reins of power with no slack or unready hand, that to disobey one of his orders would be a most dangerous experiment, and that he knows everything that is going on fore and aft.

Such a man, fulfilling this perfect attribute of command, I once had the pleasure to serve under, an elderly, prosaic-looking figure who used to come on deck shortly after daybreak every morning with a moth-eaten Bombay-made dressing-gown flung over his pyjamas, a mangy old fez upon his head, and his bare feet thrust into sloppy slippers. Thus attired he would pace rapidly up and down the poop for the space of half-an-hour, taking his constitutional, a most mirth-provoking figure. Yet no one ever laughed either behind his back on deck or in the privacy of the fo'c's'le. When he spoke it was in a velvet voice, but the man spoken to invariably took an attitude of profound respect on the instant. He was old and feeble, and our crew numbered among them some rowdies, but from England to China and back again that old gentleman's commanding personality kept the ship in a quiet state of discipline which was as perfect as it was rare.

On the other hand I have seen a most stately figure of a man, with a voice like a thunder-peal, unable to obtain respect from his crew, because in the merchant service, as I am never tired of reiterating, respect cannot be enforced; it must come spontaneously, a tribute to the personality of the officer to whom it is due, or it does not come at all. And then that ship is in a bad way. Another quality which is only second in importance to the one just mentioned is self-control. Since the shipmaster has no one above him in

his little realm, it is highly important to his whole well-being as well as to the comfort of the ship that he should command himself. However irritated he may feel at a mistake on the part of one of his officers, he should be able to conceal it before his crew. And here the Americans have shown British officers a good example. So long as an officer remains an officer on board of American vessels, so long is he upheld by all the authority of the master. There is no sneering comment upon his movements indulged in before the crew. no tacit information conveyed to those keenwitted fellows that the hapless mate-first, second, or third as the case may be-has lost the confidence and respect of his commander, and that consequently there is little or no danger in their treating him disrespectfully. Perhaps this is one of the hardest lessons that a shipmaster has to learn, especially in a sailing-ship. For three or perhaps four or even five months, sole monarch of his small kingdom, anxious to make a smart passage and often sadly hampered by adverse winds and calms, it is no easy thing for a naturally hasty man to discipline himself in such wise as to win the maximum amount of obedience and deference from those around him. Happy man if he have a hobby of some kind-a thirst for learning, a taste for natural history, anything that will exercise the powers of his mind and keep him from the moral dry-rot that always sets in where men are at the top of things, amenable to no authority but their own, and without any definite object whereon they may work and feed that appetite for labour, whether mental or physical, possessed by every healthy human organism.

Patience, perseverance, and a sense of justice are also indicated, as they are, of course, in the leaders in every business or profession, yet to an even greater degree at sea than anywhere else. For where you can neither get rid of your men nor afford to lose their services by punishing them, only the highest expression of these qualities is of any avail. It may perhaps be thought impossible that, except in the rarest instances, such a combination of excellences should be found in any one man. But that impression is not a true one. I am not exaggerating in the least when I say that but for the possession of these qualities in an extraordinary degree by masters our mercantile marine would never have risen to its present splendid height in spite of so many hampering disabilities unfelt by masters of ships under other flags. To take one aspect only, the disciplinary. I have slightly indicated the manner in which discipline is maintained in American ships; namely, by the employment of violence which is forbidden by law yet is invariably winked at. In the ships of every other nation but the English-speaking ones the merchant seaman is not only a native of the country to which his ship belongs, but he is never free from the environment of Naval law-the same law, that is, which obtains on board of a warship. For every seaman there is a man-o'-war's man, bound to put in so much actual service in a vessel of war and, as such, under the articles of war. So that disobedience to orders, insolence, or malingering (shamming sickness) are exceedingly expensive practices for the sailor to indulge in, the penalties being not only heavy but their infliction certain.

In a British ship, on the other hand, a master may unwittingly ship a crew of scoundrels who have made up their minds to do as little as they can as badly as possible, to refuse the most ordinary forms of respect to their officers, and to either desert or go to gaol at the first port, not because their ship is a bad one, but just by way of a change. And if the master or officers, worried beyond endurance, take the law in their own hands, their punishment and subsequent ruin is almost certain to ensue promptly. The rascals who have made the ship a hell afloat, confident in the tenderness of British law and its severity toward all forms of oppression, pursue their rejoicing way, and if brought to court may be fined a trifle of wages, which, as they set no value upon money, does not punish them in the least.

Some decent foremast hands may feel that I am here unduly severe upon the rank and file; that having been an officer, and, besides, left the sea for good, I have, like so many others, turned against my old But they would be utterly mistaken. shipmates. Tt is the merest platitude to say that every decent man's interest lies in having his eyes wide open to the faults of the class he wishes to benefit. The most of my sea-service was spent in a ship's forecastle, and I can assure my readers that I have never since felt more shame and disgust at the behaviour of some of mv watchmates than I did then. I cannot for my life see why the foremast hand should not be as self respecting, amenable to reason, and competent, as any good workman ashore. Sea life is not brutalising in itself; it is ennobling, and it is a strange return for the benefits that a life at sea confers upon those who live it that so many of them should gratuitously become brutish. Of course there is more excuse for the unfortunate slaves of steam, the firemen and trimmers. Yet even they can, and do in many instances, rise superior to their hard surroundings and show an example to men in positions where every comfort of life is enjoyed.

Another quality which shipmasters should possess, but whose necessity will be hotly debated by many, is that of being a God-fearing man. Some people will say that this embraces all the rest. That it should do so is undeniable; that it does do so is, unhappily, seldom the case. It is a great pity that in so many otherwise estimable men the spirit of godliness should be accompanied by a weakening of their power to command men. They become afraid lest their necessary acts for the preservation of discipline should be misconstrued into a violation of the principles which they profess. And this often results in their Christian virtues being taken advantage of by unscrupulous subordinates, so that the ship's condition becomes worse, not better, for the fact of a man being in command who is anxious to love his neighbour as himself. Needless to say, perhaps, that such a condition of things is altogether opposed to the true spirit of Christianity, which does not approve of allowing one's subordinates to break rules and defy rulers. This, however, is far too large a question to be more than glanced at here, especially as it is so hotly debated by many excellent seamen, who hold that the practice of

the Christian religion in the merchant service is an impossibility.

A master should be honest. Eyes will open wide at this, no doubt, since all men should be honest, but it must not be forgotten that all men are not so liable to temptations to be dishonest in a perfectly safe way (as far as the law goes) as a shipmaster is. The ports of the world are thronged with scoundrels who tempt shipmasters to betray their trust in a variety of ways. By bribery, the most common form of corruption, they are led into cheating the owner and the crew,--into downright robbery. There is the temptation to rob the crew, a perfectly safe operation, and one that can be excused by its perpetrators on the ground that, as Jack will only squander his money upon the vilest forms of debauchery when he gets paid off, a good percentage of it will be much better in their pockets than his. It may be done in a variety of ways, from the ostensible payment of "blood money" to a San Francisco boarding-master or crimp, which is deducted from the seaman's wages and shared by the skipper and his ally, to the commoner form of collusion with bumboatmen, tailors, etc., whereby the sailor is overcharged for everything he buys aboard, in order that a heavy percentage of his spendings may go into the master's pocket. Of course Jack is not compelled to spend anything, but it is unfair that he should be mulcted 25 per cent on such innocent outlays as for soft bread, eggs, fruit, or clothing. In these latter days the temptations to dishonesty in respect of such larger operations as chartering, towage, etc., are greatly lessened by the multiplication of appointed agencies

of the owner's abroad, but they still exist, and the sailing-ship master especially is often tempted to be dishonest in out-of-the-way ports of the world, temptations which, for his own sake, he should sternly refuse to countenance.

CHAPTER VII.

THE MASTER'S DUTIES.

As pointed out at the beginning of the last chapter, the primary duty of a shipmaster is to get his ship from port to port in the speediest and safest manner possible. And it may not be amiss to indicate here, in the briefest and most popular way, the broad principles upon which this is done. I wish to disarm criticism by experts by disclaiming any intention of giving more than an idea of the process by which vessels are taken across the trackless ocean to those who do not know and are daunted by a mathematical treatise.

Every school-child that has reached the third standard knows that the globe is represented as crisscrossed by a large number of lines running from pole to pole,—that is, from north to south; and right round the globe in the opposite direction cutting the others at right angles, or from east to west. The up-anddown ones, from pole to pole, are meridians of longitude; the crosswise ones are parallels of latitude. Now, since these are all numbered as degrees, the space between them being one degree,—the latitudes from the equator to the poles on either side of it as 1° to 90°, and the meridians from Greenwich to its opposite point on the other side of the world 1° to 180° ,—it follows that if a seafarer can ascertain at the

same time what particular degree of latitude and longitude he is in, a glance at his chart or sea-map shows him the position of his ship. This operation (finding the latitude and longitude) is performed in a variety of ways, but the simplest, and consequently the most universally used at sea, is by measuring the sun's height above the horizon at noon for the latitude, and about three hours before or after noon for the longitude. This is done, by means of a pretty instrument called a sextant, with the greatest ease and speed. At noon, the moment the sun reaches his highest point for the day, it is twelve o'clock, and a calculation, made in one minute, shows exactly how far the ship is north or south of the equator. The observations for longitude take a little longer. From the sun's height at the moment of observation is calculated the exact time at the ship, and as a chronometer, which every ship carries, shows the exact time at Greenwich, the difference between the two expresses in hours and minutes (easily convertible into degrees and miles) the distance east or west of Greenwich, the prime meridian of longitude, for every degree (60 miles) is equal to four minutes of time. Having found the latitude and longitude, the master makes a little dot upon the chart at the exact point where the lines of latitude and longitude which he is on cross one another, and sees as plainly as if he were standing at a well-known street-crossing where he is.

From the position thus obtained he shapes his course in the direction best calculated to reach his destination; that is, if the way in which the wind is blowing will allow him to do so (in a sailing-ship). This is

done by bringing the desired point of the compass in a line with a mark drawn upon the side of the round box in which the compass swings, which mark really represents the ship's head. And if, as is popularly supposed, the compass needle always pointed true to the north, navigation would be very simple. But alas, this instrument is full of vagaries. Apart altogether from such harassing complications as the attraction of the iron in the ship produces, there is the variation of the compass itself from the north, which changes continually as the vessel goes on her way. Then there is bad steering, and, worse still, the effect of unknown currents which sweep the ship away in some direction which cannot be calculated until after it has occurred. The speed of the ship is known by the use of a beautiful instrument called a patent log, which, towed behind the ship, registers her rate of progress with an accuracy unobtainable by any cyclometer. Where, for economical reasons, the patent log is not used, the mariner must rely upon a primitive instrument called a "logship," which, being used once every hour or two hours, cannot, however good it may be, give such true results as the patent log, which records every foot of the distance travelled.

When, however, the heavenly bodies, which are always faithful and reliable, are obscured by bad weather, and the master has to depend upon a position obtained by a calculation of the course made by compass and the distance run by log, he may well be uneasy if he be in difficult waters near land. For the compass can only be corrected by the aid of the sun, moon, or stars when at sea, and if *they* are invisible it may be a very unsafe guide, although an indispensable one. Roughly, these are the principles upon which a ship is navigated, modifications and extensions of which go to make up the perfect navigator. And no matter how perfect a navigator a master may be, he will always, if he be wise, see that the officers work out the ship's position independently, so that a comparison may be made between the various workings and any errors detected.

This business of navigating the ship in deep waters is, however, always looked upon by masters as the lightest part of all their duties, although I have been shipmate with masters who had grown too lazy to attend even to that, leaving it to the mate. When the ship comes to the tortuous passages of, say, the East Indian Archipelago, or threads the mazy ways of the West Indian islands, the master has an opportunity to show what metal he is made of. On reaching the vicinity of our own dangerous coasts in the long stormy or foggy nights of winter his anxieties become great. Steamship masters have here a tremendous advantage over their brethren in sailing-ships, whose best intentions are often frustrated, their best seamanship rendered of none effect, by the perverseness of the wind. This is especially the case near home, where the sea-traffic is great and the appalling danger of collision is added to the perils of rocks, quicksands, and derelicts. These are but few and feeble words wherein to outline the responsibilities of a shipmaster for the safe conduct of his vessel, responsibilities which weigh so heavily upon some men that for several days and nights together they are unable to take the rest their bodies imperiously demand; but they may serve to indicate them to the sympathetic reader. And when the exceedingly small percentage of casualties are taken into consideration, all will surely admit that the standard of ability among this splendid body of men is satisfactorily high.

The shipmaster's duty as a trustee of an enormous amount of valuable property, and, in a passenger ship, of valuable lives, is a most important one. While he must see to it that there is no delay in their conveyance to their destination, he must remember that safety is the first consideration. Recklessness is really unpardonable, and must sooner or later end in his ruin. He represents not only his owners, but the owners of his cargo and the underwriters who insure that cargo. He should be thoroughly well up in those sections of maritime laws-and they are many-which affect the traffic; know how to deal with grasping brokers in foreign ports into which he may be driven by distress; and be able to make good bargains and keep accurate accounts, since none but the finest passenger steamers carry pursers and clerks to take these onerous duties off his hands. In passenger ships he must see that his charges are made comfortable, bear with their often unreasonable complaints, be courteous and genial, and generally exert himself to make his ship-and consequently the line to which she belongs-popular, since "popularity" spells "dividends."

In cargo ships he must be something of a doctor, for on a long passage there will certainly be many ailments among his crew, and probably some fractures. Ignorance of how to deal with these means a terrible amount of misery to the hapless sufferer lying groaning for assistance which is not forthcoming. The present generation of shipmasters is greatly in advance of what smattering of leechcraft was possessed by their predecessors, but even now there is a plentiful lack of this most humane and necessary knowledge. One would hardly now expect to find a shipmaster so ignorant as he of whom the story runs that, finding that a supposed ailment called for a dose out of No. 7 bottle, he made up the draught out of Nos. 4 and 3, upon discovering that No. 7 was empty! Or such a rough customer as the skipper of whom it is told in ships' forecastles that, when it was reported to him that a man had broken his leg, replied : "Oh, give him a bucket of salts." But in one vessel where I was a foremast hand, several of us caught severe colds upon coming into a lonely New Zealand port where no doctor was to be obtained. The skipper diagnosed our complaint as bronchitis, and exhibited tartar emetic with peculiar and painful results.

Still it cannot be denied that among the old schools there were some wonderfully skilful, if rough, surgeons, men of iron, who, if need arose, could and did practise the art upon their own bodies under circumstances of suffering that might well have reduced the stoutest frame to piteous helplessness. Such a case, for instance, was that of Captain Samuels of the *Dreadnought* American packet-ship. I have not his book by me, so must quote from memory, but the picture he drew was so vivid that I do not think any one could forget its essential details. He relates how, in one of his passages from New York to England, he was midway across the Atlantic when, during a very heavy gale, a sea was shipped which dashed him against the bulwarks with such force that one of his legs was broken It was a compound fracture, and alabove the knee. though such attention as was possible under his direction was given him at once, in a few days he recognised the necessity of having the leg cut off. Mortification had set in. His mate was absolutely unable to attempt the job from sheer physical incapacity, although in other respects a most able, strenuous man. So the sufferer in superhuman fashion rose to the occasion and performed the operation upon himself, and successfully, too, for when, a few days after, the vessel arrived at the Açores, there was nothing left for a surgeon to do.

Another anecdote, this time from the log of a whaleship, the Union, of Nantucket, Captain Gardiner, who. while pursuing his calling off the west coast of South America, was injured by a sperm whale which flung its jaw upward and across the boat, catching the captain by the head and shoulders. The blow did not sweep him overboard, but laid his scalp back from his skull; broke his right jaw, tearing out five teeth ; broke his left arm and shoulder-blade; and crushed the hand on the same side between the whale's jaw and the gunwale of the boat. In this deplorable state he was carried on board his ship. His young officers, naturally bewildered by the appearance of his broken body. did not know what to do for him. They may well have been excused for considering his case hopeless, His brave spirit, however, did not recognise defeat. He gave directions, mostly by signs, for the preparation of bandages and splints, and instructed his willing but

ignorant helpers in the way of using them. When all had been done that he wished or could think of, he ordered the vessel to be taken into port and, although apparently at the point of death, he lay on deck in a commanding position and piloted his ship in. A Spanish surgeon was brought on board, who, as soon as he saw the sufferer, advised sending for a priest, as the case was hopeless. This advice was lost upon the valiant Yankee, who sent a messenger a distance of thirty miles for another doctor-a German. This gentleman hastened down to the ship, dressed the skipper's wounds, and had him transported on an improvised ambulance, slung between two mules, up to the healthy highlands of the interior. In six months' time he was fit to resume command of his ship, which meanwhile had made a most successful cruise under the mate. His left hand, unhappily, had been so badly mangled that it was hardly more than a stump, the two first fingers being so twisted in the palm that he was afterwards always obliged to wear a thick mitten to keep them from being entangled in a lance-warp while he was lancing a whale. This good man was for a quarter of a century master of a whaler and lived to be nearly ninety years old.

So prolific is the source whence these anecdotes are drawn that I am embarrassed where to choose. However, I cannot help thinking that for a fitting close to this subject it would hardly be possible to select a story more thrilling than the following. During a whale hunt the line kinked, and dragged a man, entangled by one arm and one leg, deep under the sea. He was released by the imprisoned

members giving way under the frightful strain. Rising to the surface and floating there unconscious, he was picked up and taken on board the ship. There it was found that a portion of the hand, including four fingers, had been torn away, while a foot was twisted off at the ankle, leaving only the lacerated stump with its tangle of sinews hanging loosely. From the knee downward the muscles had been dragged away by the line, leaving the almost bare bone with just a veil of tendons and leaking blood-vessels, so that it appeared as if the poor wretch had only been saved from drowning to die more cruelly, unless some one should have the nerve to perform so radical an operation. No surgical instruments were on board. But Captain James Huntling was not the man to allow any one to perish without a great effort on his part to save them. He had a carving knife, a hand-saw, and a fish-hook. The injury was so great and the poor fellow's cries so heart-rending that several of the crew fainted while attempting to help the skipper, while others became sick. So. unaided, the skipper lashed his patient to the carpenter's bench, cut off what remained of the leg, and dressed the mangled hand. Then, making for the Sandwich Islands, he put the man in a hospital, where he recovered, and, returning to America, passed the rest of his days in comfort as a small shopkeeper.

There is one more reason why it is so necessary for the master of a ship to have some medical knowledge, and this has a humorous side in many cases. It is that he may be able to detect that curse of a ship's company, the "malingerer." Often he is by no means easy to "bowl out," being, like most lazy people, of

considerable inventive genius. And although a humane man would much rather be imposed upon a dozen times than send a suffering man to work while unfit once, it is intensely galling to find that a scalawag with absolutely nothing the matter with him but a constitutional aversion to work has been indulging himself at the expense of his already hard-pressed shipmates for a week or two. A little practical knowledge of medicine will in most cases obviate this and enable the shipmaster to give the loafer a dose that, while it will do him no harm, will make him so uncomfortable that work will be a relief. But I find that the recapitulation of the master's duties demands another chapter.

CHAPTER VIII.

THE MASTER'S DUTIES-continued.

WHILE we have thus lightly run over such duties of the master of a merchant ship as are imperatively demanded of him by his position, it must not be lost sight of that there are many things that he should be and know that, while not compulsory, are most necessary, and no master who is really attached to his profession will neglect them. For instance, the Board of Trade has a voluntary examination in "steam" which is based upon some of the most elementary facts connected with running marine engines. A master may pass in steam or he may not, as he pleases, and it is doubtful whether many owners are influenced in their choice of a master to command one of their ships by the fact that his certificate is endorsed "passed in steam." Yet it should be obvious to all that for a master of a steamship, however small, to be ignorant of at least the broad principles of marine engineering must be a terrible defect. He should certainly be able, in the event of his engineers dying or becoming incapacitated, of taking charge of the obedient monsters below and running his ship, if not to her destination, to some port where the need could be supplied. And in any case he should know well under what conditions those engines do their work, that he may be the better able to appreciate his engineer's reports, and for other reasons which need not be stated. Any lack of this knowledge on the part of a steamship master is the more to be deprecated because he has such splendid opportunities and such ample time for learning.

Another subject which is not compulsory, but which it is very necessary that the shipmaster should have more than a nodding acquaintance with, is ship-construction. Studied in books it looks formidable enough to any one but a student of the subject and an excellent mathematician, but a few visits to a shipbuilding yard intelligently made, and the things seen there carefully noted, would be of inestimable service. Allied to this is the vast subject of magnetism which so intimately concerns every shipmaster in these days of steel, when the compass, poor thing, is hard put to it to remember the location of the magnetic pole at all, so sorely is it beset by diverting influences above, below, and around. But for a fair list of the things that all shipmasters should know, and might, from their abundance of leisure (in sailing-ships especially), so pleasantly and easily acquire, reference should be made to a book which I remember as a bantling, but which has now grown to most portly proportions, -" Wrinkles " by Squire T. S. Lecky. Within the boards of this splendid book Mr. Lecky has gathered a stupendous amount of information which he imparts in the most delightful manner. For many years he commanded one of Messrs. Holt's steamships running between Liverpool and South America, so that his practical knowledge is as extensive as need be, while his theoretical learning is not only great but sound.

This book has been the hobby of his life, and it may truly be said that any shipmaster who will read, mark, learn, and inwardly digest it, will be perfectly equipped for one of the most onerous of all professions if he only has the power of putting his learning to practical use. I have never seen, spoken to, or had a letter from Mr. Lecky in my life, so that what I say is perfectly unbiased by any personal consideration. Mr. Lecky is a magnificent example of what the merchant shipmaster may make of his opportunities for study if he be so inclined.

There are also branches of study-such as the most fascinating one of marine natural history-which can be pursued nowhere else so well as at sea in a sailingship. With a little aptitude for drawing, a camera, and a microscope, the shipmaster might not only pass his plenteous spare time most pleasantly, but accumulate a store of the most valuable material whereon the savants ashore might exercise their stock of wisdom. And the study of languages, too,—how necessary for a. man who, if he speak but his own tongue, must of necessity be often severely handicapped in the race with foreigners, who usually speak two or three, to say nothing of the ease with which a man may be imposed upon in a foreign port who is obliged to transact his business by the aid of an interpreter. But the time is probably fast approaching when the knowledge of one other language at least besides his own will be made compulsory for the British shipmaster, so that I will say no more about the matter here except that unless greater efforts are put forward by seagoing youths in this most valuable

direction they will find it harder than ever to compete with the constantly increasing numbers of foreigners who are pressing into the afterguard of our mercantile marine.

And now for the least pleasant portion of this section of my subject, the question of drunkenness. For the reasons already quoted this vice is one to which the shipmaster is continually being tempted. Being. when at sea, a law unto himself, he may, if he will, become a steady tippler, gradually sinking lower and lower into the hopeless drunkard. If he have any tendency that way there is only one thing for him to do,-to become a total abstainer from intoxicants. Sad is it to say, on the testimony of many such men, that such a virtuous resolve is often detrimental to a man's chances of doing his business in foreign ports, where that business is only carried on over drink. Ι know that by some good people ashore this statement will be pooh-poohed, but it is nevertheless true, and the hindrance it puts in the way of the teetotaler doing justice to himself and his employer is very real. Many a smart skipper has been thus ruined, having laid the foundation of drunken habits in ports where the first questions and the last to be put to him were : " Well, Cap'n, what are you going to have, or what are you goin' to stand?"

Again we may take comfort in the thought that sobriety is the rule among shipmasters of to-day, and not the exception, as it once was. I speak feelingly, having suffered many things at the hands of drunken skippers. Vividly do I remember on my last voyage as mate, on the first night in the Channel outward

bound, my skipper saying to me confidentially : " I always live on brandy while we're in the Channel," and the sick feeling that I experienced at his remark. Let me hasten to add that he was wrongly accusing himself, being at the time half-seas-over and exaggerating, as he was wont at such a time. He certainly did drink, and very much more than was good for him, but his tippling never gave or made any trouble. What made his remark so terrible to me was that two voyages before I had been mate of a brig with a man who, from the day that I joined her until the day. nearly four months afterward, when I refused to stay on board any longer, never drew a sober breath. Т may perhaps be excused for dwelling a little upon the plain facts of this short sea-experience of mine, which, in the words of Mr. Justice Day, who heard some of it recapitulated and proved in the Court of Queen's Bench, "surpassed the wildest flights of imagination." Sordid, certainly, yet not without a certain romantic outcome.

The vessel, whose name I suppress, was the property of a hard-working man in one of our northern seaports who had toiled and saved until he became her owner. At the time when I joined her as mate she had been absent from her first port of departure in England for nearly two years. During that period she had visited many ports, in each of which the master had abandoned himself to drunkenness, spending recklessly every penny upon which he could lay his hands, and ignoring all the owner's complaining letters. Five different mates had been engaged, had sickened of their position, and had left. At last my

turn came, and, all unknowing what awaited me, I went on board. I found the poor old vessel most shamefully neglected, the crew looking woe-begone and disheartened, and the only officer, the second mate, firmly determined to work no more. I took charge and did what I could, going ashore persistently for such instructions as I needed, but ever finding my commander in a state of maudlin drunkenness. After a few days the vessel was loaded and made as ready for sea as her condition rendered possible. I duly informed the master, who had never even seen the vessel since I joined, of our readiness to proceed, but he was of opinion there was no hurry. So day after day slipped by for three weeks, until the consignee of the cargo wired from New Brunswick protesting so vigorously that the shipper took steps to expedite our departure. He told the fuddled skipper that unless he went to sea forthwith I should be ordered to leave without him, the shipper taking all responsibility. This ultimatum aroused him sufficiently to get him on board, and to sea we went. But he immediately sought his berth and continued his spirituous exercises, varied by attacks of *delirium tremens*, while alone, and unaided except by the weary crew, I endeavoured to navigate the clumsy vessel down the Nova Scotian coast in midwinter." To add to my troubles, the chronometer was hopelessly out of order, having been, I believe, tampered with by the mutinous second mate.

How many hairbreadth escapes from destruction we had in that stormy passage of three weeks I have no space to tell in detail, but at last we obtained a pilot who brought us safely into the harbour of St. John, N. B., in a night of inky blackness and drenching rain, and there left us entangled amidst a motley crowd of coasters. Next day we were extricated and laid by a wharf, when to my astonishment my worthy commander appeared and went ashore ; his first public appearance since coming on board in Cape Breton. That night, when the vessel had settled down upon the mud by reason of the great fall of the tide, so that her tops were nearly level with the wharf-edge, the skipper returned, and, avoiding the lighted gangway carefully placed for him, walked over the unprotected side of the wharf and fell fifty feet. He passed between the vessel's side and the piles of the wharf without touching, and entered the mud feet first with a force that buried him to his armpits. His cries aroused us and we rescued him, actually unhurt but nearly sober. Again he disappeared from our midst, having now a good excuse-shock to the system! Having discharged the cargo and taken in ballast according to instructions from the consignee, I again danced attendance upon him at his hotel until he at last decided to make a move and came on board attended by a most finished rascal of a 'longshore-man who had apparently been his drinking crony all the time he had been ashore, and who was now-save the mark !- coming with us to our next port to stow the cargo of lumber we were to take home.

We towed across the Bay of Fundy to Parrsboro' in charge of a pilot, the skipper and his friend both shut in the skipper's stateroom below, drinking. When we arrived I was in serious difficulty as to a berth, because the master was so drunk I could get no instructions, But after a while I succeeded in finding a berth, where we lay quietly all night. In the morning early my skipper sent for a sleigh and again departed to a hotel, where he remained until the vessel was loaded. I frequently saw him in bed and protested with all my power against the shameful way in which the *quondam* stevedore was stowing the cargo, but all my remonstrances were unheeded. At last the cargo was complete, including a deckload six feet high, and the vessel was so unstable ("crank," as we call it) that she would hardly stand up at the wharf.

Then I sought the skipper for a final interview, telling him that, having regard to the condition of the ship, his own continued drunkenness, and to the fact that I was the only officer on board (the second mate having obtained his discharge in St. John), I wanted to leave the ship. I felt that it would only be tempting Fate to undertake a North Atlantic passage in midwinter in such a vessel under such circumstances. Moreover I warned him that in my estimation he did not intend that the vessel should reach home, hoping by shipwreck to wipe out the effects of his two years' drunkenness and dishonesty. Of course he laughed at me and bade me go to hell. I then took the only course open to me there; I left the ship, writing a letter to the owner in which I detailed matters. Two days afterwards a tugboat was engaged and the brig was towed back to St. John, where I heard that another fortnight's spree was consummated. Another mate was engaged and she sailed for home. Four days after, in a gale with frost, fog, and snow, she was run ashore on the coast of Maine, becoming a total wreck and destroying four of her crew,—not, of course, including the skipper.

Yet this man had the effrontery to sue the owner, upon his return to England, for his wages for the whole voyage. Not only so, but he would certainly have won his case but that the owner succeeded in discovering me. My evidence was final, supported as it was by the entries in the log-book, which, unfortunately for the skipper, was saved from the wreck.

Before closing my remarks upon the master, which, lengthy as they are, only skirt the subject, I would like to pay a well-deserved tribute to that splendid body of master-mariners commanding the great mercantile marine of our North-American Colonies. Manvnay, most of them-have risen to command their ships in the teeth of great disabilities and drawbacks. They have little polish, but a great deal of capacity, for the "Blue-Nose," as the British North-American seaman is called by all other English-speaking mariners, is a born seaman as well as a born shipbuilder. In only one other part of the world-Scandinaviais it possible to find men who are capable of building a ship, farming and timber-felling between whiles; then, when the hull is finished, rigging her and loading her with their own produce, and sailing her to any part of the world. These qualities seem indigenous to the soil of the coast of British North America and the northeastern shores of the United States. But it is to be noted that the final extinction of this splendid industry is near at hand. Iron and steel and steam have compelled those sturdy seamen of the North to give up their beloved and stately wooden ships,-all

but a few that are holding on almost despairingly against the steadily rising tide.

Yet when all has been said for the "Blue-Nose" master that ought to be said, it must not be forgotten that his reputation for humane dealing with his crews is far worse than that of the Yankee. He has learned the American lesson of how to enforce discipline without law,-in defiance of law, in fact,-and learned it so well that any old sailor will tell you that a "Blue-Nose" is the hardest of all ships to sail in. Perhaps this is hardly to be wondered at when the motley character of the crews they are obliged to carry is remembered, their own spare population only sufficing to supply them with officers. That their high courage and stern resolution to be master in fact as well as name often leads them into deplorable excesses of cruelty cannot be denied truthfully. And yet it may be doubted whether a good seaman would not rather sail in a ship under stern discipline, even if it were enforced by an occasional broken head, than be one of a crew who were permitted to act and speak as their fancy listed, to the misery of all on board, as is undoubtedly the case in so many of our British ships.

CHAPTER IX.

THE MATE.

NATURALLY, perhaps, seeing that most of my own sea service as an officer was spent in this capacity, I come to the consideration of the mate's position with very cordial feelings. A little shamefacedly, too, for I remember an admirable little book which used to have (and may have now for what I know) a good sale among mercantile marine officers in embryo. It was called "The Mate and his Duties" and was written entirely for the use of the profession, so that it would not be appreciated by shore people at all. To us it was of great use, although few young officers reading it for the first time could help a feeling of despair stealing over them as they studied those counsels of perfection. It did not seem possible that any one man should be sufficient for all these things. So we tried to forget the whole duties of a mate and concentrated our ideas upon the present duty to be performed, trusting that we might rise to each occasion as it presented itself.

But, to begin at the beginning, let us take the title "The Mate." It is a word of simple origin, easy of derivation, and ancient enough to make it honourable, and therefore it is a matter for congratulation that the Board of Trade has seen fit to retain its use instead of the more modern and finical "first officer," It is used almost always on board ship without any prefix, as needing no distinctive mark like the other mates; as, second mate, bo'sun's mate, cook's mate, etc. The mate is the chief executive officer, the companion of the master, who should, except when all hands are on deck, issue all his orders through the mate as a matter of etiquette. Upon the mate devolves the working of the ship, and her command upon the death or incapacity of the master, to whom he comes next in importance on board. Perhaps in this latter respect I ought to except steamers, where the chief engineer is a man of great weight and is apparently bound to be of greater weight in the near future. Yet, although the chief engineer's pay be so much larger than that of the mate, and his importance so great, there is one aspect of their relative positions which cannot, to my mind, be ignored in considering this vexed question of precedence. It is that at all times the engineer, who is below, must obey the orders of the officer, who is above, immediately, unquestioningly, under severest penalties, as is only fitting, seeing that any slackness, not to say disobedience, might result in a terrible calamity, such as running down another ship.

Let us, however, pass this matter by for the present, since it must be dealt with when speaking of the engineer later on. Again it must be noted, as in the case of the master, that there is a vast range of difference among mates, from he who manages a monster like the *Oceanic* down to the mate of a footy little brigantine "going foreign." Yet in the eyes of the Board of Trade they are both equal; the same certificate is re-

quired of both. As a matter of detail, however, it will be found that not only the mate, but the long list of junior officers, in such a ship as the Oceanic, will have passed the examination for master at least, most of them for "master extra," and many of them, as hinted at in a previous chapter, will have commanded magnificent sailing-ships. But it is almost ludicrous to see how, in a sailor's eyes, the fact that a man is in command-of no matter what-will weigh, as far as his importance goes, against the man who is not. There cannot be much doubt as to which occupies the most important position, the mate of an ocean liner like the Campania, or the master of a sailing-vessel of, say, some 500 tons, creeping wearily about the world wherever it may be found possible to secure a bit of cargo. But-and it is a mighty big "but"-one is, in nautical phrase, Captain Brown and the other is only Mr. Jones ----and there is an end of discussion.

Apart, however, from sentimental consideration there are many reasons why the grades of mates should be held so different. For instance, the master of one ship, however small, if only he be gentlemanly and accustomed to command, will find little or no difficulty in springing suddenly to the command of another ship no matter how large, because the minor details are attended to by his subordinates, who are usually competent men, and he, being at the head of the position, can calmly observe matters without letting any one see that he is strange to such a giddy height. Not so the mate. If it were possible to transfer, say, a mate of a schooner into the position of mate of a 3,000ton sailing-ship without much previous training, he would be lost. His new duties would overwhelm him. As well expect a small tradesman who has been grubbing away in a little suburban shop on a turnover of $\pounds 4$ a week to suddenly assume charge of one of the largest departments at Whiteley's or the Army and Navy Stores. For the mate does not merely command the ship during the master's absence or act as the master's mouthpiece. It is his to see that orders given are carried out and to hold the proper person responsible for neglect.

But perhaps we are getting along too fast. To return then for a moment to a consideration of how the mate attains his position, that last rung but one on the ladder of promotion which, alas, is separated by so wide a gulf from the next one above. It is hardly necessary again to go over the various steps which have been already mentioned in the case of the master, except in the most cursory manner. First, usually, but not compulsorily, the serving of a term of apprenticeship fixed at four years by law, the last year of which is counted as the service of "able seaman." Or, as the rules merely specify that the candidate for a second mate's certificate shall have been four years at sea, one vear of which he was an able seaman, he may have simply entered as boy and gone on to "ordinary seaman" and then to "A. B." This course is the one adopted in American and Canadian ships, where apprenticeships are unknown, but there the candidate is usually in far better case than any apprentice in a British ship, because he is sure to be put on board by some one whom the master is anxious to please, or, more probably, he is a friend or relative of one of the officers

themselves, in which case, although his designation may be humble enough, he will live in the cabin and have his profession thoroughly burnt into him, a process which he will in no wise be able to escape.

Our mate, however, having served his allotted time and received the essential recommendation from his last commander, makes his way to a navigation school; not that he, unless he be a hopeless idiot, has waited until now to be taught navigation, but in order that his knowledge may be suitably arranged for production at the right time and in the accepted fashion. Some young would-be officers are foolish enough to imagine that the master of a navigation school can also help them in their seamanship, but with lamentable results, for the navigation is in cut-and-dried exercises which any ordinarily capable scholar may learn with little difficulty, since all of them may be satisfactorily done without the slightest knowledge of the higher There are thousands of mercantile mathematics. marine officers holding certificates,-good men, too,who could not work a problem in trigonometry without the tables to save their lives, and to whom Euclid is a sealed book, for clever men have long been at work simplifying navigation problems until their execution is just a matter of simple arithmetic and acquaintance with a set of nautical tables. This state of things gives rise to much controversy among those who are interested in mercantile marine officers. Some say that every officer should make a point of knowing, not merely how to work his problems, but why certain tables are used; in other words, that he should not merely work by rule of thumb, but be a competent

mathematician. Then, these gentlemen add, he would be able to command not only higher wages but more consideration from his employers, besides being better able to compete with the carefully-educated foreigner. Others contend that the business already laid upon merchant officers is fully as great as they ought to bear, and that, supposing they had learned the mathematical theory of navigation, they would still in practice use the rule of thumb method. Not feeling at all capable of deciding between these two contestants I merely present their views, contenting myself with the passing remark that, supposing a man to be a good seaman, it cannot be to his detriment to make himself as proficient in the mathematical theory of navigation as his capacity will enable him. But with regard to seamanship matters are totally differ-Here there can be no difference of opinion. ent. Seamanship-that is, handling of a ship under all circumstances of weather, the fitting and keeping in repair of her masts, rigging, sails, etc., and the stowage of her cargo-cannot be learned from books. The unhappy neophyte who has scrambled through his apprenticeship without attempting to learn the business, and comes at the last moment to his crammer for assistance, is in evil case when standing before the keen-eved old shipmaster who is to examine him. He tries to recall book answers to questions that are not in the books.

Even the "Rule of the Road," that most essential part of all a seaman's education, though it be found in a set of iron-bound articles, is apt to vanish entirely away from a man who has only studied it in book

form. When the examiner hands him a model, and, telling him to imagine himself in command of her, places other models at various angles to her course and asks him what he would do, he will, if his knowledge be theoretical, surely find it depart from him in his sore need and leave him dumb and witless. And so it will be with all the various branches of seamanship. The ordeal of a viva voce examination is too great for any mere theorist to come through successfully. And failure means not only a forfeiture of fees, but a compulsory going to sea again for six months before the next presentation for questioning. The navigation, on the other hand, is considered so much less important that failure to pass that part of the examination only carries with it forfeiture of fees and a space of three months before appearing again, during which time the candidate may remain on shore at school.

Let us suppose, however, that our young aspirant has so well prepared himself that he has gone flying through his first examination, emerging a full-fledged second mate. In that case, as already remarked, much will depend upon his position with regard to influential friends among shipowners or vacancies in the firm with which he has served his apprenticeship. So many are the difficulties, so varied are the conditions under which the young officer works his way upward, that it is impossible to speak definitely as to the length of time that will elapse before he again approaches the dread tribunal for another inquisition as to his qualifications for the post of "first mate." Since I left the sea there have been several modifications in this matter. One of the most important, made certainly as a concession to the needs of officers in steamships, is that a man with two years' service as second mate, having in the meantime passed his first mate's examination, may pass his examination for master although he has never served as first mate. This, in view of the almost invariable rule in steamships that a man must have a certificate of higher grade than the one he intends to serve in, is no more than bare justice. And much as we who have been through the grinding of the sailing-ship mill may gird at it, there can be little doubt that before very long it will be found impossible to insist upon the candidate having served his time in sailing-ships. The sailing-ship has not gone yet, by a very long way, as one visit to the docks will show any one who cares to inquire, but the day of her extinction is within measurable distance. If once the Panama or other inter-oceanic canal connecting the Atlantic with the Pacific becomes an accomplished fact, sailing-ships will be worth old-iron price and no more.

To return to our candidate. Let it be granted that he has been so well supported in his application for employment as second mate that while yet the ink is tacky upon his certificate he has got a berth for a round voyage lasting a year. Upon his return he again looks up his old schoolmaster and gets coached for another visit to the examiners. This second ordeal should be comparatively easy, for while there is very little navigation added to what he has already done in the examination for second mate, he ought, by this time, to have perfect confidence in his ability to answer any question put to him about seamanship, since he has had practice in ship-handling. In my own

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case I can only say that "passing" for mate was a mere bagatelle as compared with passing for second mate. And as soon as he hears the blessed words "Where will you have your certificate sent?"—which is the formula used by the examiner to intimate that he has passed, he feels now that his course is clear, he has entered the charmed circle and become that muchenvied individual, a full-blown "first mate."

CHAPTER X.

THE MATE'S WORK-ON A STEAMER.

HAPPY indeed is the master who finds a good mate, but happier still is the mate who has the joy of serving under a master who, while never neglecting his own duties, is not forever fussing about finding fault with the way in which work is being carried on,-a master who will treat his mate as his right-hand man, not only trusting him, but confiding in him. And even while finding out whether he be worthy of trust, such a master will make his observations in an unostentatious manner, most careful that no one may suspect that the mate is being weighed in the balance of his mind. Whether a man makes a success or a failure as mate, and, consequently, as master, supposing that he ever reach that coveted position, is more largely due to the treatment he receives at the hands of his first master than is generally admitted. Everywhere, unfortunately, are to be found men who, while indignantly repudiating any description of themselves as persecutors, are yet saturated with the idea that it is necessary to treat the beginner who comes under their control with studied harshness; to comment upon his slightest mistakes-not due to ignorance, but to a nervous anxiety to do his best-as if they were indisputable proofs of his being a fool; to find out his tender spots and probe them, so that the hot flush

of shame rises and the tongue is almost bitten through in the endeavour to restrain the furious reply that would be fatal; and more than all, and worse than all, to comment upon a beginner's shortcomings openly before the men and boys over whom that beginner is placed in authority, thereby laying him open to the covert sneer, the insolent retort, and slackly performed obedience. Such treatment is diabolical cruelty to a highly strung, sensitive man, no matter how expert, how clever he may be. That upon first entering a new position he will make mistakes is an axiom, for, as has often been said most truly, the man who makes no mistakes makes nothing. Especially is this so when one realises that he then for the first time feels the burden of responsibility,feels it with a keenness that use will presently dull the edge of,-and knows that swiftness of decision and readiness in action must be joined to accuracy of knowledge and fertility of resource. To the man who is not sensitive, yet not dull, these early experiences are not nearly so full of painful incidents; but the majority of modern officers still bear about with them the scars of their early memories when their ears caught the faintest whisper of disparagement, their eyes saw every shade of expression that flitted across the skipper's face, and they were continually torturing themselves with questions as to whether or how they had failed to come up to the mark.

But to return to the actual duties of the mate. Undoubtedly his prime duty is that of an overseer, the manager of the business wherein the skipper occupies the position of chairman of the board of

directors. In the great liners, while the foregoing still holds true, it must necessarily be modified somewhat. There are in these splendid vessels many officials who, nominally responsible to the mate for all they do, really report direct to heads ashore. Still, for all practical purposes, the mate is the centre around which all the working interests of the ship, outside the engineer's province, revolve. He it is who sees that the routine of duty goes steadily forward without any slackness or neglect, who must know the condition of the ship (again as distinguished from the engineer's department and the chief steward's domain), and who must see that her condition is first class and is kept so. Of course in such a ship as the Lucania, for instance, the work of the mate resolves itself more and more into generalship. He has such an army of subordinates, each of whom is charged with some particular duty and responsibility to the mate for its being carried out, that he does not need to be forever seeing for himself that the work is being done. In such a ship the mate keeps no watch. He is on duty all day and sleeps in all night, although he would doubtless say that he was really always on duty, and that the fact of his not keeping a particular watch means only that he gets much less rest than if he did. But one thing may be taken as undeniable, the mate of a liner occupies a position of tremendous responsibility and honour. He is the real commander of the ship, the master being, like the captain of a man-o'-war, a sort of "veiled prophet" with whom the crew and junior officers seldom come in contact except in extra bad weather or on entering and leaving

harbour. Yet—and here comes the curious pinch between the mate's salary and the master's, how great a gulf is fixed! It seems such an anomaly that a man who really bears the whole burden of the ship's working—who can be, and who is, called to account by the master when anything goes wrong, and who is generally well into middle age before he gets command himself—should be so poorly paid as compared with the master. It works out roughly like this:

A friend of my own was second officer of a liner for four years. In his pre-steamer days he had been master of a large sailing-ship, so that he was getting on in years. Then, as he began to fear that he was fixed in that subordinate position, he suddenly succeeded to the mate, who obtained a command elsewhere. For one year only he was mate; then, on the master's retirement, he obtained the command. We will not enquire what powerful influences were at work to push him on so suddenly. The net result was that in one year his income was nearly trebled, his salary as mate being only \pounds_3 per month more than his salary as second mate. It does not appear easy to explain why-since the mate may at any moment be called upon to become master--it should be considered necessary to have so serious a difference between their salaries. But it explains the statement that is often truly made that, unless a man has a private income, he must not only be very economical to live upon his pay while he is an officer in a swagger line, but he must forego all idea of getting married. That is, if he wishes his wife and children to get enough to eat.

The next step down the scale of ships is a long one.

From the mate of a liner to the mate of a cargo steamer or tramp is indeed a fall, and not only in status, but in decreased pay and increased work. For in the liner, as I have before noted, there are not only numerous officers, below the position of mate, to relieve him of onerous duties such as tallying of cargo, charge of stores, etc., but he is practically relieved from any necessity of looking after these subordinates, as they are controlled from the offices ashore. In the cargo steamer, on the contrary, it is the mate who must look after the shipment of cargo, examine bills of lading, and, indeed, do the tallying as well. Moreover, since the number of mates in most cases is rigidly limited to three and often to two, he must take his watch on the bridge, must work up the position of the ship, look after the compasses with all their heart-breaking divagations, attend personally to the care of the ship in cleansing, etc., and last, but by no means least, keep in order the motley crew. And for this his pay is sometimes-nay, frequently-so small that mention of it excites disbelief among responsible persons ashore who know nothing of shipping matters. I have myself been offered five guineas a month to go mate of a steamer bound to the Baltic for timber,-a steamer of 2,000 tons burden. I would have gone, too, but that a German stepped down before me and agreed to have the five shillings a month knocked off. Perhaps the tramp mate's lot is harder than that of most other sea-officers, in that his work is never done, his responsibilities are very heavy, and his pay is so small that he *must* forego the delights of wife and children if he has only that pay to live upon. Yet these men

form the marrow of our merchant service, and should certainly not be treated shabbily. How their work is done let owners and shippers declare, who know full well that, while the master gets all the credit that his position entitles him to, the mate, working silently but strenuously in the background, must wait for any recognition until he has at last emerged from his obscurity into the coveted post of master. Not so, however, in the case of disaster to his ship. No amount of theory as to the master bearing the whole responsibility will avail to save the unhappy mate from the most severe punishment that can fall upon a merchant officer,---suspension or cancelling of his certificate if any leather-headed court of enquiry choose to bring him in to blame in any way. I do not mean to speak evil of dignitaries, God knows, but the proceedings of some of these courts-abroad especially-are sufficient to make angels weep. We all know the rest of that wise quotation. In ships of this kind the mate's lot is seldom a happy one; it may easily be made intolerable if the master be not kindly disposed toward him, or so blind to his obvious duties as to neglect or refuse to give him all the weight of his own authority in the event of any trouble arising.

I said "in the event of any trouble arising." Well, to tell the truth, trouble in a foreign port—especially where the ship lies alongside a wharf—is the tramp mate's normal environment. Not only has he the entire conduct of the ship's business on board, as distinguished from that which the skipper performs on shore, but he must see to it that the work goes on. Each one of his crew will probably be devoting all his energy to the endeavour to do as little as possible and to getting drunk. The motley crowd that are working the cargo work only under steady stress of compulsion. If receiving cargo the second mate must keep an eye on the stowage, so that he cannot assist his superior on deck, and there are the innumerable horde of touts of one sort and another to keep at bay. Evervone else will be complaining of the heat or something; the mate must bear all such personal inconveniences without noticing them, and keep the ball rolling steadily as well. And, as if these things were not sufficient, he must compete with whatever personal abuse or violence a drunken seaman chooses to offer him, his only remedy being to report the offender to the masterwhen he can get hold of him. Should he defend his own life, take a deadly weapon and use it, he is guilty of manslaughter and is sent to herd with criminals for years.

This is by no means vague generalisation. The particular instance that excites my whole-hearted indignation is the case of the mate of the *Lanarkshire*. Threatened all day by a negro seaman, who, instead of working, was oscillating between the ship and a grogshop, and filling up the intervals by using the foulest abuse to his long-suffering officer, against whom he made the most sanguinary threats, the latter, naturally alarmed, loaded his revolver and carried it in his pocket. Then, when in the gloom of the evening he suddenly realised that the fellow was making for him with murderous knife uplifted, he fired and killed him. Surely if ever there was a case of justifiable homicide this was. Yet, to the lasting injury of our

merchant service and the indelible shame of our laws, this hapless gentleman was sentenced to two years' imprisonment, and as I write he is undergoing this shameful sentence for doing what was his obvious duty. To have failed to do it would not only have been to have lost his own life, but to have put a premium upon murdering others.

In the American mercantile marine such a thing would be inconceivable. In the first place the man would never have been allowed to wander backward and forward at his own sweet will, and, had he made a threat to murder, there is no doubt whatever that he would at once have been physically incapacitated from carrying it out. Had he, without threatening, attempted murder, there is also no doubt that he would have been instantly shot dead, and the officer acting in any of the ways hinted at above would have been held to have done not one jot more than his obvious duty. As to even bringing him to trial—the idea would have been scouted as absurd.

Nevertheless it is certain that such a training as the mate of a tramp steamer gets is admirably calculated to bring out all a man's sterling qualities,—patient persistence in the face of difficulties, ability to deal with refractory races by diplomacy rather than by force, orderly marshalling of thought (absolutely necessary where so many things must be kept going at one time), and certainly endurance of hardships. This is no easy way of getting through the world. It makes a man thankful for small mercies, as, for instance, when, after a harassing time with all the worries of harbour, the mate heaves a sigh of relief upon

mounting the bridge to keep watch through four hours of a dark, dirty night. With keen eyes smarting under the incessant pelting of driving rain and spray, he peers over the edge of the weather-cloth into the blackness ahead, heeding not at all the "bucking beam-sea roll" or the thumpity-thump-thump of the untiring engines below him. Now he can send his thoughts a-roaming. Such tender musings as of love and home and rest may be admitted while the almost invisible blackness of the hull beneath him is thrust into the hungry expanse of darkness ahead, the only sure point being beneath the tiny circle of light in the binnacle. Here we will leave him, steady, resourceful, and alert, not without an affectionate remembrance of all his fellows at their posts on all the seas at this present, worthy members of the worthiest of all commercial enterprises, the merchant service.

CHAPTER XI.

THE MATE'S WORK-IN A SAILING-SHIP.

THERE is no small difficulty, I find, in presenting for landward folk the various gradations of officers in the merchant service. As far as ability in their profession is concerned there can be no question at all that the mate of a sailing-ship is far before the mate of a steamer, only the mate of a steamer is so much better paid as a rule that he naturally regards his status as much higher than that of the mate of a "wind-jammer." But here enters another complication. It is necessary for the steamer-mate to have been a sailing-ship mate first. It has hardly been admitted yet by those in authority that any man is fit for an officer's position in steam until he has served in sail. There alone, they consider, does a man develop the true characteristics of the sailor .- his all-round ability for dealing with unforeseen contingencies as they arise, his resourcefulness and skill in dealing with the wise old sea by the aid of the wind.

This view still obtains among naval authorities, where it is considered indispensable for the young sailor to become expert at sail-handling before he goes to his life work on board of a vessel where sails would be as great an absurdity as means to her propulsion as oars. One cannot help feeling that this idea is

indefensible, since the man-o'-war sailor of to-day is before anything a trained artillerist, a man of mechanics, almost an engineer, in that he is always dealing with engineering appliances of so much complexity that every hour at his disposal in his preparatory time is all too brief for the acquirement of such knowledge as he must have if he would be worth his salt. But in merchant steamers, except big liners, the case is different. In very many cases the knowledge of how to handle sails and rig jury-masts means the safety of the ship. Therefore it seems only wise and proper to insist upon the would-be steamship officer learning thoroughly the art and mystery of sail-handling before quitting the embryo stage for that of a full-blown steamship mate.

It is impossible, however, to help feeling that in all respects except the single one of pay it is a decided descent in dignity from the poop of a sailing-ship to the bridge of a steamer. Handling the former efficiently is a fine art, a mystery full of grace and deep dexterity. Many a man-fairly successful in his calling, too-never learns to get the best out of a sailingship that is in her; never, in short, is anything but a novice at the higher seamanship. In fact I really believe that the highest type of sailor-using the word in its original sense—is born, not made. I have been shipmates with men who seemed instinctively and by rules of their own to fathom all the secrets of their ships, to get just what they wanted without apparent effort. Put them on board a vessel with a bad name for unhandiness, apparently possessing some inherent defect that puzzled and exasperated beyond measure

every man who had hitherto essayed to work her. Under the delicate instinctive handling of these born sailors her ingrained clumsiness disappeared, she became docile and handy, and presently the gratified officer would remark nonchalantly : " I don't see anything wrong with her." Men like these seem able to overcome such radical faults as the misplacing of masts, bad trim (that is to say, a vessel being, through careless loading, too much tilted by the head or the stern), or awkwardness of build, producing bad steering, etc. Seldom can they impart these gifts to others, because they are not exercised by rule but by instinct. In precisely the same way you shall get a man who is a good sailor in all respects but one,he can't steer,---and another who is good for nothing else. In some mysterious way an ideal steersman (of a sailing-ship) holds communication with a vessel herself; little subtle touches are conveyed to him through the wheel-spokes, so that he knows in the blackest night, with even the binnacle (or compass-box) in darkness, exactly what she requires of him.

Now the mate of a sailing-ship is placed in the most favourable position imaginable for cultivating such a science as ship-handling undoubtedly is. Unlike his compeer of a steamship, his first care is of his vessel's propelling machinery. That towering fabric of sails and cordage which appears to a landsman's eye such a mass of intricate entanglement requires his unceasing attention. His sight should be, and usually is, as keen as a hawk's, able to note, even from the deck, anything that goes wrong. He must nurse his ship tenderly, especially aloft, bearing in mind before all things the homely adage of the stitch in time. No loose ends, frayed seizings, or chafed running gear (as the ropes are called which are hauled upon, in distinction from those which are tightened and remain stationary) must be neglected, since such neglect may be fatal and in any case must be expensive. Of course in large ships, according to the universal rule, his labours are somewhat lightened, since he will have a boatswain whose chief duty is to keep things in order under the mate's supervision, and who must keep careful watch over things aloft and report to his superior. But where no boatswain is carried the mate must see to things himself.

The practice varies slightly in different ships according to the idiosyncrasy of the master, but perhaps the ideal relation between master and mate is where the master, in consultation with the mate, keeps in touch with everything that is going on, never interfering in public with the everyday work of the ship. To use a homely simile, the master should be like the lady of the house and the mate the housekeeper. I think this will appeal to ladies, who know that while nothing is more beneficial in a great household than the knowledge by all that the mistress knows everything that is going on, so nothing is more fatal to the efficient working of such a household than the incessant fussy interference of the mistress with individual servants behind the housekeeper's back. The self-respecting and competent housekeeper would leave, of course, but the mate cannot. He must endure as best he can.

Naturally this theory of non-interference presup-

poses that the mate is up to his work. Where he is not it becomes essential to every one's well-being that the master should take the direction of things out of his incompetent hands. But no one would be more ready than masters themselves to admit that such drastic measures are rarely necessary. The incompetent mate rarely reaches the position, or, reaching it by favouring accident, long retains it.

First, then, the mate of a sailing-ship must keep his charge in order aloft; next he must see that every working hour of every day is fully occupied. There is no more certain proof of something being wrong with the mate than the sight of men standing about waiting for a job. The men are quickest at noticing this. Not that they love to be kept at work, but it is so generally accepted as an axiom that there is always work to be done on board ship that they pounce upon any unusual lapse of the kind on the part of a mate as proof that they have a duffer to deal with. He must see that she is kept clean, for cleanliness at sea is as indispensable as is order and regularity. Even here it will sometimes be found that although the men are kept pottering around continually the ship never looks smart, owing to a lack of method on the mate's part. I have been in a ship twenty years old that looked as if she were on her first voyage, not a ropeyarn out of place, not a streak of rust on the bulwarks, no unsightly stains on masts and yards, or dirty corners. And I have sailed in another on her second voyage that looked as if she had been lying up in dock with only a doddering old shipkeeper in charge of her for months; weather-worn, dilapidated, and miserable, and everybody on board discontented, because such a ship *works* hard. Whenever a ship is carefully looked after you may be sure that the ropes run cheerily through the blocks with a merry rattle, and the great sails go up or the massy yards swing to and fro easily. But in a neglected ship those blocks will be found with their pins rusted in their sheaves (the wooden wheels upon which the ropes travel), moving reluctantly, so that it is often the work of one man to pull a loose rope through them. And that means a great deal of hard swearing upon the part of the men, who are thus laden far beyond what there is any necessity for.

So far from this part of a mate's duties being irksome or wearying, it will usually be found that it is the most joyous part of an active seaman's career. Given a well-found ship, so that it is possible to do justice to her up-keep; two or three men among the crew who can "sailorise" (that is, work with rope and wire as required); and a master who will let them do their work without public interference,-a mate may be, and often is, as happy as any man ought to be in this world. Consider how many delights he has. A big sailing-ship to a man like that is just a hobby on a large scale, a beautiful thing for whose welfare he has the most solicitous regard. An "Irish pendant" (a ragged end of yarn fluttering aloft) makes him feel as badly as would the sight of one of his children walking in the park with torn stockings and shoes down at heel make a gentleman ashore. An accident such as the blowing away of a sail or the snapping of a spar gives him no such pang, because he has a stern

joy in putting forth his skill and proving in how short a time he can restore his pride to her trim appearance again.

I have a very vivid recollection of an old mate with whom I sailed when I was a boy, who was an almost perfect type of the man I mean. I have no idea how long he had been in the ship, but I know that he struck me as being a perfectly contented man, to whom his work itself-not the result of it-was the passion of his life. We were bound from London to the West Indies and enjoyed the usual fine weather after entering the tropics,---so fine that 'as far as handling went the old barky might safely be left to herself, except for steering. One morning at eight bells (8 A. M.) the mate appeared on deck with a radiant face. The forthcoming watch, as they slouched one by one into the sunshine from their darksome cavern, tightening their belts or giving a final touch to their simple toilet, muttered one to the other: "Looks as if he'd got something extry-special on hand this mornin'. More nigger-driving, "etc. But it was only the orthodox growl. They did not look displeased. The next minute the mate was amongst them, his orders flying like hail, and in half an hour the look of the vessel was entirely changed. He had persuaded the master to allow him to shorten all the standing rigging, -which was of rope, not wire, as is universally the case now. For such a crew it was a tremendous task : but it was pure sailorising, such as a man could take an interest in; and the younger members of the crew would have an opportunity of actually seeing done what they had hitherto only heard talked about,--such

operations as turning in deadeyes, rebolstering lower rigging, etc. All hands took matters so well—being really infected by the mate's amazing energy—that they forgot to growl at being kept on deck in their watch below in the afternoon.

But the joy of the mate was something to wonder at. He was untiring. Clad only in a blue shirt, trousers, slippers, and a mangy old cap, he was ubiquitous, teaching, toiling, superintending, riding his hobby at full gallop. And when at last the day's work was ended and we boys were putting away tar and greasepots, gathering shakings, and sweeping decks, he sat perched upon a hencoop on the weather side of the poop, smoking in perfect peace, beaming benignantly upon all his surroundings with the air of a man who was at the summit of earthly desires. Nor did his brow become clouded over again until we reached port and the worry of tallying out the cargo devolved upon him.

The second important duty that devolves upon the mate of a sailing-ship is that of navigating the ship independently of the master, so that they may mutually check each other. There may possibly be some of my fellow seamen who dissent from this, some masters who feel that it touches their dignity to be found out in an error by the mate, but I do not think any argument is needed to prove that they are entirely in the wrong. I have known skippers who would not allow the mate to assist in the navigating of the ship at all so far as nautical astronomy went. Such a master could not prevent the mate from keeping the dead reckoning, but the latter was dependent upon the master entirely for the ship's position by celestial

observation for entry in the log. This was utterly wrong and foolish, as well as illegal, but when a man is so much a monarch he is apt to act so some-In a well-conducted ship the skipper and the times. mate assist each other with all observations where assistance is necessary, but they work up the results entirely apart and compare them. If any error arises it is thus almost certain to be discovered, and no properly-minded skipper should feel any umbrage at being bowled out in a blunder by his mate, as will almost certainly happen now and then. When all the observations are worked up to noon, and the dead reckoning completed, the mate enters up all the details demanded by law in his log-book, that veracious record of day-today proceedings which it is the mate's duty to keep recorded each day. There are few better tests of a mate's quality than the appearance of his log-book. Some men, while they write neatly and keep the book clean, will give for all remarks, wherever it is possible : "As yesterday. Wind steady, weather fine. So ends this twenty-four hours." They fill up just as few of the ruled spaces as they dare, put down the rate per hour by guess-work, and altogether ignore the purpose for which a log-book is ordered to be kept. Others will neglect the book's appearance, too, until it is hardly fit to be seen, while as for information it may truthfully be said that what little is given would have better been suppressed. But I have seen log-books that were invaluable, giving a most interesting account of the voyage in plain and simple language, while the appearance of every page was perfect.

CHAPTER XII.

THE MATE OF A SAILING-SHIP-continued.

FINDING that this log-book business takes me farther than I anticipated, I judged it best to break off the last chapter somewhat abruptly, since the average reader is not partial to long chapters and I have rigidly limited mine to five pages of manuscript.

A log-book is popularly supposed to be (and certainly should be) an absolutely truthful record of dayto-day happenings of the ship's progress and of the weather conditions, and while there is no room for literary ability there is no doubt that ideal log-book keeping is a fine art. In the small space at disposal to state succinctly what has occurred, rigidly excluding the irrelevant, but carefully noting everything that is of importance for owners, underwriters, or lawyers to know,---this is an accomplishment by no means general and one that might be more carefully cultivated than it is. For it is only stating the baldest fact to declare that no day passes at sea wherein there is nothing worthy of record. The loss to literature and science through the lamentable habit of scamping logbook remarks has been incalculable, while the loss to the individuals themselves is equally incapable of assessment. Remembering how splendid a training it is for any one to record, as he roams about the world, all

that he possibly can that he sees of interest, one must be filled with regret that this practice is so seldom carried on. If it were, the mate's log-book would be a mine wherein might be found much fine gold—there is no room for dross. And the habit, growing by what it fed upon, would soon compel an ardent observer to keep a private log-book where he could enter those things for which the ship's log-book afforded no room, and the result would be educational and refining in the highest degree.

I have seen log-books like this. One I remember even now with the keenest delight, kept by the third mate of a large ship in which I made a voyage before the mast from London to China and back. This gentleman, besides writing a very neat hand, was an artist, and wherever it was possible he decorated his book with little sketches. Landscapes especially attracted him, of course, but passing ships, birds, porpoises, fish, deck scenes, fronds of fucus or gulf-weed were all utilised and the result was a book beyond price. As he did a little every day there was no sense of labour attached to it, yet the finished work gave the impression of a stupendous amount of work having been spent upon the result. I do not know what became of that young man, but I am prepared to hear that if he lived he rose to the top of his profession in a very short time. For, as might have been expected, he was no less keen about his duties than he was in his observations and in his efforts to record them. He loved the sea and all that belonged to it, and in return for that love the sea was to him an untiring teacher as well as a faithful friend.

Another gentleman I know always carried a camera with him and ornamented his log-book with well-developed snap-shot photographs, in this way interpreting his keen remarks upon things in a wonderful way, although his book lacked the artistic grace and finish of the other. Perhaps it may be said that, looking at this matter from a literary point of view as well as from that of a sailor who has forsaken the sea. I am laying too much stress upon it, and that after all it is the sailor-man that is wanted in a mate and not a Such a way of putting the matter is, I bookworm. maintain, manifestly unfair. I admit that a man may be super-excellent in all that pertains to the working of his ship and yet be unable to keep a log as it should be kept, but on the other hand I am sure that it will be seldom found that a mate who keeps a good log is a bad sailor-man. The efficient officer will not be less but more efficient if to his capacity for work he brings the seeing eye and the imaginative brain. And like all other mental or physical faculties, this faculty of observation will improve continually by being exercised, and add to the stature of the inner man, making him more complete. Besides, how immensely it will add to his enjoyment of life. His ideas will be enlarged, his capacity for enjoyment will widen, and instead of being, as so many otherwise good seamen are, discontented with his lot and looking forward anxiously to the time when he shall look his last upon the solemn wideness of the sea, he will find his days all too short for the full appreciation of the pleasures that will crowd into them.

There is of course another side to the question, and

it applies almost exclusively to the fine seamen that are reared in America and the British North American colonies. Strangely enough these splendid men do not profit as they might be expected to do by the facilities for education provided in their go-ahead country. It would seem as if they thought that it was necessary for a man of action to coarsen himself; to become, I say it without any intention of giving offence, more or less of a ruffian. The quiet, firm authority which marks the native-born gentleman does not appeal to them. The ideal Yankee or "Blue-Nose" mate is a splendid seaman with a voice of brass and a fist of iron. When work is afoot he may be heard all over the ship, and it is impossible to conceive of him being a silent, reserved, and thoughtful man. In the practice of seamanship this plan seems to work well. shall never forget, while lying in Hong Kong harbour, a fine American ship, the Colorado, coming in one evening. We had done work for the day and were smoking the after-supper pipe on the forecastle head. Therefore we were keenly observant of the doings of the new-comer, and with that minute admiration of smartness possessed by all seamen, even the laziest, we watched her. She came grandly up to her moorings close to us, amidst a very hurricane of roaring orders, and presently was securely moored. Then instead of furling sails and coiling up ropes, as would have been the case with an English ship, the crew began to strip the yards of the sails and stop up the running-gear. The mate was ubiquitous. His tremendous tones reverberated over the quiet harbour incessantly, weighted by the weird profanity affected by

American seamen. The men flew from spar to spar, sails descended magically, were seized, stopped up, and stowed away immediately. Before it was quite dark the ship was in as complete harbour trim as if she had been anchored a week, and even the few sea-marks upon her outside had been carefully removed. Then, and not till then, were the hard-driven crew permitted to seek the forecastle and rest from their labours. And although every one of our crew was loud in condemnation of the "infernal nigger-drivin'," as they called it, they did not withhold their admiration of the consummate smartness of the whole business, and added in chorus : "Yes, but y' sh'd see th' grub them fellows hev got ter go below ter. When a man gits 'nough t' eat 'ee don' mind workin'." It is conceivable that the splendid officer who thus made things fly could hardly write his own name, since it is the good sailor-man an American skipper looks for, not a gentleman. More than that, I'm afraid the more "bucko" he is the better from the skipper's point of view. To be quiet and reserved is decidedly against him. I was once in an American ship where the skipper was oldtoo old to go to sea really, although he had no doubt been a smart man in his day. He shipped a mate in London who was an Englishman and had commanded some first-rate English ships. As far as I can remember he was a good seaman, although a little rusty from having been long in command. But he certainly was a gentleman, and he had not been on board a week before the "old man" hated him with an intensity of fervour that was almost comical to see, simply because he could not roar, neither could he kick. I

heard the "old man" say to him one day; "See here, Mr. Small, I hain't no use fer a man as mate of my ship that creeps aroun''s if he wuz dum 'n paralytic. For God's sake try an' hustle them squarheds some, 'r we shain't git t' Melbun this fall." Yet the ship was well handled,-no thanks, I am bound to say, to the mate's quietness, but to the traditions of the American merchant service which have been followed and improved upon by the "Blue-Nose" and may be summed up in the following words of the Yankee mate to his crew: "When I say 'walk,' I want ye t'run; w'en I say 'run' I want ye t' fly." Expressive also are the typical words of the mate of the lumber-carrying ship to his crew: "Here, knock off work and carry deals." To their prayer for a little rest he says in tones of bitterest scorn : "Rest !- rest when you're dead."

But enough, perhaps, of this ruthless side of smart men's characters. Let us return to the mate's duties again. He is responsible for the due shipment and delivery of the cargo. In a vessel where his whole time may be given up to the duty of tallying (counting) it in, this is all very well, but when, as often happens, he has many other duties to attend to simultaneously, and must therefore trust to others, he often finds himself in difficulties. I speak feelingly, having once loaded Government stores in London for Zanzibar, and, being unable to watch both hatches at once. I was obliged to delegate the tallying forward to some one else. When I came to sign the bill of lading I found a serious discrepancy. My assistant reported having taken in six dozen ash oars, but I found that the bill of lading specified eight dozen.

Now these oars had all been stowed away as they were shipped, so that to get at them again meant much work. The officials stuck to their bill of course, and I wasn't sure. So I signed the bill "in dispute" and bore about with me, all the passage out, the dread of being called upon to pay for two dozen oars at about eight shillings apiece, or about two months' wages. As soon as I arrived at Zanzibar I went to the ship's steward of H.M.S. *London*, to whom the goods were consigned, and asked him to tell me how many oars he wanted from me. He replied "Six dozen," and I was happy. Yet those bills of lading had been signed and countersigned at Deptford by at least six different officials, each of whom had left it to "the other fellow."

Yes, the care of cargo, often of vast value, is doubtless one of the most responsible of all the duties of a mate. At the same time it is one which he performs with wonderful accuracy and satisfaction to all concerned on the whole, especially when it is considered under what varied conditions the work must be done: in open roadsteads, on storm-beaten shores, in foreign harbours, pestered by all the motley crew who in mysterious ways make a living out of ships and must of necessity come to the mate first; in ports where, in addition to keeping an overseeing eye upon the never-ceasing work of the ship, he is worried by his crew continually dodging ashore, getting drunk, and returning abusive. And the lower down the scale of ships his position is, the harder his work must necessarily be, since he can get less help while his responsibility remains the same.

All the ship's stores are also under his charge, and it

is his duty to so husband them that they shall last the voyage, yet see that their expenditure is conducted on such lines as to produce the best effects. And if he succeeds in this onerous duty he may have the supreme satisfaction of hearing the ship's-husband say, when he comes on board upon the ship's arrival home: "Good day, Mr. Brown, your ship looks very well," which naturally makes him feel that his labour has not been all in vain, especially if, as has been my own experience, he himself has contributed not only mind but muscle to the desired result.

He has many temptations. Interested touts will come aboard, veiling their real intentions under a mask of *bonhomie*, and invite him to dissipations ashore; will offer him money out of pure affection for him, of course, but with a suggestion that he shall hold their axes to the grindstone. And if he be strictly honest he will often find that his honesty must not only be its own reward, but in many cases that it will be a serious loss to him.

I have never been able to get over an experience I had in Rotterdam. I came home mate of a barque from Mexico with a cargo of mahogany. Unfortunately I had joined the ship in Barbadoes, finding that the skipper and the bo'sun (we carried no second mate) were on exceedingly intimate terms. Anxious to please and looking forward to passing for master I said nothing about this queer state of things, not even when the skipper and bo'sun went off day after day shooting, leaving me to get the cargo in, keep things going generally, and between whiles hunt along the beaches for derelict logs, saw them up, and bring the

pieces on board for broken stowage. Owing to my placable disposition, and partly, I suppose, to my cowardly fears of a "row," there was peace on board throughout the voyage. We duly arrived in Rotterdam and were boarded by a gang of touts after "shakings," tailors' orders, etc. One Jewish gentleman was specially attentive to me, knowing that we carried an enormous number of pieces of mahogany which were the perquisites of the officers. He wanted to buy them, and while he did not wish to bias me in any way he was anxious to give me a five-pound note as a proof of his regard. I refused it, from what I now feel to have been a mistaken sense of duty. The cargo was discharged, my importunate Jewish friend bought the broken stowage at his own price, and then came to me exultant, saying: "You vas fery foolish If you haf dake my vife pounts you vas do mans. nodings wrong. Now I haf my vife pounts unt you haf nodings." He spoke more truly than he knew, for my skipper divided the proceeds with the bo'sun and gave me "nodings," although I had toiled early and late to procure the wood. I have often since tried to console myself with the thought that I did the right thing, but I cannot help an uneasy feeling stealing over me that after all I was somewhat of a fool.

Upon another occasion, when mate of a brig that had been fitted with wire rigging in Santos, Brazil, shortly before I joined her, I was much pestered in St. John, N. B., by junkmen coming on board wishing to buy the old rope rigging. It was a mystery to me how they got to know of its presence there, but they

certainly came swarming around like sea-birds to a dead whale. One man was especially persistent, and at last, in a sort of desperation, said : "Look-a-heah, Mr. Mate, I'll give a hundred dollars for that junk, an ef ye c'n get the skipper to take that I'll give you another thutty fur y'rself." I refused with some roughness and ordered the fellow ashore. My feelings may be imagined when the next day my gentleman appeared triumphantly flourishing an order from the skipper to let him have the rigging, which he had purchased for seventy-five dollars! Knowing my commander's unquenchable thirst, he had laid his plans accordingly, and, after a carouse at the groggery where the skipper was putting up, had induced him to sell the stuff for what was certainly no more than half its value. And even that poor yield never reached the owners' pocket, nor any part thereof.

But the great temptation is drink. It assails the mate in every harbour, and by not yielding to it, while he is taking the only really safe course, he cuts himself off effectually from any society at all. Some fortunate mates find friends in port who can and do invite them to spend their scanty leisure in the midst of pleasant family life ashore. But they are few. The majority of mates must for a season learn to rely upon themselves for society, to be happy although alone, and to find companionship in books and self-culture. It will be remembered that I am now speaking of sailing-ships. In steamers the case is very different. The mate can associate with the engineers, and does do so, in cargo ships; in passenger

vessels he gets rather more company than he wants or is good for him.

And now I must part company with the mate, reluctantly and with many a backward glance over the long line of fine fellows under whom it has been my privilege to serve. Of all the different positions on board ship I know of none that is so favourable to the formation of fine characters, none that a man can hold with greater dignity and benefit to himself. He has a scope for his energies that is practically denied to the master, and where he has the good fortune to serve under a man who has not forgotten the days when he himself was mate, and treats his immediate coadjutor as his *mate*, there is no reason why he should not be perfectly happy. I know that it was the happiest time of my own sea life.

CHAPTER XIII.

THE SECOND MATE-IN STEAM.

UPON approaching this portion of my subject I am somewhat alarmed at the prospect before me. For in all that I set down in this book I strive to be perfectly truthful, not only according to the light of my own experience but in compiling the traditions of the service as they have become known to me. In doing this I am quite well aware that many whose opinions I value will be offended-it is but natural that they should be. We often invite criticism from our friends and really think that we desire to be told the truth about ourselves, and so long as the truth is pleasant we enjoy hearing it so much; but when our weaknesses come up for review, however gently, we seldom succeed in keeping our tempers, even though we know full well we should be grateful. In what has gone before I hope I have not trodden too heavily upon any of my friends' pet corns, but in what is now to come I fear that some heartburnings will be unavoidably produced, because the second mate has to pass through that most unpleasant time, common to nearly all professions, when those above him feel it somehow to be their duty to snub, annoy, and discourage him with a view perhaps to stiffening his moral fibre. Yet the impression produced is usually that of a time of misery such as we would not go through again for a great deal.

But here again there is a great range of status. Between the second mate of a large passenger steamer, who is usually a man of large experience, holding a master's certificate and having occupied many superior positions before, and the second mate of a small sailingship making his first appearance on the quarter-deck in charge, is all the difference imaginable. The one is a most important officer, usually the navigating officer of the ship and principal watch-keeper. His pay is equal to that of many a master of a splendid sailingship, and his superiors would no more dream of insulting or bullying him than they would think of flouting the chief engineer. They are perfectly well aware of the fact that before he reached such a post as that he must have proved himself a competent man. The poor fellow, however, who for the first time mounts the quarter-deck, the ink scarcely dry upon his certificate, may, and very probably will, have reason before long to wish that he had been content to remain in the obscurity of the forecastle. According to the bent of mind possessed by his commander and, in a less degree, the mate of his ship, so will he be. In some cases it will turn out that no amount of kindness and help given by his superiors is of any avail. The neophyte is no good. In some mysterious manner he has managed to satisfy the examiners at an outport where rules are not so rigidly maintained as they are, say, in Liverpool or London. So he has a certificate, but he is a dunderhead without resources, untrustworthy, not able even to keep awake in his watch on deck, and ignorant of

the first principles of his calling. Much may be excused in a skipper who finds that he dare not trust his second mate in charge of the watch except in a dead calm, who, coming on deck to have a glance around, will discover that his junior officer, instead of being acutely anxious to justify his elevation to command, is lolling on a hencoop asleep, while the vessel, with yards untrimmed, is wasting the wind, and the man at the wheel is making mental notes for future reference.

Under such exasperating conditions-especially if the master has had no voice in the selection of this young officer, but has been compelled to receive him because he was sent on board by the owners—it is hardly to be wondered at if, his indignation getting the better of him, his remarks are calculated to make the offender very unhappy. Such an occurrence, however, is, for the reason I have already given, impossible in a fine passenger steamer. So carefully are the officers chosen, so rigidly is their previous experience insisted upon, that only those who have proved their trustworthiness are allowed upon the bridge at all to take charge of the ship. And of them the second mate is the principal. It is, I believe, customary in most lines of passenger steamers-I know it is the practice in someto keep a list of officers employed, and every accession to their ranks, no matter how high his previous qualifications may have been, must go in at the bottom. And it is no earthly use attempting to get one's name upon that list unless one's record is a good one. Then, when appointed to a ship, she will be the least important of the fleet, and the recruit commences his upward climb, his career carefully watched every step

of the way and its incidents recorded. By this means it is assured, as far as is humanly possible, that by the time the officer takes command he is the very best man for the position that care and forethought can procure. And how wonderfully is this carefulness justified ! Analyse the records of our great passenger lines and see, despite the dangers of the seas, the high speed, and absolute necessity for punctuality, the almost invisible percentage of disasters occurring. It is a truly wonderful proof of the value of our merchant officers.

The second mate, then, of a liner, has attained unto an exalted and honourable position. He may, it is true, be a long time yet before he gets command, but he has soared far above the contemptuous estimate in lower circles of a second mate's position. Beneath him are quite an army of juniors. I well remember the awe I felt when some years ago, fortified by a letter from a gentleman to whom I had been introduced, I went to the stately offices of the P. & O Company in Leadenhall Street. I had a first mate's certificate, and, being unmarried, felt that I could take a very subordinate position for the privilege of getting my foot upon the ladder of such a company. But my hopes were dashed at the outset by Captain Angove, the marine superintendent, who said that while my papers were all they could wish I must have some experience in steam (which I had not). If I could again come before them with six months' experience as an officer of a steamer, no matter how small, they could put me on their list and I should enter as-sixth supernumerary mate of such a ship as the Rome or Carthage, which were then new! My heart sank within

me. I had never imagined a ship with seven or eight mates before, and, disregarding the positive evidence before my eyes of the rapidity (comparative) of promotion as shown by the commanding presence of several masters who were then in the office, I gave up the idea, feeling that life was not long enough. Promotion by seniority is a good rule when it is tempered by careful watchfulness of the candidates, and I do not believe that it is anywhere more wisely used than it is in our great steamship lines. When once the candidate has passed the preliminary stages of his novitiate and has entered the service of a great line, he has only to do his duty, and in due time he will, if he lives, certainly arrive at one of the most coveted positions known to seamen, that of master of a great steamship.

But this is, perhaps, straying from the second mate too far. Indeed, there is little more to say of his most enviable and onerous position in this type of ship. The very fact of his being navigating officer speaks for itself, for the navigating of a ship that is flying over the sea at a speed little less than that of one of the Metropolitan trains for a week at a time is of itself a great task, and the man to whom it is entrusted holds a position the honour and responsibility of which cannot be lightly esteemed. When, in addition to this, he is known as the first of that fine band who take it in turns to handle the vessel by day and night upon the exalted bridge, and, going into harbour, has charge of the after part of the deck, while in port he is responsible for what goes on in the hold with respect to the stowage of the cargo, I am sure it will be

conceded that his position is one that can only be held by a good man. His comforts are many, quite compensating him for the hardship of watch-keeping. He has plenty of society, for besides the number of junior officers and engineers, association with whom is as free and unrestricted as it is among the commissioned officers of a man-o'-war, and for the same reason the equality of status, though not of rank, there are the passengers. And although his pay is not large his treatment is so good that many a man ashore with far higher pay might well envy him. He has the very best of food, and accommodation as good in fact as he could obtain at a high price in a first-class hotel. On all of which accounts if he isn't happy he`ought to be.

But as with the master and mate, so with the second mate, when once we step down from the great liners to the smaller passenger ships. More work, fewer comforts, much less pay. No crowd of junior officers or great crews amply sufficient to do all that there is to be done. Still, even here, there are many advantages, and a second mate, remembering that he is working his way upward, has little to complain of. It is the same in the biggest cargo steamers, tramps of the highest type. In fact, some of these are, for the officers, the most comfortable ships afloat, and the pay does not differ much from that given in the liners proper. They are the plums of the profession, and as such, according to the universal law, seldom attainaable by the friendless young man struggling by his own merits to climb from the forecastle to the quarterdeck.

When we have left these splendid specimens of ma-

rine architecture and come to the tramp proper, we begin to wonder how it is that second mates persevere at all. They have a thankless task. The manning of these vessels is on such a meagre scale that the second mate will usually have to work harder than any of the crew. That, of course, is no evil in itself, but it becomes an evil because it lessens the respect in which an officer is held by his watch, generally composed of men who are never inclined to be over-respectful. Many and many a large tramp to-day is steadily boring her way through opposing seas, outward or homeward, on a voyage of several thousands of miles, where the watch on deck will consist of the second mate and three men. The second mate's orders are never to leave the bridge upon any pretext unless relieved by an officer. Well, besides himself there are only the master and mate. The first he dare not call to relieve him; the second, having his own watch to keep in his turn, must not be disturbed. Yet there is much work to be done. Cleaning ship principally, but also setting and taking in sail. I know there is a prevalent idea ashore, very naturally, that steamships never carry any sails unless they break down. But that is guite wrong. The few sails that a tramp steamer carries are set whenever the wind is favourable or it is imagined that they will help in the slightest degree. And who is to set them? One man is at the wheel, for no one has yet been clever enough to invent a ship that will steer herself. One man should be on the lookout night and day, but where is the tramp steamer that can afford such extravagance as that? At night he will be at his post, of course, and the remainder of the watch

—one man—will be resting. If a sail is to be set or taken in, what is to be done? According to the law the second mate should refuse to quit his post on the bridge, and, since it is absurd to suppose that one man could accomplish such a task as setting a sail, he would leave it unset. Such independent behaviour would, however, certainly result in his services being dispensed with at the earliest possible moment. So the practice is for the second mate to come off the bridge, and the man to be called off the lookout ; and the trio, having left the ship plunging blindly along over the gloomy sea, at dire peril to herself and any other vessel that may be near, do their best to accomplish their task in as short a time as is possible.

In the day no pretence of a lookout is kept from the forecastle, and during the second mate's watch the bridge is usually vacant also, unless the master choose to remain up there while the second mate, with his two grubby assistants, scrubs and polishes about the deck like any overworked housemaid. Theoretically, of course, this menial occupation is no part of his duty. Moreover, in the event of any accident occurring, he is certain to be severely censured, if not deprived of his certificate, for being off the bridge during his watch on deck. And it will not avail him in the least to declare that it would be impossible for him to keep the bridge and do what was expected of him as well. As before stated, should he refuse to do work about the deck with the men, and insist upon obeying the law, he would certainly lose his berth at the end of the voyage. Therefore in practice he trusts to luck and does the only thing open to him if he

would keep his berth; that is, risks the lives of all hands and the safety of the ship continually. It is said of the second mate that he doesn't get his hands out of the tar-bucket by becoming a second mate. That is only partially true, as I have shown, but it is absolutely true to say that no tramp second mate can hope to keep his hands out of the paint-pot or the soogeemoogee bucket or off the coal-shovel. He may be called Mr. Brown, second officer of the S. S. *Albacore*, but he is nothing else than a maid of all work on a trifle more than an able seaman's wages.

In harbour he has the holds to look after. Here, perhaps, he is slightly better off than his harassed superior on deck whose distractions I have endeavoured to sketch briefly in preceding chapters, because he has only one thing to attend to. But he also has often "a gaudy time," as the Americans say, with native stevedores, whose one aim in life is to do nothing, or, failing that, to do as little as possible wrongly. And he, knowing how essential it is for the safety of the ship that her cargo shall be properly stowed, has many anxieties, unless he quite neglects his duty and dozes peacefully, trusting to luck that things will somehow come all right.

CHAPTER XIV.

THE SECOND MATE-FIRST STEPS.

EVER since I began to write upon this subject I have been sorely tempted to try and explain to shore readers what it is that the Board of Trade requires of a man who presents himself before them as a candidate for a second mate's certificate. I have hitherto been deterred by the fear of being too technical, and yet I cannot help feeling that I ought to try. That feeling has grown so strong that I can no longer help making the attempt, knowing that every reader has his remedy if he finds that the subject bores him—he can skip the matter altogether. This seems to be the proper place to make the explanation if it is to be made, since it is the first certificate that a merchant seaman is called upon to take; the threshold, as it were, of his career as an officer.

May I without suspicion of egotism take a specific case, the one best known to me, my own. I had been at sea more than double the required time (four years) before I made any serious attempt to prepare for the examination. When I began my arithmetic was very shaky, and of mathematics I was entirely innocent. My first step was to procure a handbook to the examinations wherein all the problems were carefully worked out step by step. A Norie's "Epitome of Navigation,"

which contains all the necessary tables, and a blank book, comprised my educational outfit. I was at the time before the mast in a comfortable iron barque sailing from New Zealand to Oregon and thence home. We were a happy crew, young and lively, and the forecastle was, to put it mildly, not an ideal study. But the racket going on around me while I was wrestling with the unfamiliar mental exercises did me good in one direction-it helped me to concentrate my thoughts. I began at the very beginning with decimal arithmetic and worked at that until it led me naturally to the use of logarithms. Then I began to get interested and the work was really a pleasure. Whenever I came to a dead wall I went and asked the mate for an explanation, and he, an amiable little Jerseyman, always did his best to enlighten me. My progress was slow, but fairly satisfactory, and when I shipped for my next voyage before the mast to China I felt fairly certain that on my return I should be able to face the examiners without any dread of the result.

At that time the progamme on the navigation side was as follows for second mate: Multiplication by logarithms, division by logarithms, the day's work. This latter was really a formidable task to me from its length and complication, and it must have been so to many others, since I was told that there were more failures in it than in any other part of the examination. The day's work is the summing up of all the various courses made and distances run by a ship from one noon to another, so as to find where she has arrived after all her zigzagging about. In the example set the ship is always supposed to be at starting within sight of some point of land whose position is known. A bearing of this is taken by compass, and this, with the distance she is off, is known as the departure course and distance. The operation is technically termed "taking her departure," one of the very few purely nautical phrases which have passed into common use in this country. Then follow six other courses, all differing fairly widely, such courses as a sailingship might be supposed to make with foul winds of varying strength. Lastly comes a current stated to be setting, say, S.S.E., twenty-two miles in the twenty-four hours. This is called the current course. The variation of the compass is given, which will be the same for all the courses; deviation of the compass is given, which is different for every course; and leeway is occasionally given, which is another disturbing element in calculating a true course. So that each of the eight courses must be carefully calculated and then the mean of the whole obtained. It is then a simple problem to find at what point she has arrived, which must be done within one mile of a correct result. Then the problem of how to find the ship's latitude by a meridian altitude of the sun (very simple), the time of high water at any given place, a longitude by chronometer, etc. Definitions of terms used in navigation come next, which must be written out more as a test of penmanship and spelling than anything else, an exercise on the sextant showing the candidate's ability to adjust as well as use it, and the navigation examination is over. As I think I said before, it should present no difficulty to any intelligent schoolboy at the age of fifteen, while many would be able to do all the problems by trigonometry instead of by the rule-of-thumb method almost universally employed. For, as the candidate may do the work in whatever way he is accustomed to, it follows that the great majority do it in what to them is the easiest way; that is, by the use of such tabular matter as is necessary, and very easy to learn.

But, once the school work is over, the candidate's real trial begins. Now he finds the value of having attended to his business while at sea, and the futility of cramming up seamanship from manuals written for the purpose, for the examiners are all old captains and the examination is viva voce. In my own case I followed the usual routine. As soon as I came home I went to a navigation school, or crammer's, and paid my fee, not imagining that I should learn anything, but expecting to have what I did know marshalled in the most useful order. I afterwards found that I need not have spent my money. I can honestly declare that in my case, at any rate, I got no good whatever. Indeed, I got a certain amount of harm, which, however, did no damage beyond making a bit of fun, as it happened. One of the last things my crammer did was to test my sight for colour-blindness. It was the first I had ever heard of such a thing, and when he held up various squares of coloured glass between me and the light I named them promptly according to their shades, having a very keen and acute eye for colour. To my petrified amazement he suddenly slammed the glass into the box he was holding and said : "You are absolutely colour-blind. Whatever do you mean by inventing all those names for these glasses?

There are only two colours here, red and green; the others are white and black." I promptly selected a glaring gamboge glass and asked him what *that* was. He said green. A bright purple puzzled him for a moment, but was then cheerfully pronounced green also. Secretly I felt sure there was a blunder somewhere, but I had long learned not to argue with those in authority, so I said resignedly : "Well, I suppose I must take my chance." But I confess I felt very uncomfortable. Then he brought out an amazing diagram of his own invention for teaching the "rule of the road." I had seen the thing before, but carefully avoided having anything to do with it. I felt sure that I knew the rule of the road in actual practice as well as all the articles by heart and the late Thomas Gray's admirable rhymes, and I didn't propose being worried by any old diagrams. However he insisted, so with a sigh I submitted, and before ten minutes he solemnly assured me that I was a hopeless ass to think of going before the examiners at all; that I didn't know the first little thing about the rule of the road, which was the most important part of the examination, and that my only hope was to go home and sweat it up. As if any man could learn the rule of the road for practical use out of a book ashore. I didn't say anything, but as soon as I got outside I dismissed him and all his discomforting remarks from my mind entirely, amusing myself in various ways unconnected with either navigation or seamanship until bedtime.

In the morning I went straight to the Board of

Trade office, opposite the Mint, and paid my fee, which is the first step. From thence I was sent into a room where sat a gentleman with a boxful of slips of coloured glass before him. He began at once to test my eyesight, and a cold shudder ran through me as I realised that if my sight was wrong my career would be permanently stopped. And I could not help reflecting how shameful a thing it was to allow a man to enter a profession without applying so radical a test as to his fitness for it until just as he was about to step up the ladder of promotion. Yet this wickedness still goes on. You may send your son to sea, paying large money for his apprenticeship and doing all that lies in your power to make him fit for any post, only to find out when he has reached manhood that he is colourblind and of course cannot be allowed to go any farther. It would be *so* easy to enforce a rule that no one should become a sailor at all who was colourblind. Well, bearing in mind what my crammer had told me, I began describing the various shades the examiner held up before me as red or green according as I judged them to be nearest to one or the other. I thought he looked queerly at me, but he said nothing until I called a vivid magenta red. Then he said: "I have never met a more perfect case of colourblindness than yours." In despair I implored him to listen to mea moment while I told him of my lesson. His face darkened, and turning to the box again he held up a slip saying: "Tell me just what you think this colour is without reference to Mr. So-and-So." I did, and all was peace. My sight was pronounced perfect.

Thence I went into the navigation room feeling better, and did very well until I came to the third paper, which, on taking it up to the examiner, was pronounced wrong. I stood still, not knowing what to do. He said nothing until I asked: "Have I failed then, sir?" "If you can't get it right you have," he replied. I needed no second hint, returning joyfully to my table and going over it again until I had discovered the error. I was now sure of passing this portion of the examination, because I had carefully trained myself to find errors in examples I had brought to a wrong result, instead of just letting them go and beginning another one. But I had no more trouble. The rest of that part of the "exam." passed without a hitch, and I light-heartedly bounded off. I was immediately recalled, however, and told that I must go on with the seamanship now. I had been under the impression that two days were always allowed. But I was wrong.

Feeling rather sick I was ushered in before a very handsome old gentleman who was courtesy itself, Captain John Steele. Noticing that I was nervous he said a few pleasant words on ordinary topics just to put me at my ease, and then quietly, without any parade, asked me how I would begin to stow a cargo of beer in casks. Question after question followed without any particular sequence, but in such a manner that it must have been impossible for a book-instructed sailor to have answered them. Then he came to the rule of the road. Handing me one model of a ship he took two others himself, and, bidding me consider myself at the helm of the ship I was holding, he

began to manipulate his models and ask questions. At the expiration of ten minutes he was good enough to say that he had rarely come across any one with a clearer knowledge of this most important part of an officer's education. In thanking him I could not help telling him of my experience with the schoolmaster's diagram, at which he laughed heartily. Thenceforward the examination proceeded smoothly to its close, which was considerably before the expiration of the time allowed for doing the navigation part only.

With my blessed slip of blue paper in my pocket, which I should exchange for my certificate as soon as the latter was prepared, I returned to the school to tell the crammer my good news. As soon as he saw me come in he asked: "Have you got through your navigation?" "Yes," I replied. "That's good," said he; "now you must just hammer away at the rule of the road to-night as long as ever you can. If you do you may squeeze through." I answered carelessly that I didn't think I could do much good like that. "Oh, well," he snapped, "do as you like, of course. Only don't blame me for your failure." For all answer I handed him the order for my certificate.

As compared with some examinations I know the above appears a very trivial business, and yet I am firmly persuaded that as far as the seamanship goes nothing could be more searching and complete. The navigation part is no doubt very easy, even the extra master's examination presenting no serious difficulty to a well-educated lad. That part may be learned often is learned—without the learner possessing any knowledge of the sea at all. But the other, especially for master, with its searching questions into maritime legal matters, knowledge of the coasts, added to the intricacies of ship-handling under all circumstances of peril, is, I should say, perfect for its purpose and such as no mere theorist can hope to pass. It may be true—I express no opinion—what I have been told about the laxity of examiners in some outports allowing duffers to slip through, but that is certainly not the fault of the examination as arranged.

And now I must apologise for having taken up so much space over this portion of my subject and proceed to discuss the second mate's position in sailingships. Before opening a fresh chapter, however, to which the importance of the matter fairly entitles it, I should like to say that there is an intermediate certificate which may be taken, of a higher grade than second mate, which is for use in small sailing-ships which are not compelled to carry three certificated officers. It is called "only mate" and is rarely used. Its possession entitles a man to act as mate of a ship of a certain size trading to any part of the world. When an only mate is carried, there will also be a second mate, but he need not be a certificated man. In practice he is usually a first-class seaman without any knowledge of navigation in the arithmetical sense, although I have been in two vessels as mate where my coadjutor in each case was a Russian Finn of fine mathematical qualifications, who had never troubled to take an English certificate nor ever practised his knowledge, confining himself solely to such practical seamanship as required doing and also acting as carpenter and sailmaker. Both these men were perfect treasures, but

only found scope for their varied abilities in small ships, where a man must be a Jack of all trades. Such men may also be found in the "down East" ports of the United States and in British North America, seamen in the truest and fullest sense of the word, and I trust it may be long ere the advance of steam leaves them without occupation.

CHAPTER XV.

THE SECOND MATE-OF A SAILING-SHIP.

IT may be taken for granted by the uninitiated that there is almost as much difference to the beginner between taking charge of a steamer and a sailing-ship as there is between wheeling a perambulator and driving a four-in-hand. In fact I do not know but that I should be justified in saying that there is more. The young officer of a steamer has only to forget what gigantic forces he is controlling, be perfect in the rule of the road, and he may go on serenely. But a new second mate who has never in his life trimmed a sail to the changing wind, who has never had to exercise his judgment as to the taking in or making sail, whose knowledge in fact is as yet all theory, does not, as a rule, have a very good time when he is first compelled to put his theory to practical use. I was very fortunate. Ι joined my first ship as second mate in Port Lyttleton, New Zealand,---the Bulwark, of 1,300 tons, belonging to Messrs. Shaw, Savill, & Co. Her master was an elderly gentleman named Seator, one of the most lovable of men and withal a first-rate seaman. He received me as if I had been a veteran instead of a man coming straight from the fo'c's'le. And the mate, who was also elderly, was kind in a quiet way. I was then barely twenty-one years of age. My first assumption of reţ

sponsibility took place when the ship was lying out in the bay ready to sail. The mate had unfortunately had a severe fall which confined him to his berth, and the master was ashore. At about 10 P. M. the wind had increased to a gale, and anxious watching had assured me that the ship was dragging her anchor. Therefore I took upon myself to let go a second anchor. Just as I did so the master arrived and seemed gratified that I had acted so promptly. We left the next morning, and I very proudly took the mate's usual place on the forecastle while getting under way. Never once did the master interfere with me in the conduct of the work, his apparent confidence in me giving me such confidence in myself that I felt as if I could not make a mistake. And when night came the good old man, on going below and leaving me in charge, said : "If you want me, don't hesitate to call me at once. But don't call me if you can help it, as I am very tired, and besides I want you to feel free to do your own work."

Under such cheery and sensible treatment I naturally developed rapidly, as any man not absolutely worthless would have done. Yet I am sure that had I met on this, my first venture, with the skipper I was unfortunate enough to serve under two voyages after, I should have been completely spoiled at the outset. I have, however, alluded to this matter before and gladly drop a very disagreeable subject.

The first duty of the second mate is to work his watch under the orders of the mate or the skipper. With regard to what I may call the secular work of the ship, repairs to rigging, cleaning, painting, etc., it is eti-

quette for the second mate to receive all his instructions from the mate. But with regard to the working of the ship, setting or taking in sail, the second mate, being in charge of his watch while the mate is below, must receive any orders that may be given from the skipper direct. Really, the starboard watch, which is always presided over by the second mate, is the master's watch, which the second mate keeps for him, and while it would be a decided slight to the mate for the master to come on deck during his (the mate's) watch and begin giving orders over his head, as it were, there is nothing of the kind involved in the master's doing so while the second mate is on watch. It is a usual practice in sailing-ships when any large evolution is to be performed, such as tacking or wearing ship (that is, turning her round in the first case against the wind. in the second, away from the wind), all hands shortening sail, getting under way, or coming to an anchor, for the master to take charge. Then the mate goes forward, the second mate remains aft, and all general orders are issued by the master. I was, however, second mate of one fine ship where the master merely issued his order to tack or wear ship, as the case might be, to the officer of the watch, whether myself or the mate, and take no further part in the matter himself. This was very nice indeed for me, for it gave me practice. Up to that time I had never had an opportunity of putting a ship about, and although I knew very well how to do it there is nothing like practice. And some men are never better than bunglers at this beautiful evolution.

Whether he is respected by his watch, as an officer

should be, depends of course upon himself in the first instance. Sailors are always keen to take advantage of a second mate, who they regard as "everybody's dog," and if he have not a masterful air allied to a thorough knowledge of his duties their behaviour toward him will very soon degenerate into downright insolence, especially at night when the sails require trimming. They know as well as he does that it is essential that he shall have this done immediately it becomes necessary, and if he hesitates to do it from any fear of their grumbling, they will never do anything without a rumbling accompaniment of cursing, and he will soon find himself in hot water with the skipper for neglecting his most obvious duty. But if, on the other hand, he be ever so smart and willing and the skipper be continually finding fault with him before the men, or taking work out of his hands, he will need all his patience to save himself from becoming utterly discouraged. In very few ships will he be allowed to do any navigation. Never once in the whole course of my experience did I see a second mate "taking the sun," and in consequence, unless he be careful to practise in his watch below, he will find his navigation soon growing rusty.

In large ships where a boatswain is carried his position is peculiar. For the boatswain, being on deck all day, gets his orders from the mate, and the second mate has no business to interfere with him unless the yards want trimming or sail is to be made. And as in very few large ships is it the practice for the second mate to stick to the quarter-deck and attend solely to the handling of the ship by day as well as by night, he

is often at a loss what to do. He cannot work under the boatswain; he cannot work with him, because there would be a conflict of jurisdiction ; he must find some little job of his own. Where there is no boatswain this awkwardness does not arise. Here the second mate must carry on the work in his watch, and he will be thought all the more of if he be a good sailor-man. He will have to work as hard as, generally harder than, the crew, but that will do him no harm, rather good. For sailorising is interesting work. Few sailors (who can do it) ever growl at being put to a job of splicing or kindred work. They feel it a dignity, and if you want to make a sailor quite happy and contented, the envy of all his shipmates, put him on sailmaking. He will never give any trouble, never shirk his work, and will seldom have any objection to working overtime.

So much for the second mate's duties while at sea. It will at once be seen that the best place for a second mate to get a thorough grip of his profession is in a small sailing-ship, although he will of course only look upon such a position as a stepping-stone to something bigger and better as soon as possible.

In harbour his duties are very clearly defined. Whenever any cargo is being dealt with, his place is in the hold, unless, indeed, it be such a cargo as coal. He is held responsible for the careful stowage and careful discharge of cargo. In the majority of ports there are professional stevedores who have made the placing the cargo in ships' holds their business and understand it thoroughly. These are always engaged where they can be got, for obvious reasons, chief among which are the facts that good stowage makes a ship hold more, and that, especially with certain cargoes, bad, careless stowage renders a ship unseaworthy. But they always require careful watching, because there are certain fundamental details which they will neglect in almost all cases unless there be some one on the watch. Moreover there are many things in a general cargo, for instance, that are easy to pilfer, and this necessitates a close watch being kept.

Where no stevedores are to be obtained, the second mate is expected to be competent to stow the ship. And he then becomes, if he have thoroughly mastered the details of the work, quite an important personage, with nearly all hands under his command. Yet it must be said that a young second mate suddenly called upon to stow a ship would be very unfairly handicapped. His knowledge of the business would almost certainly be theoretical, and to be suddenly expected to put it into practice in an extensive manner, with perhaps twenty men under his orders, would be a severe strain. It would not be lessened, either, by the consciousness that most likely several of the men under his command would have had considerable practice and would be by no means backward in their criticisms upon the young officer's movements.

Herein lies the essential difference between second mates in English ships and those in American and Canadian vessels. Here in the majority of cases the second mate is a youngster, gentlemanly, well-educated, but unpractised. In handling neither ships nor men has he had any extended experience. He is really still at school, and he will often be made to feel the

truth of that statement very acutely. But in the Yankee or "Blue-Nose" ship the second mate will be generally found a large man with horny fist and hairy chest. a voice of thunder and a will of iron. Long and arduous service at sea has raised him no higher than this, for he thinks scornfully of "book-larnin'," but he is a sailor of the very best type. As old seamen are wont to say: "Every hair of his head's a rope-yarn an' every drop of his blood Stockholm tar." He never has any trouble with his men, for he will probably begin the voyage by knocking a few of them down on the first shadowy appearance of insubordination, which thereafter never dares to show its head. Woe unto the sleepy man who at the cry of "Lee fore-brace" in the middle watch should heave himself slowly up from some comfortable corner and grunt loud enough to be heard "---- and ---- the lee fore-brace an' the ship an' everybody aboard of her." But such a thing on board of a "Yank" or a "Blue-Nose" is unthinkable. In the first place the unemployed members of the watch on deck would be well in evidence near the break of the poop, marching up and down to keep themselves awake, if, indeed, they were not at work scraping woodwork bright, and on an order being given they would spring without other remark than a repetition of the order cheerfully. No, the second mate does not suffer from insubordinate men there.

One of my earliest recollections of the prowess of a second mate was in Bombay on board of that ill-fated ship, sunk the other day by the ironclad *Sanspareil*, the *East Lothian*. Her second mate, one of the ordinary mild, callow, just-out-of-his-apprenticeship

type, had been discharged, and the skipper had shipped a fresh one ashore who had been for some time in Nova Scotia ships. He was a splendid specimen of a seaman, not too tall, but finely proportioned and of a very pleasant face. The first morning he was on board we were washing decks under the boatswain's direction. Mr. Eaton, the new second mate, was having a look round the ship and strayed forward where two men were passing water out of the big wash-deck tub. As Mr. Eaton passed, one of them, carelessly slinging a bucket toward the other,. dropped it, cutting the deck badly with its edge. With a glance at the new officer he burst out into furious cursing at the other man for not catching it, and wound up with a few remarks about the ship and all on board, as the custom is in such exercises. Mr. Eaton turned quietly to him and said: "If you don't shut that foul head up, I'll shut it for you." The man, a huge New York nondescript, stared aghast for a moment, and then, deceived by Mr. Eaton's pleasant look, strode up to him, swearing horribly, and threatening to cut his liver out, among other pleasant things. For all answer the second mate leapt at him, seizing him by the throat and waist-band, and next moment he was flying over the rail into the sea. Turning swiftly, Mr. Eaton was just in time to catch the other man in mid-rush at him with a squarely planted blow on the chin which landed him, a clucking heap, in the scuppers. But by this time the other men had seen the fray and rushed forward shouting "Kill him" with many lurid accompaniments. The boatswain did not stir to inter-

fere, and presently Eaton was the centre of a howling ' gang threatening his life. But he had armed himself with a "Norman," a handy iron bar from the windlass, and none of them dare face him with that terrible weapon. The skipper and the mate came rushing forward and, like sensible men, ranged themselves by the side of the second mate. In two minutes the whole tone of that ship was altered. It was never again necessary to resort to violence, for the men were respectful and willing, whereas on the passage out the unhappy second mate was afraid for his very life to ** give an order at night for fear of the volley of abuse to which he was invariably subjected by his watch. So he neglected or rather put off things which he should have done until the skipper could stand it no longer and gave him a severe scolding, and at his request discharged him in Bombay, a broken-spirited, almost worthless young man.

I earnestly hope that it will not be supposed from this that I love bullying or violence, or would advocate it. But where there is no weight of force behind an order, men will always be found to disobey or neglect it, and in the British mercantile marine it will often be found that a promising young officer's career is ruined just because he has once allowed a truculent bully to tell him to go to hell and has not knocked that man down. Often and often my blood has boiled, when I have been before the mast, to hear the language used by my shipmates to the second mate, who was only doing his duty in giving necessary orders at night. Foremast hands will growl at this. I know full well, but they know it is true. And

it is a shameful thing that in ships where a man is simply treated as a dog, knocked down and jumped upon for half a word or even a wry look, the discipline should be perfect, the work, far harder than in any British ship, be smartly and willingly done, while in our own ships, where such brutality is impossible and the work is reasonable except in cases of emergency, discipline is almost unknown and officers are subjected to the foulest abuse by men who thus take a mean advantage of our kindly laws.

I have dwelt upon this at so much length because I do believe that it has a most distinct bearing upon the most important question concerning our mercantile marine of to-day. I allude to the matter of the employment of foreign seamen. Foreign seamen, especially Scandinavians, are not only biddable; they do not growl and curse at every order given, or seize the first opportunity to get drunk and neglect their work in harbour. Occasionally a truculent Norseman will be found, who will develop all the worst characteristics of our own seamen, usually after a long service in British ships. And he is then a bad man to deal with. But insubordination in the absence of any means of maintaining discipline is a peculiarly British failing. There are no finer seamen in the world than British seamen,-whether English, Irish, or Scotch does not matter,-but they must have discipline. If any proof of this be needed I have only to point to the personnel of the Navy. There are no aliens there. And for smartness, for the ability to rise to the occasion and do deeds at which even our enemies stand amazed, they have no equals. Why? because no breach of

discipline can be made without its being swiftly followed by its due punishment. At least that was the reason. Now, I believe, a race of men-o'-wars'men have arisen who are capable of maintaining discipline among themselves, having so high a pride in their service that they do not need any disciplinary restraint to keep them what they are-the finest body of men in the world. A state of things exists where for the pure joy of service the blue-jacket vields ready implicit obedience to the youngest wearer of the Queen's uniform, even though the obeying one may, and probably will, be so able a seaman as to be capable of training in all the intricate duties of a man-o'-war any officer on board. Loyal, earnest, and fearless, the man-o'-war's-man of to-day is the fine flower of the sea, and if only it were possible to raise up such a body in the merchant service no price would be too high to pay for the benefits it would confer upon Great Britain.

I have dwelt upon this subject more fully in this chapter for the reason that I know there is more of the spirit of insubordination in the second mate's watch than in the mate's, because I feel sure that if the second mate were only more thought of and more loyally supported by masters and owners something might be done to make our merchant sailors a more decent lot all round. At least so it appears to me.

CHAPTER XVI.

THE THIRD MATE.

WE have now exhausted, as far as the present work goes, the three official titles used in the merchant service,-that is to say, with regard to the certificates issued. Master, mate, and second mate are alone recognised as responsible officers by the Board of Trade. Yet with the growth of the steamship it has become inevitable that more officers should be employed, and so, as I have pointed out before, in some big ships you may have eight or more officers, of whom only two have officially recognised titles. Notwithstanding this, they will all be certificated men, and some of them, perhaps all, will have passed through all the grades before beginning at the bottom of the ladder in the great company whose service has attracted them. Thus in many cases it will be found that the third mate of a fine steamship holds a certificate as "master extra," and is as good a seaman and navigator as can be found anywhere. His duties are responsible and important, for he keeps a watch, taking charge of the great ship alone. From what has preceded this it will be seen that he must be eminently fitted for such a responsible position, and not only he, but the fourth or fifth mate likewise, with neither of whom, however, do I propose to deal here. Their position being, as I have said, unofficial and abnormal, and their duties varying with the ship and her peculiar service, it would be impossible for me to deal with them extensively. But let no one imagine, therefore, that they are to be ignored. True, their pay is small, but their prospects are good. They are in the direct line of succession to the hierarchy of the sea, and in due time, failing accident, they will command one of those splendid leviathans that are the pride and glory of ocean traffic.

Of these unofficially recognised officers the third is the doyen. At any moment he may be called up higher and become one of the great three. And no one connected with great liners thinks lightly of him. He holds an honourable post and leads a not at all unpleasant life, always cheered by the prospect of immediate promotion. He is very seldom called the third "mate," but the third "officer," in the endeavour to add, if possible, a more dignified air to his rather common-place title. It almost seems a pity that these great steamship lines do not have a system analogous to that of the Navy, where, once a lieutenant has passed his examinations, he is eligible for the highest posts, his promotion being only a matter of time. And once he takes his place as a lieutenant he is on perfect equality, as regards rank, with all the other lieutenants on board, with the sole exception of Number 1, the first lieutenant. None is before or greater than another. So I should think it might be in a great liner, where all the officers will likely hold the same certificate. Below the second or navigating officer they might all rank alike as watch officers or

some such title, and their pay should be on the same level as with the Naval lieutenants, where the only difference is in small increases for special duties.

When we step down from the liner into the tramp there is a woeful collapse. Of course only the very best type of tramp and the largest will carry a third mate at all, and he has no position worth talking about. From what I have said in the foregoing pages about the life of a second mate on board a tramp, some idea will be gathered of what sort of a post a third mate would hold in such a ship, where one is carried. It is an even chance that he would not receive the poor compliment of a handle to his name. Thus it comes about that he is usually in evil case, without respect from the crew, and generally looked upon as a "loblolly boy "to the mate or a call-boy to the skipper when going in or out of harbour, standing by to work the engine-room telegraph when required. Yet he does get some practice on the bridge at sea, where the mate will use him for a relief at times, and, as he gets experience, allow him to take a watch in the day while he (the mate) is busy elsewhere.

Nor is his position greatly different in a sailing-ship. Of course only the largest sailing-ships will pretend to carry a third mate, who is almost always the senior apprentice in the last year of his time, or making another voyage after his time is up, on an able seaman's wages but with quarters aft. It may be stated at once that he has no settled duties. He is always attached to the mate's watch and may be of considerable use to that hard-worked officer or a source of much annoyance to him. Where (and I have per-

sonally known such cases) he is a blockhead, but has sufficient owne s' interest to keep him in a post where he is of no use, he will make the mate, so angry that he will implore him to do whatever he likes as long as he doesn't get in the mate's way. And he will probably then devote his energies to killing time, lounging in the boys' house, yawning, and generally exhibiting that sad spectacle, a young man wasting his life and squandering opportunities that many a friendless youngster would give all he possessed to obtain. The men make a butt of him, except in harbour, where, as he is usually well supplied with money by his fond parents, they are full of compliments to him in exchange for sundry drinks or the price of them. He is to be seen in all his glory, with a well-fitting uniform on and his gilt-badged cap stuck right on the back of his head, dawdling about the bars in Melbourne or Sydney, or parading the streets with questionable lady friends, who, when his back is turned, allude to him as the "poop ornament."

Now I would not have it supposed for a moment that I intend this to be a picture of the average third mate. By no means. But this particular type of third mate is very well known to most officers of fine sailingships and as cordially detested. He is bred of careless skippers and of influential friends and parents who dote on him and supply him with far too much money. There is, happily, a far more general type of third mate who is thoroughly anxious to make himself fit for the position he hopes presently to occupy. He is not noticeable for being extra well dressed when at sea, for he is too fond of having his fist in the tar-pot

or manipulating a marline-spike to admit of his wearing much finery. And in bad weather it is his pride to be first aloft at shortening sail and if he can only beat the smartest man forward in getting out to the weather earing at reefing topsails or a course, he is delighted beyond measure. Such a young mate, if he has the master he deserves, will often find, on the passage home, the mate's watch handed over to him entirely at night, the mate remaining on deck all day and devoting all his energies to getting the ship as spick and span as possible for going into dock. In this way he gains just the experience he needs for taking up his position as second mate when the opportunity arises, and he becomes an officer who can not only tell a man to do a thing, but can show him how to do it if he doesn't know.

In a fine ship which I will not name there was a third mate of the dandy type I have endeavoured to portray on the preceding page. The master was a gentleman who tried to have man-o'-war conditions on board as far as possible, and consequently never interfered with the work of the ship beyond consulting with the mate. And the mate, a splendid seaman of the old school, was so disgusted with the third mate that he allowed him to loaf away his time just as he chose. He never reported him to the master for inefficiency, but just ignored him. Upon the vessel's arrival in Adelaide the second mate received an offer to go mate of another ship, and the master allowed him to go. Now had Mr. Third Mate been any good he would of course have stepped into the second mate's berth, but, as the mate said : "He's about as much fit to be second mate of this ship as I am to be Prime Minister of England." I joined the ship in Adelaide as second mate, being two years younger than the third mate. But I was strongly recommended by my old skipper, whose ship was laid up for sale, and I obtained the post with ease. This so exasperated the third mate that he actually dared to sulk in his cabin and refused to even pretend to work on the passage home. I cannot tell how it was that he was allowed to do this, but it was even as I say, until, when we put into Cape Town to land some passengers, the skipper discharged him. He went ashore a disgraced man, who stood no possible chance of getting a ship again as an officer and probably went to the dogs entirely, all the money that had been spent upon him entirely wasted.

In many of the large American and "Blue-Nose" ships a third mate is carried, but he is of a different type altogether. As these ships do not carry apprentices they usually breed their officers up from lads who are protegés of the master or mate. They come on board young, and while they have an exceedingly good time they are rigorously trained both in seamanship and navigation. They are taught that the cardinal virtues are smartness and cleanliness. So well is this training pursued that I verily believe no smarter young men are to be found anywhere, and while they are still mere boys they are made third mates with full authority and a handle to their name that no man dare refuse to give them. They are expected to lead the way whenever anything of importance is being done aloft, and are encouraged to lift up their voices with no uncertain sound in giving orders. What splendid men

they do make to be sure. There are, it is true, many foreigners in Yankee ships who have by sheer merit risen to be officers, having first perforce become citizens of the Great Republic, but for the beau ideal of a smart sailing-ship officer commend me to the pure American lad caught young and trained in a big ship. One I have in my mind's eye now, who was second mate of the Pharos, of Boston,-tall and lithe, with a clean-shaven, boyish face (he was just twenty), close, black, curling hair, sparkling eyes, and a springy step. We had a hard-bitten crew, shipped in London, and I heard one of the hardest of them-an Englishman who boasted that he had been in gaol over forty times-say, as he caught sight of the second mate for the first time: "What a — baby. Boys, we're in for a soft thing here." But he was quite mistaken. Ten minutes afterwards there was a melodious thundering voice reverberating along the decks: "Lay aft here an' rush this hawser forrard. Lively now." And the astonished crowd skipped aft, the gaol-bird at their head, to find the clean-limbed "baby" looking quite unlikely to bear trifling with. They recognised the able man at once, and thenceforward there was never any trouble. I never saw men work harder than his watch did for him, or speak more highly of a man than they did of this bright-faced youth who not only knew his own work thoroughly but knew how to get the last ounce out of the men under his command. The only thing that puzzled me about him was the almost abject reverence he had for the skipper, who was an old man, but by no means one whom I should have thought capable of commanding respect. But

that grand young second mate always spoke to him with bated breath, esteeming his lightest word as a dread law, nor did he ever, even in jest, speak of him but as one should speak of his sovereign.

The third mate of an American ship is, however, often a man of mature age who takes the place that would be taken in an English ship by the boatswain. He is no mate's loblolly boy. So far from that being the case he often is the "bucko" of the ship, the man who may be depended upon to leap, striking with liands and feet, like an enraged tiger, into the midst of a mutinous crew. He has often a lurid history and can show you a network of scars, each one a palpable reminder of some furious struggle in such lawless ports as Callao or San Francisco. In fact he is the fighting man of the ship and as such is treated with due respect. But he has not seldom the defects of his qualities, and though he may be depended upon to drive his men till they drop, working harder than any of them and cursing them all at the finish for a set of weaklings, he sometimes gets out of hand himself. Had it not been for the drink he would long ago have been master, but he cannot resist its temptations, and when, in port (never at sea, for American ships are strictly teetotal), he gets a drop too much, he is far too apt to start a fight for the pure frolic of the thing, and his fighting is usually of the nature that ends in manslaughter. On the whole I am very glad that we do not carry this kind of third mate in British ships, although there have been times when I could have wished for his aid for an hour. But his habit of kicking or striking with little or no provocation, his utter disregard

for human life—either his own or anybody else's and his incessant blasphemy, are hardly compensated for by his tremendous courage, his magnificent seamanship, or his power of command. One feels that he is out of place on board a peaceful merchantman; he should command a pirate or a privateer.

With this brief sketch of the third mate we must leave the "afterguard," as the officers who live aft are called on board ship, and come to the "idlers" or petty officers. It is hard that they should be labelled "idlers," since they are usually the hardest working men on board, but Jack only means that they do not keep a watch at night.

CHAPTER XVII.

THE "BOS'UN."

IT is impossible to help regarding the Boatswain as a great figure of romance. His title rings on the ear like the voice of the sea. And although not one person in ten thousand among our crowded populations could give a definition of his position that would not be a caricature, there are few-very few-who do not feel a responsive thrill when the word is mentioned. But I am compelled to take for granted that the average man or woman has formed some hazy idea of what a "bos'un" is like. For one thing it is certain that to speak of a "gentlemanly bos'un" would be considered as absurd as to speak of a "fair negro." He is, of course, to the general, the beau-ideal of a " Jack Tar,"-a magnificent monster with a bull's voice, burned almost black by the tropical sun, with eagle eyes forth-looking from a thicket of beard, and great hairy arms whose innumerable devices of Indian ink or gunpowder are almost hidden by a hirsute covering that would shame an ape. Brave as a man can be, he is terrible in his wrath, yet his heart is tender as a little child's and any tale of pity never fails to empty his pockets. Now it has so often been my ungrateful task to shatter old beliefs in the untrue and impossible, that I am quite glad that no necessity is laid upon me for doing so at this present.

There are bos'uns to whom the above fancy description would apply precisely, only it would not be complete. Other qualities, not so picturesque perhaps, but far more useful, would have to be added to finish the picture, and then you would have a man whose superior it would be almost impossible to find in the wide world.

In the Navy, the bos'un, upon rising to the full height of that position, becomes, for picturesque purposes, completely spoiled. He wears a frock coat, a "boiled" shirt, and carries a sword. He is a warrant officer at the head of his profession as far as concerns any man who enters the service as a seaman. No amount of ability, education, or conspicuous courage can elevate him another step. But his mates, who may go barefoot, who wear the characteristic and eminently suitable rig of the blue-jacket, distinguished only by devices upon their sleeves and a silver whistle or pipe,—these are the typical bos'uns of the popular fancy, the fine flower of the naval seamen.

As with all the rest of the officers, there are differences, not exactly in status, but in duties, between bos'uns of the highest class of steamships and the sailing-ships which are big enough to carry bos'uns properly so called. But these differences are not nearly so great as among the certificated officers, for the bos'un, whatever his ship may be, is essentially a foreman, a working-man who by reason of his superior qualifications has risen above his fellow workers and takes the oversight of them. It is his duty, not to originate work, but to see it carried out. He is no theorist, but a practical seaman of the best kind. In

steamers his seamanship is seldom called upon, but his power of carrying on work is tested to the utmost. And in case of a sudden emergency, such as the outbreak of fire, a breakdown of the engines, or falling in with a helpless sister that requires a tow, the bos'un is of the utmost importance. A good bos'un in a big steamship is a treasure of great price, although he does not command very high wages. He it is that makes all the difference to the mate between a happy life and one full of those minor worries that whiten the hair and wrinkle the face.

It cannot need any argument to enforce this fact. When the mate can call the bos'un to him and give his orders secure in the knowledge that the work will proceed without hitch or neglect, he may attend to his other duties with an easy mind. The bos'un looks to the mate, and to him alone, for his orders, and would be indignant at interference by any officer of a lower grade,—that is, supposing him to be, as usual, a man fully competent. Where by some accident he has slipped into the position without ability to command or knowledge to carry out, he will generally be glad to curry favour with anybody, not merely with the junior officers, but with the men under him—which is fatal.

The bos'un's position is not affected greatly by a change from a liner into a big cargo steamer unless it be in cases where, from mistaken notions of economy, he is called bos'un and lamp-trimmer. This degradation of an ancient and honourable position is quite unfair to the man who in a moment of folly or being hard-up accepts such a queerly-associated employment.

For how can a sailor be expected to show due deference to a man, who, after all, is only "Lamps?" In all the steamers of the Australasian colonies a lad is carried as lamp-trimmer, and his duties are confined to that and to cleaning brass-work, both tasks that are quite unfit for a man who is a leader and commander of the crew, as a bos'un is. Small tramps, of course, do not carry a bos'un. The duties which he should perform fall upon the hapless officers, as aforesaid.

But if you would see the bos'un in his glory, go on board of a large sailing-ship. There he has room and scope for his talents, can show of what metal he is made. Even the radical changes that have taken place in the rigging of sailing-ships during the last quarter of a century do not affect him much, except in so far as undermanning has reduced the number of men available to carry out his directions. I am old enough to remember the stately ships of Messrs. Green, or Wigram, or Devitt and Moore, coming into Melbourne and Sydney with crews of more than double what they would now carry if afloat. The bos'un and his two mates were most prominent figures, while their hoarse voices and the shrill scream of their pipes resounded over the adjacent waters as the vessel came up to her berth. Those grand old vessels are gone and with them the fine complement of British seamen they used to carry, men who were so disciplined that transference to a man-o'-war would have come as the easiest and most natural thing in the world.

Yet it must not be supposed that the type of bos'un they carried is yet extinct. Fortunately no, for he would be a heavy loss indeed. He has grafted the old on to the new and may be found to-day aboard of the great sailing-ships that still do a fair share of ocean traffic, carrying on the work under the changed conditions, even as his forerunners did. One of the greatest changes made in modern sailing-ships has been the substitution of wire rope for hemp. First of all, wire was used for the standing rigging, that is, for the great stays which support the masts. Then came the invention of mild steel, and the discovery that ropes made of mild-steel wire were sufficiently pliable to be used for a great deal of the running gear,-that is, ropes that had to run through blocks or pulleys. Then it was found that instead of having a cumbrous arrangement of stout ropes called lanyards to "set up" (tighten) the standing rigging, stout screws would answer the purpose equally well. Thus, instead of needing a large number of men, much complication of tackles, and many hours' time to "set up" the rigging, one man with a short iron bar to turn the screws could do all that was required in about a couple of But this innovation, although it lessened hours. labour in one direction, did not make any difference to the work of the ship aloft, where, on account of increased sail area and the practice of carrying an additional mast, the work was more onerous than ever.

So the bos'un of to-day must, in addition to the knowledge possessed by those of bygone days, be an expert at handling wire rope,—that is, splicing the refractory stuff. He cannot be content with simply knowing how it should be done, but he must be prepared to educate a crew such as he may very easily find under him,—a crew whose only previous experi-

ence has been in steamers, and who hardly know one end of a marline-spike from the other. He must be able to keep a ship in thorough repair, going over the mastheads himself, and prying into every detail for little defects which may bring disaster if not attended to in time. And his mastery of ship's work should be such that it will be sufficient for the mate to say to him : "Bos'un, I want so and so done to-day" and then turn away completely easy in his mind because he knows that the work will be done and done well.

I once had the misfortune to be shipmate with-I was going to say a bad bos'un; but perhaps the better description of him would be that he was not a seaman at all, much 'less a bos'un. We used to call him "the Curiosity," abbreviated to "Curio." He said that he had been bos'un of the ill-fated La Plata. That may have been so, because the vessel was lost only two days after leaving port, although none of us could in the least understand how he had been able to obtain such a berth. At any rate, he managed to get shipped with us in the Herat as bos'un, and as she was a 1,300-ton sailing-ship there was a fair scope for his abilities. We found him out on the first day, although, as nearly all hands were suffering from the last drunk, little notice was taken. But before we cleared the Channel he was made of less account than one of the boys. He was actually ignorant of how to do the most trivial job. Even as a foremast hand he would have had a bad time; as a bos'un his sublime audacity took our breath away. The officers were all good men and were able to carry on the work easily enough, leaving nothing to him but such matters as washing

decks or repeating their orders. Then he took to coming into the fo'c's'le and trying to curry favour with the men by telling them of his varied experiences ashore. By his own confession he had been a salesman at Mortlock's in Oxford Street, a door-keeper at a West End restaurant, something in the ring at a circus, and other equally curious, out-of-the-way employments. His impudence, as well as a certain *bonhomie* which, however out of place in a bos'un, would have been admirable in any of the positions he had occupied ashore, softened the crew toward him, and really he did not have such a bad time.

Of course he was discharged as soon as we reached Calcutta, the master informing him that he would not carry him but for ballast, giving him a "declines to report" discharge, which is equivalent to useless, but paying him on the seamen's wages scale. Three days afterward he visited us, an overpowering swell of *distingué* appearance, and grandly informed us that he was ringmaster in a great travelling circus. After distributing orders lavishly and inviting all hands to come ashore and drink at his expense, he left, and I saw him no more, the most amazing bos'un I have ever even heard of.

At the other end of the scale I place the bos'un of the *Harbinger*, a man of not more than thirty, a giant in stature and strength, and completely master of his profession. Of all the seamen I have ever known he was the most perfect specimen as far as rigging-work and the handling of a ship's company were concerned. So splendid was his work that, in conversation with him one day after watching him splice a two-inch wire

grummet round the goose-neck of the spanker boom with far greater ease than most men would have done the same thing in rope, I asked him whether he had not received some special instruction in handling wire. He then told me that he was a Blackwall rigger; that is, a man whose trade is rigging ships in harbour, and that he only went to sea when he could find a ship that suited him. That explained a great deal, but I must admit that he was just as smart at handling sails aloft in bad weather as he was at rigging-work proper, so that I should say he never allowed himself to get in the least rusty.

Other bos'uns I have known intimately by being shipmates with them, good men as one would wish to sail with, but never one that came quite up to this paragon among sailormen. Some were perfect in all their ways as far as "sailorising" was concerned, yet could not get the work out of their men; others were good drivers, but were weak in their technical knowledge,-at least not quite so good at certain work as some of the seamen under them. Others, again, were lazy, and one especially do I remember, who, although a splendid seaman, was so great a coward that he was a byword fore and aft. He was an Alsatian from Metz who had somehow got to sea, and, after serving several years in British ships, had become bos'un, a post for which his one defect eminently disqualified him. And he never learned to talk intelligible English. Sailors can understand almost any jargon that is spoken at sea under the guise of English, but this man's talk was too funny for anything. He would come to the fo'c's'le door as the watch was turning out and say: "Now poys, gum lonk. Ve shrub und shrabe mit sant unt racks alla now," which, being interpreted, was: "Now boys, come along. We'll scrub and scrape with sand and canvas to-day!" Poor fellow, his abilities and long service deserved a better fate than he met with at last. A couple of years after I left the ship I met him in Old Gravel Lane hopelessly crippled by a fall from aloft on his last passage home. He was hobbling off to the workhouse to try and get in to be saved from starvation, for there is no redress for the sailor who is maimed in the execution of his duty.

As I have said in the previous chapter, bos'uns are seldom carried in American ships, where the third mate or second mate, as the case may be, will efficiently perform a bos'un's usual duties. But where they are carried they will be found, like all the other American officers of whom I have spoken, the best seamen that can be found anywhere, but in general conduct undoubtedly brutal to those under them. One case of a "brevet" bos'un is, I believe, sufficiently quaint to be noticed here. A friend of mine, a man of rather small build, was second mate of a Nova Scotia barque bound from New York to Hong Kong. When the crew came on board,-eight of them,-he saw with some trepidation that they were all huge negroes, and he did not feel any too comfortable at the prospect of keeping them in order if they should turn out to be a rowdy lot. But, putting a bold face on the matter he mustered them. As they trooped aft he noticed that, big as they all were, one towered above all the rest, a black giant. A bright idea struck him,

and, as soon as they had answered to their names, he turned to the monster and said:

"Now, look here, bos'un, I want you t' hurry up 'n git these spars lashed."

"Aye, aye, sah!" bellowed the delighted black man; "I put de b'ys froo, sah!"

And put them through he did. There was never any trouble from that day, the black bos'un doing his work well just for the sake of the title with which he had been so suddenly honoured.

CHAPTER XVIII.

THE CARPENTER.

How shall I do fitting justice to the dignified, invaluable petty officer (warrant officer in the Navy) whose title stands at the head of this chapter? The honest journeyman ashore bearing the same title has always had a peculiar fascination for me, whether joiner or cabinet-maker. But he is no more to be compared with the carpenter of a ship than is a hodcarrier to be likened to an architect. It is not every port that can produce ships' carpenters. Any shipyard where work is specialised, as it is in many that I could name, is fatal to the breeding of such men as ships' carpenters must be.

Like all the rest of the officers I have written of, there is of course considerable difference in the duties of a carpenter in steam and sail, a billet in the former being much the easiest. In a fine passenger steamship the carpenter's duties are mainly confined to seeing that certain gear is in working order, attending to the shipping and unshipping of gangways, etc., but of actual constructive work he seldom does any at all. That, owing to the shortness of the voyages, is done when the vessel reaches home, but it is essential that

any needed repairs or alterations should be noted during the voyage, and for this particular oversight a carpenter is invaluable.

Any remarks such as have hitherto been made about incompetent men may be safely left out when considering the carpenter. I do not go so far as to say that there is no such thing as an incompetent ship's carpenter, but I do declare that I never yet met with or heard of one. He is the man who may be relied upon to give less trouble than any other on board of a ship. As to his position, it is unique. He is a tradesman of the mysteries of whose craft the sailor does not pretend to knowledge. But he is usually an old salt of keen observation, able to criticise sailor-work in all its branches, and with the proud conviction that he is indispensable to the safety of the ship,-a conviction that is based upon expert knowledge of her constructional needs. The real glory of a ship's carpenter, however, does not shine out in a steamer. It is in the sailing-ship that he finds his opportunity for the display of those abilities in which he is not to be approached by any other man on board. I have often spoken in the highest terms of admiration of the wonderful versatility of Canadians, Down-Easters, and Finns, who seem to be born with the power to use either marline-spike, adze, plough, or sextant with equal facility. But their carpentry, though sufficient for sea needs, is rough. It is, as they would be the first to admit, only to be used where poverty or pressure of circumstances forbid the employment of a man who has been through the curriculum of the "yards" and has emerged ready to do all that a ship in her utmost need can require at the hands of a man.

Perhaps the best ships' carpenters known come from Scotland. In all my experience I have only met with one who did not, and he was one of the fine old school that used to be bred forty years ago in Thames shipbuilding yards. But on the Clyde and in Aberdeen they breed a race of men as ships' carpenters who are silent, thoughtful, and strong,-men who study the requirements of their ship as a great surgeon studies his patients, and who never need telling what should be done. And this is so recognised by masters that it is popularly supposed on board ship that if the chronometer went wrong the carpenter would be called upon to put it right. For he is no mere specialist. A ship's carpenter who was only a carpenter would be of very little use on board a modern sailingship. He must be also a blacksmith, a block and spar maker, a joiner, a sailor, and a boat-builder. Of course he must be a caulker. I should not mention the latter were it not that in the minute subdivision of labour that, for economical purposes, obtains almost everywhere to-day, caulking (roughly, the stuffing of seams between planking with oakum to keep out water) has become a trade by itself.

The pumps are under the carpenter's charge. He knows not only how to fit their boxes and renew the packing,—many sailors have that knowledge,—but he can, in time of need, invent substitutes for leather and by all sorts of devices make it possible to keep the hold clear of water. Also he is responsible for the due working and up-keep of the ironwork aloft. The

great trusses and goose-necks upon which the massive yards are balanced so that they swing from one side to the other are his care: he visits them at regular weekly intervals with oil-feeder and scraper, and with minute scrutiny assures himself that there are no flaws in them which may in a moment of stress extend into breaks and let half the ship's company go howling to leeward and be swallowed up in the hissing vortex of white foam that surges hungrily upward. He attends to the due working of iron blocks and sheaves, and with critical eyes examines both masts and yards for flaws. To do this it is necessary that he be able to climb in any weather, since the gear is permanently fixed aloft, and thither he must go to examine it. But it is seldom that he is called upon to work aloft unless he be an ardent seaman as well as a carpenter. Some members of the honoured family of "Chips" I have known who scorned to be left on deck when a rising gale demanded the services of all hands to shorten sail. They were as keen and eager to wrestle with the mighty wings thundering at their confining gear as any purely seafaring man that ever hung on to a jackstay by his eyebrows or scorned to secure himself on a yard by thrusting his arm through a becket. There was never any need to call them specially when it was "All hands"; they were always on deck with a leap as if they had been waiting ready rigged for the word, although, had one gone into their berths for anything an instant before the cry was given, he would have found them sleeping with the care-free soundness of the sailor.

The bos'un, carpenter, sailmaker, and cook generally

live together in a compartment of the forward house on deck. Formerly their berth was known as the "half-deck," a survival of ancient days when they were really berthed in a horrible dungeon that rightfully bore the name. But now the title is often carried by the berth set apart for the apprentices, and the petty officers' quarters are as often divided into two,-one for the bos'un and carpenter and the other for the sailmaker and cook. They are attended in the simplest fashion by a boy, not at all as a servant, but just to carry in their simple fare, wash their messtraps, and scrub out the berth. They may feed a little better than the men, but not much, and the manner of their table is practically the same,--the "table," indeed, being often non-existent, as they eat their meals in the good (?) old way, that is, with their plates upon their knees or on a chest at their sides. But the carpenter has, in addition to this home which he shares with one or two others, a place of retreat sacred to him alone, wherein no man has any right to enter, save the master and mate,-and I am doubtful about the mate. It is his "shop." Here is his bench; here he does such small work as comes under the head of carpentering proper, or, on a long passage, makes cabinets, writing-desks, or bookshelves for the skipper. It is a temple of peace, fragrant with the scent of new wood, with a sub-tone of pungent tobacco-smoke, for here the presiding genius may-and does-smoke with no one to say him nay.

Unlike any other officer in the ship below the rank of mate, "Chips" finds his own work, unless, indeed, the master may have some special piece of work that

he wishes done. And even then it would probably not be undertaken if Chips did not think it was feasible. Under ordinary circumstances the carpenter goes on his own even way, no man interfering with him, and few knowing what he is employed upon. Once, when on the homeward-bound passage of a long voyage, I asked our carpenter whether he was not sometimes puzzled to know what to find to do. It was a piece of daring on my part, for he was a dour Aberdonian of middle age, so taciturn that his voice was seldom heard, and with a grim expression on his face that discouraged familiarity. But he had thawed out a bit on this occasion, and told me several yarns, so I ventured to put the question which had often occurred to me.

"Mahn," he growled with lowering brow, "Ah cud fine wurk fur seven year, 'f we wur oot sae lang. Fat due Ah fine tae dae, ye say? Did ye ever see ma idle in wurkin' oors?"

I shook my head vigorously, feeling that I was on exceedingly delicate ground.

"Nah," he muttered, "there's nae lack o' wurrk, but there's plenty wantin' wull tae dae it. But Ah niver hahd ta worry aboot siccan a thing in a' ma life."

I said no more, being no wiser than I was before, but feeling that what he said was true.

On the other hand it may very well be that a ship's carpenter sometimes comes in for an overwhelming pressure of work which taxes all his energies to cope with. On one occasion in my own experience the skipper of a big ship, as we then considered her, bound from Liverpool to Bombay, brought with him to sea a number of huge rough spars, bought cheaply, I suppose. These he purposed to replace the yards that were already doing duty aloft, and as soon as opportunity offered the work was begun. It was a tremendous task for one man to undertake, but our Chips, although it was only his second voyage to sea, was fully equal to the demand made upon his skill and strength. More than that, he was able to train sundry members of the crew in the handling of broad-axe and rip-saw, so that they could take off his hands the most laborious part of the work. During a calm that persisted for eight weeks we practically shifted every yard in the ship, working all day long and-shall I say it ?--sleeping all night. I will not go so far as to say that the man at the wheel went to sleep, but I dare not say that he did not, for no demand was made upon his steering skill by the ship-she lay as nearly motionless as a ship can lie upon the ocean.

It was on this voyage that I learned how wonderful a tool in the hand of an expert is the adze. Chips seemed to prefer it to all his other tools, and the way he made it serve him was marvellous. I heard him tell a story of how some braggart was boasting in the yard of his skill with the adze, when an old carpenter challenged him to take off a shaving under his foot, staking his week's wages that he, the challenger, would take off the thinnest. The boaster tried and succeeded in slitting the sole of his new boot, at which there was much laughter. Then the veteran, taking off his shoe and stocking, placed his naked foot upon the plank, and, swinging his adze over his head, brought it down with a whir. On removing his foot,

a shaving no thicker than note-paper lay upon the blade of the adze, the old man slyly saying: "Ah dinna keer fur reskin'a guid peyr o' butes in a ploy laik this yin. But it'll mebbe teach ye no to give way tae ungodly boastin' agin." I have no difficulty in believing the story, having seen the truly marvellous way in which this (to a novice) awkward-looking but ancient tool is handled by an expert shipwright.

That same carpenter mended the skipper's wife's sewing-machine, and "sorrted," as he would say, the same lady's bracelet. In fact he was always being called upon to do some job as far removed from carpenter's work as one could well imagine, and always succeeded.

Carpenters in American ships are of course superexcellent, but they are not so good at iron-work as a Scotchman. For a Scotch carpenter seems equally at home in handling wood or iron,---as a result, I suppose, of the thorough training he receives while an apprentice. But in wood-work, in extensive repairs to a ship, the Yankee cannot be beaten. Indeed he must needs be good, for otherwise he would almost certainly find some of the officers who would offer to teach him his trade. In British North American ships a carpenter is not often carried, since nearly every Blue-Nose sailor is a born worker in wood and would consider the carrying of a carpenter a superfluous expense quite unwarranted by any ship needs whatever.

Although not strictly within the purview of the present work, I may be pardoned for paying a belated tribute to the excellence of the American car-

penters carried in whaleships. Their strong point was in boat-building, and it was a marvel to see what they could and did do with a batch of broken boats, some of them indeed with hardly any vestige of a boat remaining. Without any help, without rest for a couple of days and nights, except for necessary food, they would toil until they had again made it possible for the pursuit of the whale to be undertaken. And they had to work in such cramped quarters, not free from the all-pervading greasiness of trying-out, that how they managed to do anything at all in workmanlike fashion was a mystery. One of them that I knew was also an artist in ivory and bone. He had a lathe of his own construction, and by its aid he turned out such exquisite pieces of ornamental work that they would not have been put to shame in any exhibition in the world.

These ships also carried another artisan,—the cooper,—whose province it was to make casks, barrels, tubs, buckets, piggins,—anything that could be made with hoops and staves. Consequently utensils that in other ships would have been of iron were, in the whalers, made of wood, and I once heard our old cooper declare that he'd undertake to make a lady a pair of stays if he was favoured with the order. And I have no doubt that he would have done so,—a pair that would have lasted a lifetime. No one on board would have had the slightest difficulty in believing that, given a sufficient number of trees and a little iron, these two worthies would, in case of our vessel's loss, have speedily constructed a ship in which we might have sailed around the world.

One more old carpenter I must mention, who, with a broken leg and covered from head to foot with suppurating mosquito-bites, crawled from his bunk when our vessel was found to be on shore in the middle of the night. In this pitiable condition of body he immediately began to caulk the only serviceable boat we had, which, lying bottom upward upon the skids, had got so impoverished by the sun that her seams were gaping wide, rendering her absolutely useless. And for over twenty hours thenceforward, without one word of complaint, that heroic man laboured on until all that he could do was done. He did not seem to think that his accomplishment was in any way extraordinary.

Perhaps the carpenters who read this may smile at the presumption of a mere sailor in praising their work, but I hope they will believe that I do but express toward them the ordinary sentiments of their shipmates of all grades.

CHAPTER XIX.

THE SAILMAKER.

THE position of this most useful man on board ship will give me less trouble to deal with than any other that I have either handled or shall handle, for the sufficient reason that steam knows him not and has no need of him. It is quite true that on board ships of war the sailmaker is still in evidence, is still more busily employed, but not in making sails. His work is much simpler now. It consists of making deckcloths, awnings, mast and yard covers, and all the varied canvas screens whereby alone it is possible for so complicated a machine as the modern ship of war to be kept in anything like cleanliness. People are apt to enquire what can be found for so large a crew to do as a man of war carries. They either forget or do not know how defiling, how all-pervading, is the grime from the funnels and the dust of the coal used. As far as making work goes, it far more than compensates for the disappearance of sail power. Even with all the canvas protectors that are made and kept in repair by the sailmaker and his crew, the dirt is so persistent that one is tempted some time to cry despairingly: "All the protection we get from these covers is so inadequate that it is more than counterbalanced by the necessity for keeping them clean; we should be better off without them."

On board of the sailing-ship, however, going, as she does, on voyages that sometimes extend- to two or even three years before returning home again, the sailmaker is indispensable. Not that even in ships like these a sailmaker, as such, is always shipped. Sailmaking has always exercised a certain fascination upon seamen, and it will sometimes happen that a master or mate will be so excellent at the business that they will dispense with a sailmaker altogether, relying upon finding among the crew some men sufficiently expert to do the stitching as it should be done, while they design, cut out, and fit. But where it is any one else than the master who thus adds the sailmaker's duties to his own, the practice is rather dangerous. For there may be many things happen which will cause the amateur sailmaker to declare rather suddenly that he will have no more to do with it, that he has quite enough of his own work to do, and then the consequences may be awkward. Owing to the tremendous stress of competition and the resultant cutting down of crews, a far less number of sailmakers are carried than used to be,---ships of 1,000 tons now being turned into barques, and all the complement being reduced until it seems marvellous how the vessel is handled at all. In craft of this size the sailmaking must be done by the seamen, and with the decrease in number of thorough seamen who along with their other accomplishments are capable sail-sewers (it would hardly be fair to call them sailmakers) the problem of how to keep the vessel clothed aloft is not an easy one to solve.

Possibly landsmen think very little about the mat-

ter, but they may be assured that the making of a sail is by no means what they might suppose,-say, as easy as preparing a pair of sheets for a bed. There is considerably more art required in cutting out a jib, for instance, than there is in cutting out a suit of clothes. In a properly equipped sail-loft ashore the various measurements may be laid off upon the floor in chalk, and then it is comparatively easy to cut the numerous cloths of canvas out by simply laying them down. There need be no calculation of angles, only allowances made for "roach,"-that is, curves at the edges so planned that the sail shall set properly and not hang like a wrinkled rag when hoisted. But to do this on board ship in the same way is impossible, so the sailmaker must make a tiny draft of the sail to scale. From this he must calculate the length of each cloth required, and if possible, what is more im. portant still, the number of cloths which the width of the sail will take. For a cloth of canvas is only two feet wide, and from this must be deducted the width of the seam, which is usually about an inch and a half, but varies a little according to individual fancy. Then there are the angles to be calculated, and certain allowances made which only practice can estimate so correctly as to ensure a well-fitting sail when finished.

Even with all the care imaginable in cutting, a bad workman will spoil the set of a sail by not keeping the right amount of stress upon each cloth as he stitches. It would not be an easy task to cut out a sail if the material were all in one piece; when it is made up of a number of pieces, as it is, the work

needs a master of the trade in order to produce a wellfinished article. And when it is remembered that some sails will contain forty-five cloths of canvas, each ten yards long,-canvas, too, that is stout enough for the heaviest work for which sails are called upon,-it ought to be seen that sailmaking has nothing in it of the nature of unskilled labour at all. In fact, so much skill is required for sailmaking, so much innate ability, that it may be truly said of the perfect sailmaker that, like the perfect tailor's-cutter, he is born, not made. Even then the dead hand of tradition weighs heavily upon the sailmaker. Certain fashions in sail-cutting exist in this country which are scouted in America as being in the last degree clumsy. And the Yankee sailmaker goes so far as to say that a British sailmaker cannot cut a sail! This taunt does really seem justified to an impartial observer when looking at the difference between the sails of a British and of an American ship when set side by side. I have often seen a new set of sails hoisted on board a British ship that looked more like a miscellaneous collection of rags hung out to dry than the "white wings" famous in song. And it was not till long after, when a great deal of stretching and humouring had taken place, that the sails came to look at all neat and unwrinkled.

I don't know whether it is justifiable in a work of this kind to say so much about sails, but I feel that since the popular imagination is so stimulated by a sight of that most beautiful picture, a ship under full sail, that it would hardly be fair to pass the subject over perfunctorily, especially when it is so deeply studied and argued on board ship. There is nothing in a ship's equipment that excites so much interest among her crew as the sails. Every one on board who has any claim to be called a sailor poses as a critic when a new sail is set or when another ship heaves in sight, and as many intelligent opinions may then be heard as might be expected from a party of trained workmen going through an exhibition of work with which they were well acquainted.

It must not be supposed that sailmaking is merely a matter of stitching together a certain number of pieces of canvas of a certain shape. Far from that being the case, the strength of the sail lies in its borders. These are first "tabled,"-that is, a broad piece is turned over and stitched down all round the sail. Then a tarred rope (technically "bolt-rope") of the very best make is carefully stretched, having a number of turns taken out of it to prevent its cockling up the sail when it is wet. It varies in thickness, not only on each sail, but on different parts of the same sail according to the strain that it may be expected to bear. When duly prepared it is stitched on to the tabling with several parts of stout twine (ropingtwine) well tarred. This work demands considerable skill, for the canvas must be gathered up in the process so that the strain shall come on the rope, yet not so much as to leave wrinkles in the sail. And at intervals small loops of rope ("cringles") must be worked on the rope, from which they stand out at right angles. They have grooved iron rings fitted into them, so that they will not be chafed through by wear, and they serve to secure the sail by "sheet,"

"tack," or "earing" (although the earing cringles are seldom iron-lined). Of late years the fine hemp boltrope has been much discarded in favour of flexible wire rope neatly covered with canvas and spunyarn to prevent rust. This is stronger and more durable in itself, but it makes the sail far more refractory to handle and cannot be stitched on to the canvas, as of old, by pushing the big needle in between the strands of the rope. It has to be "marled" on, a method of securing it that always looks clumsy and insecure.

But I fear that in all this I am straying far away from the sailmaker himself. It may very reasonably be supposed that on leaving her home port a ship would have a supply of sails sufficient to last her, barring accident, for the voyage. That is really so in all well-found ships. Two, and sometimes three, complete suits of sails are carried: the best or newest suit for seas where the stormiest weather may be expected; the next best suit for general use; and the fine-weather suit for regions where light variable airs are always found, and where it would be a great waste of money to allow good canvas to bang itself all to pieces against the masts as the vessel rolls idly upon the sleepy swell. Now the sailmaker's first duty is to keep these sails in repair, and since they have a great deal of wear it will usually be found that he has not only quite sufficient to do himself, but can find constant employment for some favoured seaman out of each watch at sewing seams. Generally speaking, he is a man that has served his apprenticeship to the trade, although a good discharge from his last ship where he has been engaged in a similar capacity is all that a skipper looks for from him upon engagement. Perhaps this is hardly correct, though, as many skippers will ask, in addition, for a written personal reference, regarding the official certificate of discharge as a mere formality that signifies little concerning the quality of the man. But this applies generally to all seamen above the rank of A.B.

It will often be found, however, that a master who is an observant man will have noted during the voyage that one of his A.B.'s has shown a special aptitude for sailmaking. Then at the end of the voyage he will inform such a man that if he cares to come next voyage as sailmaker he will employ him,--of course at a lower wage than he would give a regular tradesman. In this way many seamen have risen from the forecastle to be sailmakers. Verv good men they are too, but I never saw or heard of one of them who had attained to the competency of cutting and fitting new sails. Not that there is any personal reason why they should not do so, but they do not get sufficient practice. They are smart hands with the "palm and needle" and the "fid,"-that is all. Of course regularly trained sailmakers are very wrath at this method of cheating them of their privileges, as they consider it, but they are quite powerless in the matter.

Sometimes, however, they have their revenge, as in the case of a ship carrying an amateur "sails" (as the sailmaker is called), that meets with a sudden squall and "carries away" all her sails. This term does not mean that the sails are stripped entirely from the yards, but that they are rent into ribbons, mere out-

lines of sails. An enormous amount of sail construction as well as of repairing is thus thrown suddenly upon the sailmaker, and every available stitcher on board is then pressed into his service. Then, if he be a regular tradesman, he is in his glory, but if a promoted seaman he will usually be just a terrified unit of the crew, badgered by the master and flouted by the men. And the ship herself suffers accordingly. It is false economy, saving at the most but a few shillings a month, and should never be indulged in. The sailmaker, poor man, useful though he may be, is never very well paid, fifteen shillings or a pound a month more than the A.B.'s wages being about his maximum. And like the carpenter, although not so indispensable, he is almost always a good reliable man whom it is well to have on board a ship in a position of some responsibility.

As with the bos'un, it will be found in American and Canadian vessels that a sailmaker, as such, is rarely carried. The business of sailmaking, like carpentry, is in those vessels tacitly considered to be a part of the education of a thorough seaman and it would be a rare thing to find one of them without an expert amateur sailmaker among the officers. They get some beautiful patterns to work from when leaving home, and doubtless study them deeply, for in spite of their habit of not carrying professional sailmakers it is an unknown thing to meet one of them anywhere with badly-fitting sails. I know of no lovelier sight than a full-rigged American ship on a bright day with a new suit of sails set to a good beam wind. The canvas, being of cotton (ours is

made of flax unbleached), is dazzlingly white. Catching the glint of the sun, it gleams against the deep blue of the sea or the lighter azure of the sky like the wing of a mighty angel, so pure and clean that the eye cannot bear more than a passing glance at it. Not a thread is slack, not a curve untrue; she has the very poetry of motion induced by a gloriously beautiful arrangement of wings that makes her look like nothing earthly. Alas, that this splendid canvas should, when wet, become like a plank for stiffness, so that in the stormy Atlantic, when searching cold, howling gale, and drenching rain combine, and the hapless sailors are strung aloft to furl those fiercely straining wings, the task is too terrible for words. The naked hands, torn and bleeding, cannot bend the stiffened canvas, and in the fight many a broken sailor has gone to the rest that was denied him in life.

CHAPTER, XX.

THE STEWARD-IN STEAM.

THE consideration of this worthy official's position has flung me back again into all the difficulty of differentiation from which my dealing with the sailmaker was free. And more so, because of all the men who serve in the mercantile marine there are none who know such changes of fortune, such a range in value of their position, as does the steward. From the chief steward of an Atlantic liner to the cook-and-steward of a small foreign-going brig, what a tremendous distance there is. And yet, given push, a gentlemanly appearance, and ability in organisation, there is really no reason why the holder of the latter position should not aspire to, and reach, the former, with all its emoluments and the command over a couple of hun-These hierarchs of the steward order are dred men. really very closely allied to the managers of great hotels. In fact, speaking from an outsider's point of view. I am inclined to think that a man who can manage the domestic arrangements of a couple of hundred people at sea-that is, in a floating hotel which is quite cut off from any external source of supply for a week or more-has a far greater task in hand than any hotel manager ashore can have. Such an official has naturally enormous weight in deciding

the question of a certain ship's popularity. Her master may be one of the most splendid and genial of seamen, her officers the best of their kind; but, after all. if the creature comforts are not well looked after, she gets branded as an uncomfortable ship. Therefore the chief steward is in close touch with the office ashore. He and the purser-an officer whom I have left out of my list because he is really one of the shore officials carried to sea for business purposes-are really the autocrats of the passenger department. Like every one else on board, they are under the master's command, but he has nothing else to do with them. Carefully selected men as they are, they take care that their part of the business shall not trouble His Majesty. If he were troubled by them the chances are that there would be changes in the *personnel* of their department very soon.

Most people will need no argument to convince them that the position of chief steward of a big liner is a most lucrative post. It is also one whereof the holder should be a man of good appearance and gentlemanly manners. Yet—and I say this delicately, because I would not for a great deal give pain to any member of a most estimable body of men—every seaman, no matter how humble, feels toward them, no matter how high, a certain disdainful sense of superiority. He can never quite get rid of the feeling that they are menials. I do not excuse or encourage such a feeling, but that it exists is quite certain. Nor, in spite of the rich prizes that are to be won in the business, do you ever find parents who can afford to pay a premium for their youngsters being apprenticed to

the sea, contemplating their being made stewards. For myself, I see no reason why the steward's post should not be considered as honourable as the master's, and certainly, taking the chances of promotion one with the other, the prospects of fortune are far brighter for the accomplished steward than they are for the most valuable master to-day. But there is among sailors a marked repugnance to the "tip," to being expected to do body service to other people unless In an emergency or as an act of charity, and this feeling can by no means be explained away.

Below his high mightiness the chief steward in a liner comes a host of subordinates in as many varying grades as are to be found in a big hotel. Unto each is allotted work which goes on like clockwork day and night, in fair weather or foul. Efficient service in your hotel means a great deal, -not only a great deal of thought on the part of the management, but a great deal of hard work and manual dexterity on the part of those who actually do the work. And these toiling ones are always expected to wear a smile, no matter what their physical condition may be; must always be ready to spring at your call and do for you whatever you choose to desire. But what does such service as this mean at sea? When what the sailor calls a stiff breeze is blowing, with "a nasty bit of a cross sea on," and the big ship is writhing her way through the green masses with a perfectly indescribable combination of pitches and rollings, the seasoned passengers must have their meals in due order with all the usual. accompaniments; the helpless ones must be waited on. How is it done? Only by the most loyal, eager

subordination of self in the desire to please, backed up, if you will, by a wish to get on, and tempered by the prospect of a substantial tip by and by. Whatever the motive, the work goes on with a regularity that is so unostentatious that the passenger ceases to wonder at it after a day or two and accepts it as he does the unseen machinery below.

At the head of each department of bedroom stewards, waiters, pantrymen, and what-not-I do not know the designations-is a gentleman who is steadily working his way to the top, climbing to the giddy height where he may go about all day long in the dress of a private gentleman and use only his brains, not his hands, for the prosecution of his work. As in all businesses. efficient devolution is the whole secret of success. But let the work be devolved as much as it may, every one beneath the "chief" has guite as much as he can do by steadily working on with little sleep, little rest, but abundant food. This is so in the finest weather at sea and in harbour; in bad weather at sea, work is greatly added to, not only in quantity, but in the difficulty of doing it. There is no mere child's play in the distribution of food alone, without the arrangement of all the paraphernalia of the mealtables. And in the cleaning up afterward and carrying away of china and glass, the washing and stacking thereof in secure places while the decks dance beneath the feet and every little bit of panelling complains, there is very much severe toil, done no less thoroughly because out of sight.

This ocean hotel service has grown to great dimensions, but not without dragging into its toils a great

many burden-bearers whose labours are essential to the luxurious comfort of latter-day passengers. It is to be hoped that those who enjoy this wonderful attendance while crossing the great and wide sea do at times give a thought to the human machinery ever at work on their behalf; for a little thought would surely make them less intolerant of mistakes or seeming neglect.

As we come down the scale of passenger steamers and lengthen the voyages, the position of the stewards gets worse, while their wages (that is to say, their entire gains, which means wages and *backsheesh*) get less. Their labours increase by reason of the shortness of hands and lack of accommodation provided for them. They are not to be envied at all. Yet they are a cheerful crowd and a respectable; for any dereliction of duty or misbehaviour of any kind means dismissal from the ship,—a serious matter which often carries with it a great difficulty in finding another.

Coming down still lower to the cargo-carrying steamer, or "tramp" pure and simple, the stewards have dwindled to one and a mess-room boy who waits upon the engineers; and although the steward of a tramp does not get much of a salary, his duties are simple and his masters are few. Indeed he may be said to have but one master, the skipper, if he be well up to his work. With that proviso and civility, no other officer in the ship will ever interfere with him. Even here he is a most responsible man. Upon him devolves the outlay of the consumable stores. They are placed under his charge, and he is expected to see them duly served out to all, keeping a record of their going, so that he may be able at any time to answer a question put to him by the master as to how the ship is prepared for the next portion of her voyage. His part it is, too, to do battle with wily dhubash or compradore in the far East, who will cheat not only in quantity but in quality of stores on every possible or even impossible occasion. Upon entering ports abroad, one of these worthies or their prototypes are always engaged to supply harbour-food, fresh meat, vegetables, fruit, etc., and a good honest steward will make a tremendous difference to the comfort and well-being of the ship's company. A dishonest one is of the devil, because bribes will be offered him to wink at short weight and inferior quality, and he will accept. Then there is discontent and often blame cast upon the wrong shoulders.

His other duties consist in keeping the saloon and the skipper's berth clean (the officers must get their berths cleaned by somebody else, usually a deck boy, the steward being no body servant of theirs) and wait at table. Where the cook is incompetent, the steward will have in addition the duty thrown upon him of preparing food for cooking. In fact some stewards prefer to do this, considering that their pastry-making cannot be excelled by anybody. But the practice is by no means so common in steam as it is in sailingships.

I can hardly close this portion of my subject without an allusion to the curious principle that obtained when I was sailing in intercolonial steamers, and may still be in force for all I know to the contrary. It was then usual for all the ship's provisions to be sup-

plied by a speculator on shore, whom we called the providore, at a fixed rate per head for every member of the crew; that is, so much per day for a sailor, a fireman, an officer, a second-class or saloon passenger, -the rate varying from one shilling to half-a-crown a day. For this the providore supplied not only food but also cooks and attendance. The chief stewards were always supposed to be deeply interested in making the scheme pay, but their peculiar position often led to their being very unjustly abused. Any attempt on their part to stop waste was almost certain to be met by the accusation that they were stinting the food in the interests of the providore, and naturally they could look for no countenance from the master or officers. And as the waste "forrard" was simply abominable, they were always in more or less hot water. Of course they could, and did, control the expenditure of food aft and among the passengers, but the crew did as they liked. I have seen a man go to the galley for breakfast and receive a tin dish containing four or five pounds of chops and steaks for six men. It is true that they were vilely cooked and usually as tough as leather. The fellows would turn the meat over, saying bad words the while, and presently one would say: "Well, this isn't good enough for me." Then, taking the tin to a port, he would cast its contents overboard and go calmly to the galley for more. And if he were refused he had only to complain to the master, who would of course give no sympathy to a "providore's man." Enough food was wasted on that ship to feed a large ship's company every day, and by men who had all known what it meant to be very hungry.

CHAPTER XXI.

THE STEWARD -- SAILING-SHIPS.

THERE are even now a few sailing-ships which carry passengers, but in these no such luxury is to be expected as in steamers, for obvious reasons. Nevertheless a great deal of comfort may be got out of a voyage in one of these grand flyers,-comfort of a kind that, while it does not appeal to the passenger pressed for time, is to the invalid a perfect god-send, one of the most sumptuous rest cures in the world. In such vessels the steward is a man of some importance as well as skill, for he must do a great deal of contriving in order that such food as may be carried on a passage lasting perhaps for over a hundred days without a break by calling at any port may not become too monotonous for a landsman's pampered appetite. Livestock is carried,-poultry and sheep and pigs,-and the steward is a good deal exercised about the care of these useful passengers, although it is a matter over which he has little control. He attends to their feeding, but the cleaning of them and their protection from the weather does not rest with him, while it makes all the difference possible to their con-A bad feeling toward him by the crew may dition. often mean serious trouble in respect of his livestock.

Or for other reasons trouble may be made. For instance, in one ship wherein I was an ordinary seaman there were two fine sets of coops on the forward house which contained ducks and geese. Now geese at sea are a great nuisance, owing to their noise and wake-We had many passengers, and it was well fulness. known among the crew that not one fragment of the meat we carried alive would ever find its way to their mouths, although the food supplied to the crew forward was disgraceful to the last degree. Therefore, after enduring the brutal cackling of the geese for a few nights, some revengeful fellows climbed up to their quarters in the darkness, armed with belayingpins, and, as the long necks were thrust out between the bars to give vent to the strident song, one after another received a blow which quieted them effectually. In the morning there was not one left alive. The steward was inconsolable, but all efforts to find out the perpetrators of the deed were in vain.

It is, however, rather late in the day, I fear, to talk about stewards in passenger sailing-ships. Their palmy days are over. But in the ordinary sailing cargo-carrier they still flourish, a race apart and as distinct from the steamship steward as can well be. Their berth is by no means a bad one, assuming that they know their duty and do it. There are many instances where a steward has sailed so long in the same ship as to be almost as much a part of her as the mizzen-mast; a faithful servant of the owners and a privileged member of the ship's company, who is a prime favourite with all on board. Occasionally a master will make a favourite of the steward, allowing him privileges which he denies to any of his officers. This is exceedingly bad, leading to all sorts of trouble on board with both men and officers. For it is too much to expect that any man occupying such a position and pampered in such a way should retain his respect for those whose rightful claims to authority are ignored by the head of affairs. I have in mind two such cases.

In one of them the steward was undoubtedly a clever man, who ran his department like clockwork, and, although certainly petted overmuch by the skipper, did not take the advantage that he might have been expected to do,-at least, not until we arrived in India, where he suddenly exhibited an amazing aptitude for getting drunk and keeping so for intervals of about a week at a time. This led to complications of various sorts, and to disagreeable scenes in the cabin, where the skipper, when he was exasperated beyond measure by the filthy behaviour of his favourite, often went the length of rope's-ending him. But as the skipper expected his officers to endure all the drunken abuse and neglect that the steward was inclined to favour them with, and make no demonstration, the whole thing ended in a fierce fight between the master and the mate, much to the edification of the crew, peace only being restored by the discharge of the steward.

The other was in a big ship on which I was second mate. I joined her in India, and on the first day of my service was struck by the calm way in which the steward bandied doubtful jokes with the first and third mates. Myself he had not yet become sufficiently

acquainted with. Not, of course, that there was anything wrong or unpleasant in that of itself; it might, I reasoned, be merely exercising the freedom of an old servant who meant nothing like insolence. But I could not help wondering very much at the way in which that steward omitted to give the mate his title of "Sir." or "Mr. Evans." I had never before heard a chief mate called by his surname, all short, by any inferior without a full measure of immediate trouble ensuing. Yet this man did this amazing thing while the mate made no objection. The master was not at the table. Of course I said nothing, but I meditated much, and at the earliest opportunity broached the subject to the third mate, a very fine young offier just out of his time in that ship, asking him what I was to understand by it. His explanation was that the steward—a gross, flabby man, by no means smart or remarkable for ability in any way--was so great a favourite with the skipper that he was allowed to do practically whatever he chose. And this was the more remarkable because the skipper was not only part-owner, but a man who, as a rule, was very sharp with his subordinates.

For a month I was very comfortable. The master used to chat with me amicably during my dog, or first, watches, and even went out of his way to compliment me on the way I did my work, until in an evil hour I offended the steward. It was in this wise. He came to my room door in my watch below, saying to the third mate as he came along past his door: "Where's that fellow Bullen?" And then he flung my door open, crying: "Here, you, I want a cask o' beef got up as soon as the devil 'll let ye after eight bells." Now I maintain that if an officer is to have any authority on board a ship, such language from one of his subordinates cannot—must not be permitted at all. The man was not drunk; he was deliberately insolent because backed by a foolish skipper. Of course I resented his words, receiving more insolence, and then, instead of knocking him endways, as I ought to have done, I went and reported him to the master, who jeered at me and warned me that I had better let his steward alone. I tried to explain, but only succeeded in drawing abuse from the skipper, and from that day forward my life was utter torment, such misery as I have never experienced on board ship before or since.

But such cases as these are by no means common. The average sailing-ship steward of to-day is a quiet, inoffensive man, who does his duty unostentatiously, lives rather a solitary life (since the only person he can associate with is the cook), and endeavours to serve out the provisions to the men with perfect justice. If the master carries his wife with him, the steward may be very happy or very much the reverse,-he can never plod along in the same easy, jog-trot way as is usual when there is no woman on board. In American and Canadian vessels he is often a negro and sometimes a Chinaman, but it may be taken for granted that whatever countryman he may be he is also a paragon, because the American skipper will have nothing less than perfection in cleanliness and service. That must be rendered him whether the steward be white, black, or yellow, and he is ready to enforce it

by the rudest and readiest means to hand. Wherefore it follows that he is served as probably no other seafarers in the world are served.

But even here the officers are not personally attended by the steward except when they are at meals. It is the commander who must needs have his every wish anticipated, his linen kept spotlessly white, and the woodwork, the adornment of his cabin, as clean as—yea cleaner than—on the day they were first fitted into place. Many of the old ships carried stewardesses instead of stewards,—often the wife of the cook; and although to some people such an experiment might seem to be one of the extra-hazardous kind, it was not so. The American is a wonderfully chivalrous man toward all women-folk, especially when under his protection.

Stewardesses are of course carried in British steamers; in fact they must be, for attendance upon the ladies. They are well treated by everybody on board except their charges, but some of them can tell some queer stories of endurance at the hands of these who owe them so much comfort. These quiet, defthanded women, who balance themselves so featly roll the ship never so heavily, could tell many strange tales. Strange, is it not, in these days of reminiscencewriting, how carefully they hold their peace? Once I was shipmate with a lady passenger, one of the most accomplished ladies that it has ever been my privilege to speak to. She knew all that a woman should know, and many things that good, useful men did not know. And whatsoever she learned, that, if it seemed good to her, she would put into practise. She was

going out to a far country with a little capital to prove to a sceptical world that a lady who could ride, shoot, swim, and run a farm as well as play the piano, sing, paint, and talk several languages could make her way alone in a new world as well as any man. But fortune was unkind to her, and she failed in those days. Then she took a stewardess's berth in a coasting steamer that carried some hundreds of passengers from port to port around one of the stormiest coasts in the world. We met when she had been at this occupation for some months, and she had aged ten years in appearance. By her looks she was weary of life, but she made no moan. Then in an awful gale her ship went ashore on an outlying reef. There were ninety female passengers on board whom she considered a sacred charge. That charge she fulfilled, seeing them all safely boated away while she retired to her cabin and locked herself in to meet the death that she had grown to look upon as a delivering friend.

I would not close this all too brief account of the steward without again emphasising the fact of his heavy claim to the consideration of all men. His business is not a showy one, and Jack is far too fond of hurling the opprobrious epithet, "flunky," at him; but there is a great deal of quiet heroism in his annals, and in any case his work is just as important as any other seafarer's. For men must be fed and their food taken care of. The doing of this with regularity, cleanliness, and cheerfulness is the part of the steward, and how well he does it let all sailors testify.

CHAPTER XXII.

THE COOK—IN STEAM.

IN many respects the cook is the most interesting figure on board ship. From him of the vast floating hotel, a man of many attainments, an artist in foods, who should, but does not, command as great a salary as the *chef* of a first-class London hotel, down to the miserable urchin who crouches low over his scarcelyshielded pot on the open deck of a foreign-going barge, ships' cooks not only deserve our attention; they command it, dumbly yet imperiously.

How are the cooks of first-class passenger steamers trained? Whence are obtained those able manipulators of provisions who are always to be found on board of excursion steamers (that are laid up half the year) as soon as they commence running? What do they do in the dead seasons, those magicians who, in a space no larger than a reasonably-sized cupboard, succeed in turning out a dinner of several courses for five hundred people, no matter what the weather may be? "Magician" is surely the word, if only for the marvellous way in which every corner of cramped space is utilised, every trick of the culinary art whereby the same thing is presented under two or three totally different aspects and flavours; and roasting, boiling, frying, and stewing go on apparently in the same glowing chamber at the same moment—is practised. These things amaze me, but, after all, much of the work may be done ashore, or in the quiet of the moorings before starting-time in the morning, and pastry and cold side-dishes may be bought all ready for table.

But none of these adjuncts are available for the sea-going cook. His dinners, down to the smallest item, must be prepared by himself and his subordinates. It is true that in a liner the cook has a large staff, and that his assistants are carefully selected for their several duties, but he has not, as his far-betterpaid brother ashore has, the power of dismissing any assistant summarily if that assistant be incompetent or worse. That is, he has not such a power at the time when it would be of use. In the day of battle, when the great organisation of an Atlantic liner's catering is going on, he must use such men as he has; they cannot be exchanged for others. But how very striking is the moral to be drawn from such a state of affairs. It is that, considering the excellence of the work performed by these men, there must be a most exalted standard of quality among them. And they would seem to be a contented folk. We know, most of us, that the great steamship companies have a reputation for treating their servants generously, but generously treated work-people are not always the most contented. The cook and steward class in these vessels must be contented, however, or we should hear them, for they are by no means a feeble folk. You will find them occupying comfortable positions ashore while still in the prime of life, hav-

ing earned sufficient within a few years to enable them to abandon the strenuous toil demanded of them at sea. They have earned every penny they have, and have not been compelled to "carry the banner" in order to get more. And in strangest outof-the-way places of this wonderful England of ours you will come across quiet, gentlemanly men who, upon opportunity arising, will inform you that they were cook of the steamship *So-and-so*, or steward of such another one. They enjoyed the life, but presently, like sensible men, they felt the need of a wife and home and children, and they therefore looked about for something suitable ashore, found it, and made room for a younger man.

No one, unless he belong to the cooking-staff, has much opportunity afforded him for prying into the galley on board a big passenger ship during working hours. Those splendidly fitted hives of industry may be viewed at other times, but then they reveal nothing to the outsider. This exclusiveness is not malicious or for fear of being found fault with. It is solely because there is no room for any but the workers, who work indeed. Every inch of space is needed. Look down through the hatch above, or peer in through the ports, and you will be astounded at the way in which the cooks are handling the food; how, in a space where by all ordinary rules of cookery they should not have room to move, they are turning out with conjuror-like dexterity a state dinner of ever so many courses for a couple of hundred saloon passengers. And then contrast their surroundings, if your previous experience enables you so to do, with the palatial spaces of a grand hotel kitchen. Only you must remember at the same time the gale raging over the wide sea, and the complicated movements indulged in by the ship as she strides over the tremendous waves. So shall you acquire a respect for the seacook that will endure all your days.

To compare great things with small, this mental picture brings before me by association the cooks in the Australian coasting steamers. We have nothing like the same lavish arrangements for cooks and stewards on our own coasts, because our system is different. Here the fare is exclusive of food. You may dine or not as it suits your purse or your appetite. When you dine, you pay. But in the Colonies the fare between ports includes sumptuous feeding arrangements for the first-class passenger, while for the second-class (there are no third-class or deck passengers as with us) there are rough accommodations, but an unlimited supply of excellent plain food. Australasia is truly the land of plentiful eating. And the cooks,--well, they are good, some of them super-excellent, and all of them trained by hard experience to do much work in a very small compass and with a tiny staff.

The cook of the *Wonga Wonga* stands out boldly in my memory as one of the characteristic figures of my sea-experience. A huge negro with a voice of thunder, and an effervescing humour that made him a prime favourite, he succeeded in his vocation where many a better man might have failed. He was a fairly good cook, but in his details of work he reminded me strongly of the elderly negress in "Uncle Tom's Cabin," who dished up a dinner out of "chaos and old

night" somewhere down below. Such an extraordinary jumble of pastry-making, poultry-trimming, and all the varied operations required in the preparation of a dinner was surely never seen. And out from the weird confusion of things Sam would burst, smeared with blood and grease and dusty with flour, brandishing a big knife and declaiming Shakespeare on the slightest provocation. But in spite of the fact that the whole preparation of a dinner for sometimes as many as five hundred people, except peeling potatoes and the actual cooking, devolved upon Sam alone, he was always up to time. It was dangerous to come near him, though, as that time drew near, for then he drew perilously near being a howling maniac. Yet no sooner had the last dish disappeared aft than Sam would sally forth from the galley, his ebony countenance aglow with satisfaction, and a big pipe in his mouth. Down anywhere he would fling himself, ready to discuss any question in the world, from the ruling of an empire to the winning moves in a game of draughts. His successor, when he got promoted to the City of Melbourne, was a far better cook and a paragon of order and cleanliness, but there wasn't a man in the ship to say a good word for him. He was a shy Englishman.

Then, dropping still lower, I have every reason to remember the cook of the *Helen M'Gregor*, sweetest of small passenger steamers had she been on the London-Margate route, but a grisly terror when scaling the steeps of the Southern Pacific waves in a "southerly buster" between Grafton and Sydney. She was far too small for such an arduous service. Yet we carried over a hundred passengers when full. All her cooking was done in a caboose,-just such a square box as may be seen on the deck of any old sailing barque,—a cube of about eight feet clamped to the deck by iron rods. There was no table within it, only a locker seat running across it in front of the stove, which contained coals. Two men could not pass between this locker and the stove without careful edging, unless one of them got burnt. Most of the implements had permanent abiding-places on the stove, but a few lived on racks above when not in use, and when the skittish little ship was dancing they would clatter down at intervals. Outside, in an angle between the back of the galley and the steam-chest, was a movable board for pastry—and other things. Its dimensions, with liberal measurement, may have been two feet square-not another inch if I were bribed to say so.

The presiding genius of this most primitive of arrangements was a hunchback, a shrewd little Yankee with a French face, who received \pounds II per month and earned \pounds 50. He had one assistant, a nondescript man of indefinite age, who never wore an apron, and whose duties were confined to peeling potatoes, stoking the fire, plucking fowls, and washing up pots. But these things he would do as long as there were any of them to do, mechanically, even though, as was frequently the case, the conditions all about us looked as if another ten minutes would see us all at the bottom of the sea. He earned \pounds 5 a month. But what he lacked in ability or initiative was more than made up by his chief. That man was a miracle. On that two-foot slab he would make pastry of all kinds, pre-

pare most elaborate dishes,—yes, although the salt spray whistled around him, and on occasion an eddy of the gale would flip a dish, with its contents, off his board and far away to leeward. He would shout an order to his acolyte for half a dozen fowls and a bucket of boiling water. A few rapid motions of the hands, and they were all gyrating in the scuppers, while one after another he plunged them into the steaming bucket and slithered the feathers off, flinging each, as he did so, to his waiting henchman for the minor picking. Thus I have seen him serve six fowls at noon—at 12.35 they were being eaten. Ask me not how, for the details are unpalatable.

But his great achievement was butchering in bad weather, -butchering sheep. Stolid Joe would bring the sacrifice along, mercurial Bill would seize it, stab it, and, unaided, commence to rip off its hide immediately. There, on the deck, outside his galley door, the struggle would go on as if it were a fight to the death, so great was the fury that little man displayed. And it was one of the commonest of sights to see, in the midst of the operation, a green comber of a wave come hissing along, embracing carcase and cook and sweeping them clean off in a dishevelled heap bang aft, up against the second-class berths. Knife in one hand, half-skinned sheep gripped by the other, he had no buffers wherewith to ward off bruises, but he had a voice. And he used it, not in canticles of praise. Yet punctually the meal for which that sheep was being prepared would appear on the table. And it would not be an unsa voury dinner either. The one thing that always

seemed to dishearten him was the lifting, of a copper or kettle that fitted into a hole on the stove top, clean out of its fiery bed, by a vicious plunge of the vessel. And as such an event was usually followed by a green sea thundering over all, and flooding him and his lieutenant clean out of the galley amid a smother of steam, coal grit, and spoiled food, his temporary subdual could not be wondered at.

But I must forbear. Mental pictures of that superexcellent cook's doings arise before me in almost interminable succession, tempting me to forget the fact that there were many others doing almost precisely the same things, unsung, and unrewarded save by the meagre pay they drew. Who, for instance, could envy the cook of a "weekly" tramp,—a steamer, that is, which making quite long voyages, has engaged her crew at so much a week and find themselves. Perhaps there are no cooks at sea who are more worried than these. For Jack, left to his own devices for supplying himself with food, does some of the queerest things that ever were or could be recorded. And each individual expects his own mess to be as carefully looked after as a whole saloon dinner. Natural, perhaps, on his part, but for the hapless cook purgatorially inconvenient. I was once a passenger from an Irish port to Liverpool in a weekly boat, and in the grey of the dawn was waiting at the galley door to buy a cup of coffee. Men came and went incessantly, banging oven doors and flinging utensils from side to side of the red-hot stove-top. The cook was absent, engaged aft in some business or other. Presently he appeared with a teapot and immediately snatched at a huge copper kettle which stood on the stove in the middle, where the top plate was almost transparent with heat. The kettle flew up in his grasp, being empty.

"Why, there's nothin' in it," he screamed.

"No," replied a fireman who was groping in the starboard oven. "I tried it ten minutes ago, and it was empty then."

"An' you putt it back on that stove!" said the cook tragically.

"'Course I did," was the calm reply. "Think I was goin' ter fill it?"

I really thought the cook would have died of suppressed emotion before he found words wherein to express himself; but his tongue was loosened presently, and then his remarks, if sulphurous, were fairly comprehensive. The fireman only laughed.

What shall I say of the cook of the tramp pure and simple? Only this, I am afraid, that while he has a bitter, hard berth of it he gets little better pay than his brother of the sailing-ship. One consolation he has, and that not a little one,—he has more to cook, and consequently he is, taken generally, a better workman. For there is nothing tends to disgust a man more—no matter of what trade he be—than the being compelled to make bricks without straw. And there can be no doubt that, hard as are the tramps in many respects for their crews, the food is much better, taking the average, than that provided in sailing-ships. Having such a rough crowd to cater for, however, does not tend to improve the quality of the cooks carried in tramp steamers. A decent man hardly

cares to face the possibility of being violently assaulted, for no fault of his own, by members of a gang of ruffians of every nation under heaven save his own countrymen. And this is the state of affairs that any man in such a position as a cook holds must be prepared to face in most tramps. If he be fortunate enough to get into one of the Northeastern coast tramps owned by canny firms who like to have their ships manned by their own people, and whose highest ambition is to see efficiency combined with comfort on board of them, he will be as well off as any seacook, not an artist, can reasonably ask to be.

CHAPTER XXIII.

THE COOK-SAILING-SHIPS.

IT may perhaps have appeared strange to many that, in dealing with the cook in the preceding chapter, I have hardly mentioned anything about the materials with which he is called upon to deal. Most people have heard something about the badness of food in the merchant service, and therefore it might seem at first sight a great mistake to write a chapter on the sea-cook and say nothing about the kind of food he has to prepare. My excuse must be that in the kind of ships with which I have been dealing the food question rarely causes any trouble. In the finest steamships I doubt very much whether the workers are not fed quite as well as are any corresponding class of toilers ashore. And even in the lowest tramps there is not that general lack of decent food which does press so hardly upon the seamen in sailing-ships.

For one reason, the steamship is never so long away from port—unless she breaks down—as to give the same excuse for carrying the kind of food considered necessary in sailing-ships. And in many, as I have said, there is a system in vogue of paying the men so much per week and permitting them to "find" themselves,—a hateful system and one that can only be indulged in by the authorities at the cost of much

suffering and loss of efficiency by the improvident men who are under it. How can a man do his work who, without more forethought than a babe, comes to sea for a fortnight's passage with a few ship-biscuits and a dozen salt herrings? Without any of the minor comforts, such as tea, coffee, cocoa, or sugar, he is in misery all the time, beside being an unmitigated nuisance to those of his shipmates who have come provided with what they need. Then, when the vessel arrives in port and such a man gets his pay, it is but rarely that his bitter experience results in his being more careful. He will have an extensive "drunk" and again face the passage in a condition of starvation. But in any case his behaviour does not affect the cook.

Therefore, to see what manner of man it is that sailors have had to deal with their food in the majority of vessels up till the advent of the great passenger steamers, and that is carried as a cook of today in thousands of sailing-vessels, it is necessary to take a trip in a vessel dependent upon sail-power for propulsion,-a vessel wherein you may be a matter of five or even six months at sea without making a call anywhere for ever so short a time. It is perfectly safe to say that even at the present day seven out of . ten sailing-ship cooks are only so styled by courtesy or for want of a better name to give them. And this is in despite of the well-meant and in most cases philanthropic efforts that have recently been made to train cooks for ship work. The good people who, with the welfare of seamen at heart, take so much pains in order that he shall have his food properly prepared, are undoubtedly doing a good work for their

pupils, but the unhappy sailing-ship man seldom gets the benefit from those educated cooks that their teachers hope for. And this for the simple reason that when once a ship's cook has really learned cookery he will use his utmost endeavours to get a ship where there is something that requires skill in cooking. So he gets into steam, and, once there, only some dire misfortune will bring him back to a windjammer again.

Yet, strangely enough, even the elementary skill required for cooking the staple food served out in the great majority of sailing-ships to-day is generally wanting. Surely it is only reasonable to expect a man who engages to serve as cook of a ship to be able to boil salt beef and pork, make pea-soup and bread, and boil rice. Nothing more is required of him at sea than this, for the better food carried for the cabin is prepared by the steward, who will generally give an eve to it also while cooking. But it is seldom that vou will find a sailing-ship cook who will or who can do these things properly. As to taking a little trouble to make this coarse food palatable by varying its treatment, such cooks would be astounded-indignant -at the revolutionary idea. And when, in port, the fare is changed to fresh meat and vegetables, the only thing that the cook seems capable of doing is to make one kind of soup. That is usually good, but soon becomes monotonous. As to roasting meat or cooking potatoes nicely, such a thought is not to be entertained, or, if the cook does try to do such a thing, the meat is usually so hard as to be uneatable by any one but a sailor or a savage.

I am aware that these statements of mine will be met with indignant denials in some quarters. I shall be told that things have altered so much for the better since my day (sixteen years ago) that I should hardly recognise them. Unfortunately for the makers of such remarks, I have taken pains to find out whether this is really the case, ready and eager to rejoice in the fact if it were a fact. But I have found to my sorrow that among sailing-ships the improvement is practically nil. When I was going to sea there were good-living ships, where plenty of preserved meats were carried and the crews were treated periodically to fresh messes; ships where abundance of potatoes, turnips, and onions were put on board and served out liberally to the crew forward as well as to the officers : where a regular allowance of butter and pickles was made, and in cold weather oatmeal porridge was served out for breakfast. And there were lines of sailing-ships where a scale of provisions such as these was drawn up on generous lines and incorporated in the ship's articles instead of the shameful Board of Trade scale. There are such ships to-day, but their proportion is no greater than it was then. And if any will speak of official inspection of provisions in order to ensure a high standard of quality, I would respectfully call their attention to the innumerable statements made and uncontradicted, this present winter, of the abominable condition of the food supplied, on board many of the transports, to our troops on their way to South Africa. Not that I believe such food would find its way into the kids of the crews of those transports in the ordinary course of things. No, but

such food as that is, in the ordinary course of things, carried by sailing-ships, the majority of them for the supply of their foremast hands.

Now in these days such behaviour on the part of those whose business it is to supply ships with food is unpardonable, not only because it is cruel, but because it is unbusiness like. It would be cheaper to supply preserved fresh meat than salt, cheaper to vary the food instead of giving hapless men the infernal monotony of beef and duff, pork and pea-soup, every other day for a matter of a hundred to a hundred and fifty days on end. There is really no reason why every ship afloat should not have a pound of butter per week served out to each sailor, or why a sufficient quantity of such easily kept vegetables as potatoes, turnips, and onions should not form a regular portion of a sailor's dietary. It is also very well to talk of the healthiness of sailors, but you will very seldom find a hale deep-water sailor over fifty years of age. Nor is this due to volcanic outbursts of intemperance and other forms of vice while on shore. It is due to privation of vegetables, and to the use of bad, highlysalted meat as the only flesh food for long periods. Dried peas can never make up for the want of fresh vegetables, although apparently they are expected to do so, even when flavoured by the boiling with them of pork so salt that, if allowed to remain in the soup for more than half an hour, the latter is rendered uneatable. And then many cooks are fond of an overdose of carbonate of soda in the soup, in order to ensure their peas bursting. No one ashore can have any idea of the craving which seamen on long vovages feel for fresh vegetables, the thought of them at times being almost maddening.

It may be said—although, from the real importance of the subject just touched upon in the few preceding paragraphs, I sincerely hope it will not be—that I have been making a purely gratuitous digression from my text. At any rate, I will now drop the subject-matter of cookery, and proceed to deal with the cook himself as fairly as I may. Unfortunately my experience has been so unhappy that it is rather difficult for me to remember that there must be many good cooks in sailing-ships, even if I have not had the good fortune to be shipmates with them during my sailing-ship voyages. However, I will do my best to be impartial.

In the first place, the routine of a cook's duties in a sailing-ship is fairly fixed; there is not much room for variation. We will suppose that it is Monday morning in the middle of a long passage. At four o'clock, when the middle watch is relieved, the cook is called. Going at once to his galley, he lights his fire with a handful of tarry yarns and a little wood, and pops the kettle on. Then a grating noise and a pleasant smell is manifested; he is grinding coffee. While the water is boiling he will attend to the mixing of the sponge set over night for bread or "duff," whichever it is his custom to make out of the half-pound of flour which every man is entitled to on that day of the week. At two bells (five o'clock) he puts his head out of the galley door and cries "Coffee." On the word, every man of the watch on deck, except the steersman, brings his pannikin to the galley door and receives a little more than half a pint of-well, we'll call it coffee, but

really, when you come to think of it, the name is somewhat misapplied. For the daily allowance is half an ounce of green beans, which, by the time they are roasted and ground, are hardly capable of yielding sufficient caffeine to make a pint and a half of drinkable infusion, or rather decoction, since the cook must boil to get any flavour at all. But that is a detail. At any rate, the liquid is hot, and it may be sweet, if the drinker is economical with his twelve ounces of sugar,—careful enough to make it last him the week.

This morning coffee is a great institution. However unsavoury it may be as a beverage, it is looked forward to as no other meal of the day is, for it breaks up the long and sleepy morning watch, it ushers in the day, and its medicinal effects are undoubted. After it has been drunk, the man at the wheel relieved for his share, and a smoke indulged in, the cry of "Wash decks" is heard, and the day's work begins. The cook's duties are light. He has nothing to prepare for the men's breakfast-that is, in eight ships out of ten-except another jorum of questionable coffee, about a pint for each man. In most ships breakfast for the men is the grimmest farce imaginable. A few fragments of dry ship-biscuit and a pint of coffee cannot by any stretch of courtesy be called a meal. A little butter would go far to make it one; a few potatoes, wherewith to make dry hash or lobscouse with the few remaining fragments of meat left from the two preceding meals, and an onion to flavour it with, would cause the ship to be gratefully regarded as a "good-living" packet. In American ships this is the rule; few, indeed, of them are to be found

where a good breakfast is not provided for the men; and, what is quite as important, the quality of the bread (biscuit) supplied is usually superior to that found in the cabins of British sailing-ships. Not so in Canadian vessels. It is a profound mystery to me, the way in which Canadian sailors—or, for the matter of that, 'longshoremen in Canadian coast villages feed. The fattest of fat pork, potatoes, and salt cod seem to be the staple food in the coasters, and as often as not "coffee" is made with burnt bread and sweetened with exceedingly dubious molasses.

Lying in a Nova Scotian harbour once, loading lumber from a large schooner, I went on board at breakfast-time. I found the skipper preparing breakfast for all hands-four of them. They did not muster a cook. He unearthed a mass of cold cooked potatoes and a block of pale pink fat; got out a big square tin, which he put on top of the hot stove; and, carving up the lump of fat into dice, sprinkled them over the bottom of the pan. He then peeled his potatoes and dropped them into the pan on top of the hissing fat, stirring them round with his knife. As soon as the mass was warm through, breakfast was ready. The "coffee" was warmed up from the day before, and its aroma was enough to kill a mosquito. -I should think it would have made a fine disinfectant. Yet in that splendid country, while there is no want of the best food, there is a serious lack of cooking ability. I stayed in a "hotel" in one coast village for nearly two months one winter, where at least thirty always sat down to meals. Those meals never varied. Fried blocks of meat, potatoes boiled in their skins,

soggy bread, and "pies" (a sort of stew of cranberries or dried apples spread over a dough-covered plate and indurated in an oven), always formed the menu. Never a bit of green vegetable or any suggestion that even the same kind of meat might be made just as palatable, if not more so, by being treated in a different way. I suppose these strong men look down with a certain contempt upon any careful treatment of food as being effeminate.

But to return to the British sailing-ship cook getting ready for breakfast. As I have said, the men's repast does not burden him. He may have in the oven a panful of "cracker hash," a mess of pounded biscuit and chopped beef or pork, mixed with water, and plentifully anointed with grease skimmed from the cook's coppers. This will have been got ready over-night by the younger member of the forecastle crowd. In many ships, however, this form of filling is strictly forbidden; that is to say, the cook is not allowed to have it in his oven, because it is well known to be most unwholesome, producing various intestinal disorders and covering the men with boils. But the temptation to invent some means of distending the craving stomach is great, so most men break up the biscuit into their coffee and shovel it down soaked, to the ruin of their digestions. Meanwhile the watch on deck are getting a razor-keen edge on their appetites. The strong pure air and the vigorous exercise of thoroughly cleansing the decks with a flood of water and much scrubbing from stem to stern is enough to do this, even if it were not aided by an occasional appetising whiff from the galley of frying bacon or cunning stew which is being got ready for the officers' morning meal. Those who have been sleeping in the crowded forecastle are naturally not so sharp set; they can do with a drink of coffee and a smoke. But when, at eight bells (8 A. M.) the watch is relieved, and those who have been at work all the morning come below to the mockery that awaits them, there is much bitterness and bad language.

No sooner has the cook cleared off the cabin breakfast than he turns his attention to the "duff" or bread. The former curious compound is peculiar to British merchant sailing-ships. It is really boiled bread. It is made like bread with hop yeast, but a certain quantity of grease is mixed with it, and it is not put into the bags dry like dough, but slack enough to run. The bags are made of canvas, conical in shape, to allow of the duff being turned out easily. Before the mixture is poured into them, they are dipped in hot water,-salt, of course ; you cannot afford to use fresh at sea for such cooking purposes, except in steamers where a condenser is always at work. When the due amount is poured into each bag it is loosely tied to admit of the duff rising, and plunged into a boiling copper, whence, if all be well, it will emerge at seven bells light and spongy. Usually a modicum of molasses is provided, to give it some flavour, but I have been in ships where even that poor adjunct was wanting.

CHAPTER XXIV.

THE SAILING-SHIP COOK-continued.

HAVING got the duff off his mind,-and allow me to assure you that a sailing-ship cook's reputation hangs principally upon his ability to turn out a satisfactory duff,-there is the beef. It has been soaking in sea water since the previous evening, to mollify in some measure its terrible salinity, and now the cook removes it therefrom, unless, as often happens in small ships, the steep-tub is the wash-deck tub also, in which case the meat must be taken out at 6 A. M. in order to allow the tub in which it has been soaking to play its part in the cleansing of the ship. But that is only a detail. If the cook be a clean man he will now wash the meat carefully (it needs washing badly) before putting it in the copper. But he may-and often does-think that process not at all necessary; it will be clean enough by the time it is cooked. With the duff bubbling fiercely, and the beef on the other side of the stove keeping in tune with it, the men's dinner needs no more thought on the cook's part except to keep the fire going, so that he will be able to do a bit of cleaning up if he have a weakness in that direction, or he may sit and smoke and meditate. The steward is preparing the cabin dinner aft in his pantry : a fruit pie, some tasty combination of tinned meat and potatoes, or even a fowl if they are carried. In any case, as a rule the cook has only to see the food for the cabin through the actual cooking.

At seven bells (twenty minutes past eleven; the ten minutes to the half-hour being allowed for the men to turn out) some one-usually an ordinary seaman, or a boy where boys are carried; in other cases the "cook of the mess "-comes to the galley for the dinner. Tt. must be ready, and it almost invariably is. Any delay is unpardonable, for there is only the "chunk" of beef and the "phallus" of duff. Since they have probably been fasting since the previous supper-time, except for such few morsels as they have been able to get down at breakfast or "coffee-time." the members of the arising watch are usually very sharp set, and the duff disappears like magic. The beef, too, although there be nothing to eat with it but the flinty biscuit, receives considerable attention, but it is generally spared for supper, as it is better cold-if the word " better " can be used in connection with it at all.

But the men of the watch that has been working all the forenoon on an empty stomach are ravenous. At eight bells (noon) they come below and eat like starving men. If it were not for the filling "whack" of duff, though, their hunger would soon be destroyed, not satisfied. In some ships the cook is not allowed to make duff, for the same reason that he is not allowed to cook cracker-hash, and then the men's principal meal on flour days is a sad business. A roll of justmade bread, seldom palatable, and a chunk of salt beef, is not a fair meal for a hard-worked man under such conditions. And in these days of cheap, good,

and tasteful food ashore it is not to be wondered at that seamen before the mast embrace the earliest opportunity available of quitting such positions and getting work ashore, where even the convicts in our prisons are far better fed. This is the more to be deplored because it is so totally unnecessary. The difference between a good-living ship and a bad one to the sailor may be expressed in the simplest terms. It is not true that the sailor is never satisfied. Men will speak in the most grateful terms of a ship for years afterward on which, instead of the incessant salt meat, they had a fresh mess three times a week, potatoes and onions were served out occasionally, and butter and pickles were given. And these things make a mighty small difference to the total expenses of the voyage; nay, by slightly reducing the quantity of salt meat, the expenditure might be kept almost, if not quite, at the same level. And then good cooks would become the rule.

American ships have earned their reputation for good living solely on the strength of their bountiful supply of potatoes, onions, and flour, their lavishness in the matter of dried apples and cranberries, and their high standard in the matter of cooks. And Americans are not extravagant in business matters either. They know how to run a ship economically as well as any seafarers in the world, and they think it is the most wasteful thing imaginable to starve a ship's company for the sake of a little attention to detail. This is a vital principle with them. They will work their crews to the last ounce, often in what cannot by any stretch of courtesy be called necessary tasks. I have been with men who have actually known what it is to be slung aloft scraping yards in a gale of wind at night, but they said that when they got below there was always a tasty meal ready for them, and any neglect on the part of the cook would have resulted immediately in his feeling the burden of severe suffering.

Once the dinner is over and the gear washed up, the cook's work is practically done for the day. He may find a few minutes' relaxation in "burning coffee," as the sailors call it,-that is, roasting it in the oven. But that is about all. He has nothing to prepare for the men's supper. He may have a little dry hash to get ready for the cabin, but in many cases the steward will do even that, so that there is really no excuse for his being dirty. Yet unless the skipper is a man who rigorously practises that most essential part of a shipmaster's daily round,---that is, goes all over the ship every day,-a cook will often get so dirty that it is a wonder the men are not poisoned. And I am sorry to say that this condition is by no means confined to negroes and Asiatics, who have the worst reputation. I remember three cooks, each of whom was my countryman, of whom I may say I do not believe it would have been possible to have found dirtier men.

Tuesday's work is like Monday's, except that, instead of bread or duff, pea-soup is the staple. And since 'board-ship pea-soup is simply peas boiled in water with a piece of pork allowed to simmer with it for about half-an-hour to give it flavour, one would think that on pea-soup days, at any rate, the poor sailor would be sure of getting his meal properly pre-

pared. But if you asked a foremast hand how often he gets good pea-soup, please look out for strong language. He will most probably tell you—although that would be exaggeration—that the only time the pea-soup is good is when there's a heavy sea on, so that the tumbling about of the ship renders stirring unnecessary; otherwise it is almost sure to be burnt, because the cook is too lazy to stir it. And therefore it is often burnt. Now burnt pea-soup is perhaps one degree worse than burnt oatmeal porridge, which it is said a pig will refuse. Or it may be that the cook cannot learn the secret of getting the peas to mash, so that the soup is like yellowish water with a collection of yellow shot at the bottom, a food that would disarrange the digestion of an ostrich.

Another thing that always seemed to me to be radically wrong was the making of tea and coffee in the same pot that was used for soup, and making these infusions as if they were soups, serving them out, too, like soup, by ladlefuls, stirring up the leaves or grounds as if afraid of defrauding some critical sailor of his due allowance. Surely it should not be so difficult to utilise a kettle for making tea and coffee. But these observances grow into the most conservative of customs, and it would be like suggesting mutiny should some enterprising individual dare to hint at a change. One cook with whom I was shipmate, a Maltese, perpetrated a piece of cookery that I have never been able to forget. Some one had caught a dolphin, and, instead of frying it (in the oven) as usual, the cook boiled it, and indeed it was very palatable. But the next morning at coffee-time

the coffee was too funny for anything. We were not at all dainty, but that mixture would *not* go down. So one of our number, a sarcastic old Yankee, went to the galley and said:

"Hyar, cook, what in thunder hev ye ben improvin' th' coffee fur? It may be all right, but I'll be dog-goned ef I kaint do better with it ez before. I've gut used t' it."

So saying he held out his pannikin invitingly. The cook took it, smelt it, tasted it, looked puzzled for a second or two, and then said triumphantly:

"Oah yez, I know. I boil him in de same pot I boil the fish las' night, 'n' I don' wash her out, see!"

He was quite struck with his ingenuity in finding it out,—and he wasn't punched, either.

I mentioned the cook of the mess just now, but that is a term applied solely to a man who takes his turn with the others where there are no boys or ordinary seamen in the fo'c's'le to carry in the food, wash up the plates, or clean the fo'c's'le out and trim the lamp. Now in an American ship the crew's plates are washed by the cook, who also keeps the tin dishes in which their food is served to them as bright as silver. That, again, is a point wherein an American ship's cook differs widely from his British *confrère*. Indeed it is not too much to say that a cook who would be called a very clean man in a British ship would be looked upon as dirty on board of a Yankee, so high is the American ship's standard in matters of cleanliness.

Really I am half afraid to say what I have seen done by cooks on board of British ships, the things will seem so incredible to landsmen. But the subject

is so important in its bearing upon the well-being of the men that one hardly likes to leave it without telling all the truth. I have seen a cook who did not know how to open a tin of meat, who tried to chop it in half with an axe; who was too lazy and filthy to wash the saucepans out, but *wiped* them out instead. Another who made duff without yeast, and boiled it in salt water without a bag,—a lump of dough that was like a piece of grey india-rubber when it was served up. Another who did not use a frying-pan for steaks in harbour, but flung the chunks of meat upon the top of the red-hot stove and unblushingly sent the charred flesh into the fo'c's'le for the men to eat.

But strangest thing of all,-a thing that puzzles me to this day,-was the action of a crew in one vessel where we were cursed with the queerest specimen of an incapable for cook. We shipped a man in Rangoon as A.B. who was really a good cook, as shipcooks go, and as soon as he found how things were he volunteered to teach that wretched food-spoiler his duties in his (the seaman's) own time. Then, wonderful to relate, the very men who were suffering from the vile messes the pseudo-cook was making turned round upon that volunteer, saying that if they were the cook, they wouldn't allow no ----- interloper to meddle with their work, so they wouldn't. Of course this discouraged the reformer, and he desisted from his laudable efforts with the result that we were in a state of semi-starvation all the way home. Truly a sailor is a strange being.

There is a lower depth still—impossible as it may seem—in small vessels, where the galley dwindles to a

"caboose," a sort of sooty cupboard on deck, too small for the miserable youth who is both cook and steward to get into. So he stands on deck, often swathed in oilskins, his head in the grimy hole, with the smoke from the stove nearly stifling him, doing his "cooking." Does this state of things need any comment? Fancy cooking under such conditions, if you can. In bad weather, of course, the fire cannot be kept alight, so that the crew must go without any other comfort for their craving stomachs than biscuit and cold water. A short meditation upon such conditions of living should bring to many of us a sense of shame for our complainings at food which, were it ten times as bad, would be an unheard-of luxury to the sailors on board some of our ships.

Let me conclude with one more reminiscence. In a brig of which I was mate on the East African coast we shipped two Zanzibar Arabs as cook and steward. The skipper had his wife on board, and she, poor woman, on the passage home, was in danger of being starved to death. So the bos'un and myself took it in turns to oversee those savages,—cannily too, for they valued not their life one jot, and would as soon have murdered us as look. Oh, how we suffered ! At last we reached St. Helena and got some fresh beef and vegetables. I cooked a dinner of these luxuries, and when it was brought into the cabin the lady actually wept with delight at the prospect of one decent meal.

CHAPTER XXV.

THE APPRENTICE—SUGGESTIONS.

I MAY as well admit at the beginning of this chapter that I approach it with a heavy sense of responsibility, and for many reasons. I am exceedingly anxious about the future of our merchant service, and the decay of the apprentice system at sea is full of menace for that future. Again I know that many dear friends throughout the length and breadth of this land of ours are looking with pathetic eagerness for some guidance upon this subject. They want to gratify their son's inbred craving for a sea-life, but what are the prospects. How will it affect their boys, supposing they find, after a short acquaintance with the sea, that they are not fit for it at all?

In short, there are so many middle-class folks ready to apprentice their boys in the merchant service if that service is worth their attention as a probable lifeoccupation, and they are so pathetically eager and earnest to obtain reliable information and enlightenment on their utter ignorance of all the details of a nautical life, that it behoves all who have that information to give it carefully, without bias, and intelligibly. There is therefore no reason why they would withhold it altogether from craven fear of being upbraided for after-consequences of following the advice they have given.

With this in my mind I would say at the outset that I believe the system of apprenticeship might be revived with great advantage to the country and to individuals, but it needs revision. As it exists at present, its only effect is to flood the merchant service with an enormous number of certificated men who cannot get ships as officers, and who find the fo'c's'le society disgusting, having trained themselves to expect something better. Worse still, it will be found to have unsettled many lads for any steady land occupation, while completely disenchanting them as to the fine life they expected at sea. It has just aroused in these well-brought-up, home-keeping youths the nomad instinct that is latent in every human breast, and, the love of wandering once established, nothing short of main force will make that man a settled citizen again until he reaches middle age.

Apprenticeship is often spoken of as a means to the laudable end of replenishing the British merchant service with British seamen. But in its present form such a suggestion about apprenticeship is utterly absurd. Respectable people who have spent money upon their sons' education do not pay a heavy premium and apprentice him to a ship with the object of his becoming an "able seaman." They expect him to be an officer as soon as possible, and that is the goal to which the lad looks forward. Now it must be said at once, plainly and frankly, that the supply of officers far exceeds the demand. The fact that there are many foreign officers in our merchant service does not affect this statement at all. All that it means is that as the pay of officers is a matter of individual

bargaining, and not a fairly fixed quantity like that of the seamen, there is always an opportunity for underselling. Let me give an instance. On my last voyage I had been prowling about the docks, looking for a ship, until I was in very low water indeed and glad of almost anything. Yet, as I was married and had one child, there was a minimum wage below which I could not go without the prospect of my dear ones starving. Receiving information that there was a brig in the St. Katherine's Dock wanting a mate, I hastened down to her, finding the master a pleasant, genial man and English. I told him my errand, showed my credentials, and was asked what wages I wanted. I suggested £6 10s. a month, feeling, as I did so, that I might as well ask for the moon while I was about it. We finally agreed upon \pounds 5 15s. a month, which made my wife's income while I was at sea about fourteen shillings a week. But I went home light-hearted enough in the feeling that I was no longer a dockslouching mendicant, and that something was sure for at least twelve months.

The next morning, when I came on board to work, the skipper told me that he had received an offer from a German, fully certificated, to come as mate for $\pounds 3$ a month, and one from an Englishman who said that as he had money of his own, and only wanted to get his time in for master, he would come for *nothing*. "I didn't take the German," said Captain —, "entirely because I had given you my word, but because I hold that it is a national crime to permit foreign officers to have charge of our ships, apart altogether from the shame of having them cut the already too scanty

wages. And I didn't take the other fellow because I wanted a man to earn his wages, and I knew that he was likely to earn what he offered to go for—nothing." So I kept the berth, but, as the skipper truly remarked, had the owner known that he was paying much more for my services than there was any necessity for him to do, he would have been very angry.

My contention is that apprentices should be classified. If there were two grades established, one with a view to making foremast hands and another for training officers, I think much good might be done. For instance, the poor lads who go in such charitable training-ships as the Warspite and Chichester, the Exmouth, Shaftesbury, and Cornwall, should not be sent adrift as they are now, shipped as boys in whatever ship will take them, and discharged with the rest of the crew on their return to the home port. It is true that the authorities ruling the training-ships are always ready to befriend these young sea-boys to a certain extent when they return, but it should be remembered that there are always many fresh lads to be disposed of, boys who have finished their trainingtime and are waiting for a ship in which to begin their sea-life. It is not always an easy task to provide ships for them, either, and therefore it is hardly fair to expect the training-ship people to handicap them by looking after the shipment of old boys as well. But if those lads were apprenticed without premium at a small wage increasing each year, and with the definite object of making good foremast hands of them, I am sure much good might be done. They would certainly be no worse off than any lad ashore who serves

his time as a mason, a carpenter, or a plumber. In the vast majority of cases the horizon of such apprentices is bounded by the prospect of becoming a *good* journeyman, for which the demand is always greater than the supply. If they develop habits of thrift, a faculty of organisation, and power of command, the way is open for them to become master, and in like manner there would be nothing to prevent the non-premium apprentice from rising higher than a mere "journeyman" sailor, if I may thus use the expression, in the fact that he had been apprenticed on a lower grade than those intended for officers from the beginning.

The treatment of such apprentices would be no different to that in force now on board ship for "boys" so called. They would probably live in the fo'c's'le among the men or with the petty officers. I know that some people will raise an outcry against the idea of boys being sent to live in the fo'c's'le with the men, but from experience I am sure that this would not be detrimental to the boys at all. When a boy has spent two or three years on board a training-ship (I do not mean a training-college like the Worcester or Conway, although I do not suppose that all the boys there are unfledged angels), he has nothing to learn in the way of evil in a ship's fo'c's'le. Please, my good friends the officers in charge of these ships, don't imagine that I am casting any reflections upon you. You do your best, but it is simply impossible for you to keep such a crowd of young rascals as you have to deal with like an ideal Sunday school. I have been shipmates with a great number of these boys, good, bad, and indifferent, but in one respect their education was

never wanting,—the knowledge of such evil as we do not write about, and only hint at in conversation.

I have heard—of course I do not assert it—that even our great public schools are not above suspicion in these matters. At these are sons of gentle parents, who have led a guarded life from childhood, the foul innuendo and salacious gabble of the streets never having reached their ears. So that if they, in the carefully guarded precincts of these homes of education, acquire a knowledge of the grosser forms of evil, we need not be surprised at the poor street boy who joins the Arethusa or the Cornwall being wiser than they are. I have often seen a boy checked in a ship's fo'c's'le for using an expression that was not-well, fit for ears polite, although the man who checked him was constantly in the habit of talking in that strain. It is perfectly true that one occasionally finds a lowminded beast of man's age who will deliberately encourage a boy to swagger in foulness for his private ear, but it is always in private; such a practice would never be tolerated in the midst of the watch. And such loathsome company will always be open to the boy, whoever he lives with on board.

No, it is not nearly so dangerous for boys to live with the men in the open fo'c's'le as it is for them to live with one or two petty officers, or, worse still, by themselves. The latter should never be allowed at all: it is as bad as it can be. Living with the men, they hear foul language continually: but they have always heard it; most of them have long been proficient in its use; and none of its shades of meaning are lost on them. But they must not use it themselves

now. They will not be ill-used,-that is, beaten,-because of that growing tenderness for the young which is such a fine feature of our day, and one that has been just as fully developed on board ship as it has ashore. They must be civil and obliging, and, if willing to learn, will always find some one willing to teach. The fact of their being bound to serve for a period of four years would operate powerfully against that tendency-so fatal to the replenishment of our merchant service with young British seamen-to quit the sea after the first voyage or two and get some job, requiring no skill, ashore. At present, when first the training-ship boys go to sea, they are sure to find some fellow who will lay before them a lurid picture of the hopelessness of ever doing any good at sea. He will continually din into the young ears the advice to sweep a crossing, become a "dung-puncher,"-anything rather than lead such a dog's life as he says the common scaman always endures. With what results let the Registrar-General of Shipping and Seamen's Reports tell. According to them there is a constant drain of young men out of the merchant service,--lads who had served one, two, or three years, and consequently the supply is cut off at its source.

Now this sad thing is distinctly traceable in my mind to three great causes. The first is the want of provision for keeping these lads a reasonable time at sea by some binding agreement like apprenticeship indentures. The second is the utter carelessness manifested in the majority of cases about food and accommodation. And the third is undermanning. These last two do not in any way apply to the high-

est class of liners, which is above reproach in these matters. But it does apply to most of the ships we own in Britain, and until the European standard of what is due to a workman's needs more closely approximates to our own, either by our sinking to their level or by their rising to ours, it will continue to operate in the direction of displacing British subjects by aliens. I do not believe that the question of wages enters into it at all. Wages do affect the officers, who, as I have before said, make their individual bargains; but if a crew of Scandinavians or a crew of Britons are shipped before the mast, the wages paid will be the same in both cases. And when you come to think of it, foremast hands are not at all badly paid. When the A.B. was a skilled mechanic and received f_{210s} . a month, while a carpenter, a joiner, or a mason was getting £1 15s. a week ashore, the former had some ground of complaint; but when, as is the case now, the majority of seamen before the mast-in steamers at any rate—are really little more skilled than labourers, £3 10s. to £4 10s. a month, with board and lodging, is better pay than any of their fellows ashore are getting. Sailing-ship A.B.'s deserve more, but they get less than steamboat men, for some strange reason that has always puzzled me.

It must not be supposed that I am advocating anything revolutionary. What I propose with regard to this second grade of apprentices is already in operation, owing to the far-sightedness and liberality of a North-country firm, Messrs. Walter Runciman and Co., of Newcastle. Of course they are steamship owners,—tramp-owners if you will; but, as I have be-

fore hinted, tramps hailing from the northeast coast of England have good reputations. The canny "Geordie" has made a specialty of tramp-owning, and, backed as he is by a long course of most successful experiences in all matters pertaining to the sea, he is growing remarkably strong. The men of the "Coaly Tyne" have the well-deserved reputation of being pioneers in several of our most notable reforms in shipping matters. The mention of only two—Board of Trade certificates and lifeboats—will give an idea of what our hard-headed North-country folk are capable. Mr. Walter Runciman says that his system of carrying non-premium apprentices is most successful, and I am sure that his word may be relied upon.

Then there is the premium-paying grade. A great many alterations might be made in their behalf. to the end that a parent who is put to the expense of outfit, premium, etc., may have something definite for his money. It need hardly be said that if a boy is a born "duffer" one can hardly expect any skipper or officer to make him anything else, but there is a medium in all things, and every sailor knows that there is no trade in the world where the first duty to an apprentice is so much neglected as it is at sea. I can honestly assert that I was never on board of but one ship in my life where any attempt at all was made to teach the apprentices their trade. That ship was the Harbinger, before she was taken over by Lord Brassey's committee and made a special sea-training ship for cadets. In my day she was just a fine merchant ship belonging to Messrs. Anderson, Anderson & Co., and commanded by Lieut. Henry Y. Slader, R.N. He formulated stringent rules that every apprentice on board should have a share in all sailorising that was going on; that, as far as lay in their power, these young gentlemen should work the sails on the mizzen, the smallest mast of the three; that one apprentice should always be on duty on the poop, so that he might be in touch with the officer of the watch, who was supposed to lose no opportunity of imparting to him practical instruction in handling sails, trimming yards, etc. In addition to all this, Captain Slader was himself in the habit of taking these young.men through a practical examination in navigation at stated intervals, and inviting them to dine at the saloon table in rotation on Sundays.

Now this treatment had its due effect in the building up of those apprentices into first-class seamen and officers, as indeed it might have been expected to do. Yet it was only on a par with common-sense workshop treatment, and it was certainly no more than any parent who had paid a premium of £70 to £80 had a right to expect. But even on board that fine ship the lads were left entirely to themselves in their watch below. They all lived together in the fore part of a small after house, and unless the senior apprentice happened to be a young man of fine forceful character the tone of their "diggings" could not help being bad. Be it noted that among that splendid set of youngsters, the midshipmen of the Royal Navy, there is always to be found a sub-lieutenant who is responsible for the behaviour of the gun-room, who rules it, in fact, in despotic fashion. And the conditions there are very different to what they are in the merchant

service. The lads don't sleep in the gun-room. They are not herded together in one small apartment which serves as bedroom, bathroom, dining-room, and sittingroom.

In the United States the two great cities of Philadelphia and New York maintain, out of their public funds, a fine vessel each,—the *Saratoga* and the *St*. *Mary's*. These are sea-going ships especially set apart for the training of men and officers for the mercantile marine. The idea is distinctly a good and publicspirited one, and might, one would think, be advantageously copied in England. But I fear that such a thing is too much to hope for, at least, not until our shore-folks are aroused to the enormous importance of our mercantile marine.

If only we could get one tenth as much interest manifested in the gigantic business by means of which we are all fed, as is shown in one great horse-race or a dozen first-class cricket-matches I should feel hopeful. But I am afraid that is far too great a blessing to expect.

CHAPTER XXVI.

THE APPRENTICE — SOME FACTS CONCERNING HIS LIFE.

PERHAPS it may be thought that in hammering away at this point of the apprentices' lodging-place I am doing an unwise thing, as no alteration is likely to be made; but I beg to say that I am speaking from practical knowledge of the subject, allied to absolute conviction that the worst possible thing you can do with a boy fresh from school is to put him, with half a dozen other lads about his own age, into a house with no authority therein to keep them in order, save perhaps one of themselves who has made a voyage Such a lad is usually to be found among them, and is better than no one, for he has had some experience; but in cases where all the lads are new to the sea it is absolutely shameful to cast them thus upon their own resources. If the master made it his business to give them a visit every day, things would not be so bad, because presumably he would tell them what to do; but even then it must be remembered that there are twenty-four hours in the day, and mischief may be going on in every one of them.

To take the simplest matter, personal cleanliness. How many lads are there to be found, I wonder, leaving good homes such as the majority of sea-apprentices

do leave, who have ever washed a shirt or a plate, made a bed, or sewn on a button? Not one in a thousand. These things have always been done for them, and had they decided upon going into any trade or profession ashore would have still been done for them. To my thinking it is one of the gravest defects of modern education that it leaves a man so helpless when thrown upon his own resources. I would have every lad, no matter what his position in life, taught to do for himself those personal services which under settled conditions of shore-life are done for him by the other sex. He might never be called upon to exercise these abilities, but what of that?—the knowledge that he was able to help himself could not fail to be of service to him in any event.

The cadet ships do a great deal for sea-apprentices in this respect. Not that they prepare a lad for the utter reliance upon himself which will be suddenly thrust upon him in almost any ship he joins, for parents would object, but still it may be taken for granted that a lad who has been through a Worcester or a Conway course will not be nearly so helpless as one who has come direct to sea from some quiet country home. I was once on board a large barque as A.B. where every apprentice (there were six) was on his first voyage. \pounds 60 each had been paid as premium for them, and an average of £35 each for their outfit. They were nice boys, but one day, when we had been a month at sea, I was invited into their house. And the first thing I said to my host was: "I wonder what your poor mother would say if she could see this place!" It smelt; that rank aroma which is the product of deficient ventilation, foul clothes, and stale food caught me by the throat as I entered. The bunks of those young gentlemen were like the bins in a ragdealer's shop; their chests were little if any, better; and there was a thriving population of vermin of various sorts. Not a plate, knife, fork, spoon, or mug had been washed since our departure from London. In short, the place was like the abode of a group of savages who had suddenly been introduced to 'boardship life and given the habiliments and utensils of civilisation to play with.

I made a few remarks to my young friend upon the state of affairs, to which he replied with a shrug of his shoulders:

"Yes, it's pretty bad I know; but what can we do? Nobody ever comes in here, nobody seems to care what we do when we're below, as long as we're out on deck at eight bells. I'm sick of it. I've written a letter to my father to tell him I've had enough of it already. I didn't know I was coming to sea to live like a pig, and to be taught nothing but sweeping up decks and cleaning out pigstys and water-closets."

I had nothing to say to that, because I saw the full force of his remarks myself. But I made him an offer to wash his clothes for him for a pound of tobacco a month, and I told him that I was sure the other fellows would find plenty of chaps forward who wouldn't mind doing them the same service on the same terms. But, as he said, how was he to know that he could get such things done for him unless somebody told him? He wouldn't have dared to ask anybody such a question for fear of giving offence. Then he confided in

me to the effect that during his period of seasickness he had befouled a large quantity of clothing which, becoming offensive, he had flung overboard under cover of night, and that out of his expensive outfit he was afraid he should have hardly enough left to carry him home. He was quite astonished when I told him that was no news to me. Over and over again I have seen an apprentice come on board ship with an outfit costing between £30 and £40, who at the end of a twelve months' voyage had not had enough to dress himself decently. And then the lad scarcely ever looked decently clothed.

The fact of the matter is that one of the first necessities of an apprentice at sea is a little personal supervision by the master or the mate. Some, esteeming it their duty, give this supervision; others, and these the majority, look upon the hapless apprentices as a rather troublesome and unhandy portion of the crew, more bother than they are worth at any time, and certainly not entitled to any personal care. I do not understand what kind of mind a man must have who will thus deliberately neglect the interests of a crowd of youngsters committed to his charge, but there is the fact. If any evidence to the truth of it were needed there are hundreds of men scattered about the country who have served the whole or a portion of their time, and have then quitted the sea for good, who could and would supply it.

So much for their private life. As to the prime purpose for which they become apprentices, it may be said roughly that they are more likely to learn their profession in a ship where they are used dishonestly

than in one where they are treated with the contemptuous neglect which is so often their portion. By dishonest treatment I mean their being utilised to make good the deficiency of a purposely reduced crew. Again I draw upon personal reminiscences. I have often seen the sons of well-to-do parents who had given them a costly education, paid a heavy premium with them, and provided them with a gorgeous outfit, driven harder than any other item of the ship's com-Now, I do not suggest that hard work is bad pany. for anybody who is otherwise well treated, but I do assert with emphasis that to carry premium apprentices and make them do what the men refuse, to make them the lackeys of the men in fact, is scandalous dishonesty. There is a certain amount of dirty labour to be performed on board of every ship,-any one will see that this must be so; but that is no reason why the apprentices should be set to do it because of the short-handedness of the men. Moreover, in properly manned ships this is not allowed. Such work would naturally fall to the lot of the lower grade of apprentice to which I alluded in the last chapter, whose preparation should be for an A.B.'s life. Some one must do it. and, as it is generally boys' work, boys are usually carried to do it.

Still, where apprentices are thus served, it cannot be denied that they do learn thoroughly the rougher part of a sailor's curriculum. They speedily become expert sail-handlers and helmsmen, because in that way they can best replace men. "Sailorising," a comprehensive term which I am of necessity continuously using, but am leaving the explanation of for a fitting

occasion, they do not learn so readily, because they are not allowed to watch a man at work unless they are told off to assist him. The handling of a ship very often remains a sealed book to them during the whole of their apprenticeship, because, treated as they are, they acquire the habit of mind which is characteristic of the foremast hand,—that is, not to bother their heads about anything except what they are told to do. Besides, they are so hard-worked that they are usually weary and disinclined to waste one minute of their watch below in an endeavour to gather information; while in their watch on deck at night (a good opportunity for learning many things) they will be trying to do as they see the men do,—steal as much sleep as possible.

In a word, they are just ship-boys, fed like the men, worked harder than the men, but living apart from the men in a little den of their own, where, unhindered, they may sink into savagery. This is a lurid picture, I admit, vet I dare not soften its details one iota. T can only say that it is not universal. There are fortunately a good number of ships in which conscientious masters consider themselves in honour bound to act toward their apprentices as honest guardians of their best interests, who would no more think of allowing them to be set cleaning out latrines, pigstys, and fowl-coops, while the men were comfortably engaged upon cleaner work, than they would think of putting their own children to do it. But such treatment ought to be made impossible. It should also be very distinctly laid down that no apprentice with whom a premium is paid should be put to work cargo in tropical ports. That is a task under which the strongest European sailors often fail. Shovelling coal, guano, or nitrate, for instance, with a temperature of over 100° in the shade in a ship's hold, is an employment that no boy on board ship should ever be subject to, much less a lad whose parents have paid for him to be well treated.

So curiously are some men constituted that I have seen two lads from the *Chichester*, on board one vessel in which I was A.B., much more carefully taken care of than I ever saw apprentices but once. Those two boys were not even allowed to grease down any of the masts because it was their first voyage; they were never sent into any position of danger on any pretext whatever; they were taken in hand by the mate in their watch below, educationally; in fact they received what I should call the ideal treatment for an apprentice.

Yet in my next vessel there were three apprentices, two on their first voyage, with each of whom £50 premium had been paid, whose treatment was so scandalous that even the men cried out against it. I did not join the ship until half the voyage was over, so I did not witness their early training; but while I was on board they did *all* the greasing down and all the extra dirty work of the ship, while for a season one was acting cook (?) and another was acting steward. I am glad to say that one of them had the *nous* to prevail upon his widowed mother to write to the owner, upon the ship's arrival home, protesting against the most scandalous treatment of her son. In this case the owner was certainly not to blame, but that mother's letter had the effect of opening his eyes to what might

be going on in his ships without his knowledge or privity.

But in one most painful case which recently came under my notice a boy was actually done to death by overwork and neglect, both of which crimes against him were abundantly proved, but went unpunished owing to official shielding of the criminal. And the broken-hearted mother was advised to let the matter drop, as she could not possibly do any good, and in any case she could not bring again her dead to life!

From all this it may be gathered that I am of opinion that the sea-apprentice system needs considerable overhauling. At present everything depends upon the master. Where he is an energetic and conscientious man the apprentice will doubtless be thoroughly well looked after and will be taught his profession, and his lot will compare favourably with that of an apprentice in any other trade or profession going. But such an important matter should not be left to individual caprice at all. Certain rules for the treatment of apprentices by the officers should be laid down by the owners, and it should be insisted upon that those rules shall be carried out. Ashore, if a man binds his son to any profession, he is in constant touch with him, able to ascertain whether he is being taught, or just being used for an errand-boy or odd-man, and if he be not satisfied his remedy is always at hand. But once a lad has gone to sea he is cut off from everybody who might help him; he is at the absolute mercy of the skipper; and it has not seldom happened that he has run away in a foreign port, to the terrible grief of his parents.

It has long been the current remark concerning seaapprenticeship that it is the only apprenticeship in the world where a lad is supposed to learn his profession without being taught, as if, in some mysterious way, he could absorb practical knowledge without ever having an opportunity to do any of those things he is to be examined in presently. In no other trade in the world would it be possible for a young man who had spent four years at it to be so ignorant of its working details as to require coaching in them when going up for an examination. I have seen young fellows at the "crammers" in London being taught such elementary matters as sending up spars, bending sails, etc., for the purpose of facing examiners; but I never heard of any of them "passing" until they had learned it in the proper way, that is, by assisting in the doing of such work at sea and taking careful note of how it was done.

It is quite true that there are some youngsters who will learn, no matter how great may be the difficulties in their way. They belong to the class from which spring all our leading men in every profession, fellows whose thirst for knowledge and industry of application is so great that, no matter where you put them, they would speedily rise. But they are few. The great majority need to be taught, to be spurred on, to be scolded for laziness or inattention, to be driven with a tight rein. Having all the thoughtlessness of youth, they need to be continually reminded that its days are brief, and that very soon they will be called upon to stand alone, to take a hand in the working of the world's big machine, no longer boys, but men.

In the United States and Canada, as I have before hinted, the apprenticeship system finds no favour. It may be taken for granted that every youth carried in those ships for the purpose of becoming an officer has not only every facility afforded him of learning his profession most thoroughly, but is compelled either to learn or quit. Usually the master or mate has a personal interest in him (it is seldom that more than one is carried), and they spare no pains to teach him all that they know themselves. He is well looked after. No dingy berth shared only by other boys for him; no hard and scanty fare differing in no respect from that of the sailors-as in most British ships. He lives in the cabin, eats at the cabin table, associates with the officers, and breathes the air of authority. Therefore it is no wonder that when he has grown old enough to become an officer himself his promotion comes perfectly natural to him; he has had for it the best preparation that could be given him. It may be said, and with truth, that such a system would not answer our heavy needs, even if a sufficient number of masters could be found to give so careful .an amount of attention to aspirants as is here indicated. But surely some middle course might be taken, more closely approximating to the treatment of midshipmen and naval cadets on board of a man-o'-war, but without giving the youngsters the status of officer from the outset. I believe, however, that a definitelydrawn-up programme for the treatment of apprentices by officers, such as I have hinted at in a preceding paragraph, would answer all needs.

CHAPTER XXVII.

THE APPRENTICE-SOME PRACTICAL INFORMATION.

AND now, as a relief to all this gloom and vituperation, I wish to give parents and guardians a few practical hints as to the course they should pursue if their sons or charges insist, as so many do, upon making trial of a sea life. Perhaps it is hardly necessary, after what I have already said, to repeat that the ideal preparation for a lad who is destined to become an officer is a preliminary training on board of either the Worcester or the Conway. Here a lad will not only be thoroughly grounded in navigation and such seamanship as can be taught on board a stationary vessel, but he will become familiar with life on shipboard, in itself no small item. And his general education will not be neglected either. In fact, whether a lad is intended for the sea or not, I know of no more profitable place for him to spend a couple of years than on board H.M.S. Worcester or (although I have not the same personal knowledge of the matter,) H.M.S. Conway.

But there are many estimable people whose incomes will not bear the modest strain put upon them by the fees chargeable in these floating colleges,—a much lower fee, by the way, than would be payable at any public boarding-school of repute. It is as much as

they can afford to pay a premium of, say, £60, and provide the lad with an outfit. And this last word brings me to a subject that I have often wished to enlarge upon for the benefit of parents sending their sons to sea as apprentices in merchant ships. It is associated in my mind with a great deal of downright robbery-heartless swindling. The Registrar General of Shipping does his best to warn parents and guardians of the wiles of these landsharks who lurk in our great shipping ports, ready to prey upon the unwary, but often his warning does not reach those for whom it was intended. Therefore I would sav: Beware of all advertisements in the newspapers for seaapprentices. Remember that no shipowner of repute needs to advertise for apprentices. If you go to a firm like Messrs. Devitt & Moore, for instance, you will probably almost certainly find that they have no vacancies; that if you wish to enter your boy with them you must put his name at the bottom of their list and he must await his turn.

It will be found almost invariably that these advertisements emanate from shady firms of outfitters or shadier firms who are nothing at all but bloodsuckers, —people who can most assuredly do nothing for you but that which with a very little trouble you could do much better yourself, and who will mulct you in heavy fees and commissions before you get out of their clutches. And in addition be quite sure that you are unlikely, through such agencies, to find a good ship for your son. You may, but all the chances are dead against it, because, as I have said, firms of repute do not do business in that way. Moreover, in handing

yourself over to the apprenticeship-broker, or whatever he calls himself, you will surely be let in for a far too heavy expenditure upon outfit than there is any necessity for, and in addition you will surely get an outfit that will not be worth carrying away. I well remember one case in particular, of a young friend of my own, whose outfit cost the modest sum of $\pounds 35$. It was bought from a great firm of outfitters in Londor that I dare not name for fear of the law of libel, and would certainly have been dear at one third of the money. Indeed I believe I should be justified in saying that it would have been dear at any price, since it was of the veriest shoddy throughout. When my friend showed it to me, or, rather, what remained of it after a month at sea, I was almost speechless with indignation. I should say that such rubbish must be specially manufactured for such purposes, since I cannot imagine anybody ashore buying such stuff. pair of sea-boots to reach below the knee was among this precious outfit. Their price was $\pounds 2$ 5s. Now a sailor can always get a really good pair of sea-boots for $\pounds I$ 5s.; a swagger pair of best make, with high fronts to cover the knees, for £1 15s. The first time my friend put his sea-boots on they naturally got wet, and when he came below, four hours after, they hung in graceful folds about his ankles. As to keeping out water, you might just as well expect a sponge to keep out water. They could be wrung like a piece of flannel. In a word, they were absolutely worthless, and the sale of them was a heartless fraud

This outfit business requires only a little common sense to be conducted economically. In the Navy a

list of articles required for a naval cadet or midshipman is supplied to him, and no deviation therefrom is permitted. But no such hard-and-fast rule obtains in the merchant service. Uniform, of course, is compulsory, but beyond that the parent may use his own discretion. In the matter of underclothing, for instance, it may be taken for granted that what the lad already possesses will answer excellently well. Flannels, too, boating or cricketing, come in very useful; in fact, any of his old clothes are good enough to work in. In any case he should not have too large a stock, for, however many clothes he may take with him, they will certainly require washing before a long sea-passage is over, and too great an accumulation of dirty clothes is, for many reasons, undesirable. If I were asked to draw up a list of the requirements of a lad on his first voyage as apprentice in a southern-going ship, it would be something like this:

A strongly-made chest, of three-quarter inch pine, dovetailed throughout, and without any iron about it; the lid and bottom very carefully fitted, should first be procured, —such a chest as a working carpenter would be willing to make for \pounds r, but would cost at least double in a shop. It should have a small mirror fitted inside the lid, but removable, and also a tray dividing it into upper and lower compartments. Above all, it should be perfectly watertight when closed. It should be painted black, with brass drop-handles, and inch rising-pieces on the bottom.

Two suits of uniform clothing: one of fine blue cloth, the other of good blue serge.

Six white and French piqué shirts for shore wear, with collars and ties.

Three woollen and three cotton shirts (not necessarily

new, but such as the boy has been wearing at home or at school).

Three thick and three thin vests.

Three thick and three thin pairs of pants.

Three pairs of heavy and three pairs of light socks.

Four pairs of working trousers (any old ones that the boy has been wearing).

Three pairs of blue-jean overalls (dungaree).

Three blue-jean blouses.

Three coarse towels.

Several caps (old golf or cricketing caps are just the thing).

A stout, wide-brimmed, straw hat for harbour use or in the country.

One dozen coloured cotton pocket-handkerchiefs.

One pair of woollen mittens without finger-spaces.

Two pairs of suspenders.

A leather belt with a sheath attached for holding an open knife. (NOTE: the above should never be worn tightly for the purpose of keeping the trousers up. Such a practice is a most frequent cause of rupture).

A horsehair mattress, cot size.

A full-sized feather pillow, with three stout slips.

Three coloured cot-blankets.

One pair of shore-going boots.

Two pairs of canvas shoes of very best quality.

Two pairs of working boots without any iron in their soles.

One pair of sea-boots reaching to the knee, with either sown or pegged soles; preferably the latter.

A box of dubbin, also blacking, and a pair of very small shoe-brushes.

A small clothes-brush, a tooth-brush, hair-brush, and two combs.

A housewife, well supplied with needles and thread, (not cotton), mending-wool, scissors, and tweezers.

Three bars of good yellow soap.

One dozen boxes safety matches.

One plate, one basin, one quart pot, and one pint cup, all of block tin.

Knife, fork, and spoon. One complete suit of *good* oilskins. One pilot coat.

From this it will be seen that much of his old clothing will come in useful, but it should be remembered that he will probably grow rapidly, so that he should not be sent away with clothing that will presently be of no use to him. If the supply be thought meagre, I would suggest that a larger quantity would probably only lead him to waste; the above will be found quite sufficient for all his needs, and he should never miss a single opportunity of having his clothes washed, or, better still, washing them himself. Provide him with some good books, especially a copy each of the Bible, Shakespeare, and some good book of poems. Lighter reading may be supplied at discretion. He must have an epitome of navigation and a blank book to work examples in; also plenty of writing-paper and envelopes to encourage him in writing home-a duty that lads are prone to shirk. A pair of good binoculars are very useful things to have, but not at all necessary; while a sextant, for the first couple of voyages at any rate, had better be left at home. It usually receives very rough treatment, and its use requires little practice to make one perfect when the time arrives that it becomes necessary.

But I would strongly advise, in addition to this outfit, that a boy be provided with the ability to wash a shirt, to sew a button on, and to keep his eating-utensils clean. A few lessons in the kitchen before he goes away will save him a world of trouble in this respect, besides saving the parent a good deal of expense. I need say no more on this head, as I have spoken very strongly about it before. Of course the list I have given, although I consider it quite sufficient for a twelve months' voyage, represents the minimum. Any additions may be made that are considered desirable, but it can be taken for granted that to burden a lad with the care of too much clothing at sea is to invite him to fling some of it away on very small provocation.

Then, as to the choice of a ship: It is here impossible to give any written advice. If parents have no seafaring friends the matter is very difficult. There is really no recognised medium of communication with shipowners for this purpose. This is why one is so often tempted to reply to the specious advertisements, since they seem to provide a royal road out of the difficulty. A little-very littleknowledge of shipping matters would enable parents to select from the columns of the Mercantile Navy List a good firm of sailing-ship owners; but, assuming that they do not know that much, the next best thing would be to apply to the shipping-master in any of our large shipping centres. He would almost certainly forward a list of the best reputed shipping firms. But the services of an old seafaring friend (not Naval) would here be of great value, not only in the selection

of a suitable firm, but in the little matters of advice to the boy himself. There are many dangers which beset the path of the young sailor, especially in foreign ports, against which a word of warning from the initiated is worth much fine gold. It is not fair to send a gently-nurtured boy to sea unwarned of these things, lest he learn of them by a bitter experience which may cost him a lifetime of fruitless repentance.

Having found a ship and gone through the official routine, it is always wise to try and enlist the sympathies of the skipper and the mate. They have probably heard it all before, but in spite of that it is pleasant to be consulted, pleasant to feel that their importance is recognised by any one ashore. And if you cannot domuch good you will at least do no harm by reminding a skipper that you are entrusting him with one of your most precious possessions.

As to the duties of the apprentice, they may be dismissed in a very few words. His first duty is implicit obedience. He has come to sea to learn, and he can only learn by obeying. It is unlikely that he will learn much on his first voyage besides familiarity with his ship on deck and aloft by day or by night, and to be of use in assisting to furl sails, etc. And this is no trifle. He should remember, too, that it is not enough to obey in a lazy, sulky manner; he must, if he would ever be worth anything, cultivate smartness, the habit of ready and cheerful obedience. He must not slouch, he must spring; he must not sulk, he must keep in evidence. Not merely for the sake of gaining the good word of those in authority over him, but for his own sake, because he is now laying the foundation

of his future career as an officer. The lazy, skulking, slouching apprentice becomes the miserable, discontented, and generally worthless seaman, if indeed he ever becomes a seaman at all, which is in the highest degree problematical. Let him never be afraid to ask anybody for information, never ashamed to enquire what he had better do, and especially, emphatically, avoid becoming dirty in his personal habits because he has not on board ship the conveniences of home. Some day, perhaps, our fine sailing-ships will provide a bathroom for lads and men, and water to wash with more frequently than once a week; at present it must be admitted that the way of personal cleanliness on board a sailing-ship is hard.

And I earnestly hope that the few hints I have been able to give may be of good practical service to many.

CHAPTER XXVIII.

THE ABLE SEAMAN (A.B.)-GENERAL QUALIFICATIONS.

AND now we approach the discussion of the Able Seaman, the man of the rank and file, the "common sailor," as he is sometimes contemptuously termed by those who-God forgive them !- know absolutely nothing of his uncommon trials, virtues, and temptations. It is most probable-nay, almost certain-that for what I have written in the preceding pages the "A.B." will bear me little good will. He will most likely set me down in his own mind as another mercenary scoundrel, paid by the owners to vilify the fo'c's'le man. When you come to look at the matter you will see that it must be so. Such a one-sided view of themselves is not confined to the sailor. It is rampant among men who should be able to weigh questions impartially,---intelligent workmen ashore of all kinds. As a general rule they lay themselves open to the charge of the grossest unfairness because they will not abide the truth about themselves. One need not use any names, because they will occur to all who keep in touch with current events,-names of men who have been chosen from among their fellows for their exceptional abilities, and empowered to represent them in various councils. As long as such representatives could see in capital no white, and in labour no

black, they were popular, cheered to the echo; but as soon as they learned the fundamental fact that there are two sides to every question, and wisely endeavoured to use that knowledge, they were subjected to much abuse and gross misrepresentation, and perhaps the mildest suggestion made about them was that they had been "got at."

But although the foremast hand finds it impossible to be fair,--although he, taken collectively, regards all owners as bloodsuckers, and all officers as traitors or tyrants,--every one of his well-wishers (of whom I claim to be one of the warmest) can, and do, find many excuses for him. Please to consider his position. For the great majority of his days he lives in the utmost ignorance of what is going on in the world. He is like the inhabitants of some undiscovered country, whereinto none of the latter-day adjuncts of civilisation have penetrated. From year's end to year's end he never reads a newspaper,-at least not until it is long out of date. During his quiet voyaging from one side of the world to the other, the whole political aspect of the planet may be changed, but he knows nor recks nothing of it. Speak to him of the rise and fall of governments, the strife of parties, the hubbub of a general election, and he will look upon you as one that talks in an unknown tongue. To those of his class who read, supposing that they possess the right books, this aloofness from the worldmovement is all to the good; they can enter into the spirit of the giants of literature as no other men can. Bringing to the consideration of immense topics minds unfettered and undisturbed by the petty squabbling

and sordid tricks of politics, whether imperial or local, they enjoy their reading as few other men do.

One of my chief delights, when I was before the mast, was to sit on deck in the brilliant tropical moonlight, or on a lotus-eating evening before the dark had arrived, and read aloud to the assembled watch. I had no inattentive listeners. Hardly breathing except to keep their pipes aglow, they drank in every syllable; their long acquaintance with all sorts of hybrid variants of English enabling them to catch the sense even if they were unable to grasp the full meaning of the sonorous sentences. For I never would read them rubbish,—or what I considered rubbish. Т carried with me for years three volumes of the Chandos Classics, the Odyssey, the Æneid, and Longfellow's works. Shakespeare I always had, and I should be puzzled indeed to say which of the two-the Odyssey, or Shakespeare-they relished most. They did not favour discussion of the books read very much; they were content to enjoy. I grieve to say that their discussions were usually most trivial and unprofitable. They would start an argument upon some question about which none of them knew anything, and carry it on with the utmost fierceness and heat, even unto Once I used to intervene with some reliable blows. information, but I found that when, in reply to the "Who told you that?" I admitted that I query: had learned it from books. I was thenceforward scouted as a purveyor of second-hand information, and I desisted.

It is a poor task bringing book-evidence to the average sailor. Marshal your authorities as you will, you

will be met with the stolid question: "How do you know? You wasn't there !" etc., until you retire like a man who in the dark has run head-first against a stone wall. It is no good to argue with the average sailor either. He lives in a little world of his own, its horizon bounded by the blue sky and unbroken by any vision of the movements of shore-dwellers except at long intervals. Then, when those brief periods of contact with landward folk arrive, he is like a boy suddenly let loose from school. He forgets his seatroubles, his long confinement, in the strange sensation of liberty. How can these men be expected to use their freedom wisely. Their experience of it is so limited, their ignorance of shore ways so pathetic, that it would be surely a miracle to see them behave themselves in reasonable fashion.

But one peculiarity that I have often noticed among sailors is their preternatural suspicion allied to a blind trustfulness: two opposite qualities meeting. Only, with the perversity of poor human nature, they exercise suspicion where they should be trustful, and confidence where they should be most cautious. Any scoundrel that lays himself out to cajole and cheat a sailor is almost certain to succeed, while a philanthropist aiming only at the seaman's highest welfare will find it a most difficult and disheartening task to gain his confidence or even attention. And so it comes to pass that, at seamen's missions, or wherever anything is being done for destitute sailors, the greatest care has to be exercised, the wisest discrimination used, in order that meals, etc., provided are not entirely monop. olised by longshoremen, and the sailor be conspicuous

by his absence. It must always be borne in mind that the sailor is just a big child whose opportunities for being understood by shore people are almost nil, who cannot tell you what he wants, and whose life is hidden from you. Herein is one of the greatest difficulties confronting missions to seamen. They have but a very short time to work upon any individual sailor, only a few days wherein to teach him things that shore people, when they do learn them at all, often take years to acquire ; and then the exigencies of his calling remove him from all those hallowed influences for perhaps four or five months on end. On shore it is recognised by all the churches that if you would do good it is not sufficient to preach godliness to people; you must provide for them the right kind of society in lieu of that which they must abandon; vou must nurse them through their period of babyhood in grace until they are able to stand or walk or run in the way of righteousness. But the poor sailor gets no such nursing. Before he has scarcely awakened to the fact that old things have passed away and all things have become new, he is back again in the fo'c's'le. And now he is very lonely, because he knows that the only things that are continually talked of are those that should not be so much as named. His quietness is taken for moroseness; he gets nicknamed the "queer fellow; "all sorts of influences are brought to bear upon him, tending to push him back into the slough; and if he stand firm you may be very sure that he is a man in the highest sense of that much-abused word.

I feel, however, that I must apologise for straying into this side issue, which, although it is so important to me, hardly comes within the scope of the present work. Perhaps I ought to have begun this chapter with a definition of the "able seaman's" position. It is popularly supposed, even at sea, that the Able-Bodied Seaman, a term whereof the initials "A.B." are the recognised official contraction, is a man who can "hand, reef, and steer," the first and second terms meaning: (1), the furling of sails,-that is, rolling them up and making them secure; (2), the reducing of a sail's area by enfolding a portion of it and securing it by a series of short pieces of rope sewn into a doubled or trebled band of canvas across it, technically called "reef points;" while the third requires no explanation. But while it is undoubtedly true that a seaman who can do these things and no more cannot have his wages reduced for incompetency, it is absolutely certain that an A.B.-on board a sailing-ship at any rate-who could do nothing more would be looked upon as an impostor, not only by the officers but by his shipmates. Yet there are an immense number of " able seamen" whose qualifications are hardly up to that primitive standard. More than that, their number is increasing. For in steamships the handling of sails is reduced to a continually lessening minimum; reefing is a vanished art; and as for steering,-well, steamships of any importance carry quartermasters who do all the steering, receiving a few shillings a month extra pay therefor. So that you shall often find a man occupying an A.B.'s position who is really only an unskilled labourer. Placed on board of a sailing-ship he would be as helpless and useless as any landlubber, except that he would not be seasick.

An "able seaman," properly so called, is a skilled mechanic with great abilities. In the first place he is able to splice hemp or wire rope,-work that requires a considerable amount of technical skill, for splicing is not by any means simply the joining of two pieces of rope together in a certain way. There are many kinds of splices : short splices, long splices, eye splices, sailmakers' splices, grummets, etc. And it is not sufficient to be able to make a splice: it must be done neatly, in workmanlike fashion, so that when it is "wormed," "parcelled," and "served" it shall only show as a smoothly graduated enlargement in the rope, or, as in the case of a sailmakers' long splice, be, without any covering, hardly visible at all as a splice. The A.B. must also be able to make all the various "seizings" or securing of two parts of a rope together by a neatly passed lashing of tarred cord or wire; make them, too, in any position aloft while the ship is tumbling about, and not merely in a comfortable corner on deck. He must know the right method of "bending" sails; that is of fastening them to yards or stays for setting by "robands" and "earings," so that they shall remain doing their work no matter how severe the weather. He must understand the technique of sending up or down yards and masts; be able to improvise lashings for the securing of sails when carried away in a gale, or broken spars dangling aloft like fractured limbs. He should know how to handle a "palm and needle;" that is, how to sew canvas for making or mending sails, and understand the manipulation of "purchases" (pulleys and ropes), the rigging of derricks, and the distribution of strains.

How to "set up rigging," "rattle down," and "heave the lead" must be his accomplishments as a matter of course.

Now all these queer-sounding names of duties that the good A.B. must be able to perform would require a vast amount of laborious explanation to make their meaning and purpose clear to any landsman, and it is doubtful whether one person in ten thousand would take the trouble to master their details if an attempt were made to give them. But I think that few will assert that a man who can do all these things as they must be done at sea can in any sense be classed as an unskilled man. And I must add that those I have mentioned are only the broad features, as it were. There remains still an enormous number of smaller matters, knowledge of which is expected of an A.B. But I must admit that the class of able seamen which is capable of answering to such a description as this is growing yearly smaller and smaller. That of course is the fault of steam. While sailing-ships endure there will always be some of them : there must be; but they are not wanted in steamships, and so the supply dwindles with the demand. But it is a great pity, because these men are capable of rising to the height of an emergency. Thev have individuality and resource as well as technical ability. And when, as so often happens, a steamer gets into trouble at sea, breaks down, or is overtaken by a gale against which her low power is helpless, the need of skilled seamen is often sorely felt.

An old shipmate of my own was telling me the other day of a case in point. He was one of the A.B.'s in a large steamer called the *Bengal* outward

bound to Japan. They were overtaken in the Bay of Biscay by a tremendous gale, before which they scudded with the huge square foresail set in order to keep her ahead of the sea. (It was being overtaken by such a sea that caused the awful loss of the London.) But at last it became necessary to take in that foresail and heave the ship to, it being unsafe to run her any longer, especially as the sail might carry away at any moment and the very evil they dreaded come upon them instantly. So all hands were called aft, eight of them, and the skipper said: "D'ye think ye can take that foresail in, my lads?" At which question they were amazed, for none of them had ever heard such a question put before. After a moment's silence one fellow shouted : "Take it in ! why 'course we can, sir. We c'd eat it."

That comforted the old man, and he gave orders to haul it up, at the same time manipulating the spanker so that she came round cannily, head to sea, and did not ship any heavy water. They furled sail without any more difficulty than usual, but when they had cleared up the gear the "Old Man's" voice rang out again : "Splice the main-brace." Pelting aft at the double they received each a glass of grog and the old man's heartfelt thanks. He told them that on the previous voyage he had a crew of steamboat sailors who in just such a night as that refused to go aloft; they were afraid. And he had to see not only the sail blow away, but also a great deal of damage done to his deck-gear, and at one time it looked as if the vessel would be lost. So this voyage he had been careful to select sailing-ship sailors, and the result had

entirely justified him. "Yes," said one man, "that's all very well for you, sir. But how about our getting a ship next voyage? We shall be called steamboat sailors now." Of course the poor skipper had no answer to that, but I have no doubt he felt the full force of the remark. For therein lies the great difficulty. No skipper of a sailing-ship dare take steamboat men unless he has absolute proof that they know the work on board a sailing-vessel, and even then he is sure that a few months in steam rusts a sailor; he is not likely to be very smart getting aloft, or to be as expert as a man in training when he gets there. More than that, the steamboat sailor, being, as I have said, almost invariably better fed than he is in any sailingvessel, does not take at all kindly to a return to the old miserable way of living, neither does he appreciate being so long at sea. And all these things tend to assist the influx of the foreign element which, flocking into our sailing-ships, speedily overflows into steamers and, having once obtained a secure foothold, never returns to its own place again.

CHAPTER XXIX.

THE ABLE SEAMAN-HIS ROUTINE.

NAUTICAL routine, although in certain broad features alike in all ships of all nations, varies almost indefinitely in detail; not merely in ships belonging to different countries, but in ships of the same flag and of the same character. And this is not only true of the details of duties to be performed, but of the method of rigging, sail-setting, etc. The master, having a free hand, may and does use his own discretion as to how and when he will have work done. There is no one to gainsay him, although his fads will certainly be keenly criticised in the fo'c's'le. But where a certain routine is fixed and universal there are no exceptions to its rule,-as, for instance, the incidence of the watches. The first thing to be done after a ship has cleared her home port, outward bound, is to muster the crew by their names. Then the mate and second mate face the assembled seamen and draw each a man alternately, the mate beginning, until each have a moiety. If there is an odd man the mate gets him, unless some private arrangement is come to between the two officers. The number of men under each officer is called his watch, and for further convenience of definition the mate's is called the "port" watch and the second mate's the "starboard" watch, the left side of the ship

looking toward the bows being the port side, and the right the starboard. Thus divided, the crew select their bunks on the side of the forecastle answering to their watches, and so they remain throughout the voyage.

Now there is an unwritten sea-law which says that "the cap'n takes her out and the mate brings her home," which, being interpreted, only means that the starboard watch has the eight hours out on the first night of the outward passage, and the port watch the first eight hours out on the homeward passage. But this again needs explaining. A simple method of dividing the twenty-four hours into watches would be to have six of four hours each, but it would have the demerit that the same men would be on watch for the greater part of every night. So a simple plan was long ago devised for the continual change of watches. The day was indeed divided into six watches of four hours each ; but the last watch of each working day, namely, that from 4 to 8 P. M., was subdivided into two "dog" watches of two hours each. Nearly all the pleasant memories of fo'c's'le life cluster around the second of these. From 4 to 6 P. M. (I speak of an ordinary British ship) the watch on deck rounds up the day's work, puts things away, sweeps up decks, etc., preparing for the night. The men of the watch below get their tea ("supper" it is called on shipboard), and at four bells (6 P. M.) the members of the other watch come below and get their evening meal. The watch that has relieved them has now no work (unless sail requires trimming), with the exception of the helmsman, and when supper is finished all hands can and do

foregather on deck or in the fo'c's'le, according to the state of the weather, and exchange yarns or read. All smoke if they list. It is the time of day when all hands meet, and it is looked forward to with a good deal of interest in every ship where things are as they should be. At eight bells (8 P. M.) the night begins. The watch that has the eight hours out—that is, the watch that cleared up decks from 4 to 6—begins its vigil, which will last till midnight; the watch below turns in.

In every decent ship the bell is struck every half hour, increasing by single strokes: that is, 8.30 P. M., one bell; 9 o'clock, two bells; and so on up till four bells, when the helmsman and the lookout man are relieved; then five, six, seven bells sound until five minutes to twelve, when "little one bell" is struck. and the watch below is called, to be ready for appearance at eight bells (midnight), when they are mustered by the appearing officers. The watch coming below then turns in, and the bells begin again and continue until 4 A. M.,-eight bells again. Then the "eight hours out" men reappear, and at two bells (5 A. M.) "Coffee" is called. At four bells "Wash decks" begins, and with it the "secular" work as distinguished from the mere handling of the ship's sails, etc., steering, and lookout. At seven bells (7.20 A. M.,-really 7.30, the ten minutes being slipped in for "coming up," as we say) the watch below is called for breakfast. and at eight bells (8 A. M.) its members come on deck ready for work, the retiring watch going to breakfast. and afterwards to bunk or whatever they think fit until seven bells (11.20 A. M.). Then they rise for dinner,

and at noon--which is made by the sun and never by the clock unless the sun is obscured--they come on deck for the afternoon's work while the other watch retires. With their coming below again at eight bells (4 P. M.) the twenty-four hours' day is completed. And it will be found that at 8 P. M. the watch coming on deck is the watch that on the previous night was at that time turning in.

Now this routine of watch-keeping is universal, but not so by any means the distribution of work. I have just sketched the outlines of duty in a commonplace sailing-ship or tramp steamer under the British flag. But when we come to a smart liner or an American ship this humdrum jog-trot round is shattered like a bubble. In the former it is necessary for the comfort of the passengers that their promenade decks shall be clean and dry at an early hour; therefore the deckscouring, paint-washing, etc., must be got through before the time at which work is usually commenced in a non-passenger-carrying ship. I do not suppose that any one can be so thoughtless as to wonder "what on earth the sailors find to do" who has ever made a passage across the Atlantic in a big liner. Such a foolish question is often asked about ships in general, but surely even the dullest must comprehend that the splendid cleanliness and order on board those floating hotels means a vast amount of work done while the passengers are sleeping, since it is never obtruded upon them in their waking hours. It must also occur to the more thoughtful among them that the modern sailors' duties are largely made up of housemaids' work. Yet, with so little opportunity for keeping up

his acquaintance with the higher duties of his calling, he is expected to rise to the fullest heights of a sailor's duty at the first call. I submit that the meagre drill he gets in boat-handling and fire-stations can hardly be sufficient to keep him up to "sailor pitch."

In American sailing-ships, on the other hand, no such easy-going precession of duties is allowed. The first thing that a seaman learns when introduced to an American ship is that his time belongs to the ship,that if he is allowed to have any for himself at all it is a matter of grace, not of right. He must at all times hold himself at the disposal of his officers, and whatever work they consider it necessary to undertake he must, on the word being given, throw himself into it as if it were a matter of life and death. Theoretically this is the case in all ships, but it is nowhere carried out as it is in American vessels. It is their tradition, and they have a pride in its maintenance. What it means to the sailor under the despotic rule of a bowelless master and iron-fisted officers it is impossible to convey to any one who has not seen the process. It sometimes happens in British ships that all hands will be kept at work in the afternoons at sea, usually on the passage home when the vessel is being thoroughly overhauled and renovated; but where this is done a great deal of laxity is permitted at night. The watch on deck during the hours of darkness, with the exception of the man at the wheel and one on the lookout, are allowed to sleep unless the sails require trimming, and even this very necessary work is performed with a great deal of grumbling and bad language. But in American ships it is often the proud

boast of a skipper that he keeps his men at work in the watch on deck throughout the voyage, by day or night, in gale or calm; and as for an afternoon watch below—absurd, makes men fat and lazy! No grumbling is permitted, no dilatoriness of movement, and due attention to all these severe rules is enforced by blows, and, if necessary, by shooting. It is the other extreme of the scale. We are much too slack in our discipline; the Americans, as a rule, are far too severe. Of course there are exceptions on both sides, but I speak of the rule.

Sailors often wonder whether landsmen realise what it means for a ship to be always watched and tended from the time she leaves port until she arrives at her destination: whether, when coming on board a ship in harbour, and looking curiously at the deserted wheel aft, they appreciate the fact that for every minute of perhaps five or six months there is a man at that wheel, steering the ship over the trackless sea, guided alone by the compass. This ceaseless care of the vessel has always struck me as a very impressive thing, especially where, as in an ordinary sailing-ship, every man in the fo'c's'le takes his turn, or "trick," as it is called. At the commencement of the voyage the men settle among themselves in an informal manner the order in which they shall follow each other at the wheel, and, subject to alterations in their number, this order is preserved throughout the voyage. Some curious terms are current among them about the steering turns. For instance, when a man has neither "wheel" nor lookout occurring in a watch, he solemnly announces he is a "farmer"; when it happens

that his "wheel" occurs from four to six A. M. he growls at the idea of his having the "gravy-eye" wheel,—a coarse but most expressive designation for that sleepiest of watches. This is the time when more accidents occur through lack of watchfulness than any other in the twenty-four hours.

His duty of steering varies greatly with the ship and the man. Some vessels are beautifully docile, responsive to the lightest touch on the wheel, and actually sympathetic-I can use no other word-to a good helmsman. I have been in vessels that one could almost steer blindfold by the feel of the wheel, where the making of a serpentine course was a certain proof that the helmsman was either a bungler or grossly It is popularly supposed that a ship is alcareless. ways steered by the apparent movement of the compass, and this is fairly true of steamships, but it is ridiculous when applied to sailing-ships. The compass must be watched of course, but the man who keeps his eve fixed upon it will soon find that not only must he work like a slave, but that no amount of wheel-twisting will keep his ship steady on her course. He must watch the movement of the ship's head against the sky, the clouds, or the stars, for he can then see instantly what amount of helm she requires, whereas the compass does not tell him until too late, or it is so lively that it is no guide at all, except that its average swing from side to side of the point he is told to steer by will be approximately the same. Τ have often been steering a large iron ship running before a heavy westerly gale in high southern latitudes, when the compass has swung continuously

round through its whole thirty-two points. Some men get so bewildered by this that they are useless as helmsmen. Others, again, when steering before a heavy following sea, will lose their nerve. The mighty waves thundering up astern, like ravening monsters only to be satisfied by the overwhelming of the vessel, are terrible to see, and a prudent officer who notices the helmsman looking astern at such times with a wild eye and a blanched face will have him relieved at once, before that appalling disaster "broaching to" takes place. This occurs when a ship running dead before a gale of wind, with her yards square, is suddenly caught a little on one side by a furiously rushing wave and whirled around until her sails get caught aback, the sea thunders over her broadside, and she is in the greatest danger of being dismasted, turned over, or smashed up altogether. Many a ship posted as missing has thus been destroyed; she has disappeared from the face of the sea in five minutes without giving any one on board the slightest chance of life.

As far as the A.B.'s workaday duties are concerned, the same rules that apply to other workmen ashore do not apply for obvious reasons. If a carpenter, for instance, were employed in the building of a house, and it were found that he could only boil glue, sweep up the shop, or turn a grindstone, he would be discharged on the instant. But you cannot discharge a sailor until his return home, unless he is willing to go, and, in a foreign country, unless the consul is also willing to allow him to be discharged. He may be absolutely worthless from the seaman's point of view, which, as I

have shown, must be considered in relation to the ship, whether a steamer or sailing-vessel; but unless he is unable to steer it is almost impossible to reduce his wages.

I well remember a case, years ago, tried before the late Mr. Raffles, where the master of a ship had reduced one of his A.B.'s wages for the voyage by $\pounds I$ a month,—that is, to the level of an "O. S." (Ordinary Seaman). There was no doubt whatever as to the kind of man the *quondam* A.B. was. He had never been to sea before that voyage, but some enterprising boarding-master had supplied him with another man's discharge, rigged him up like a seafarer, and got him shipped in a big southern-going sailing-ship as an able seaman at \pounds_3 per month. But he had the wit to put his case into the hands of a smart lawyer, who bullied the master to the verge of desperation. Among other things he said :

"Did you have your ship's decks washed, Mr. Brown?"

"Of course I did," replied the sorely tried skipper.

"Oh, you did. Was this man able to assist in washing decks?"

" Oh, well, I suppose he could do that."

"I don't require any of your supposing, sir; could "he do his duty in this respect or could he not?" thundered the counsel.

"Yes, he could."

"Thank you" (ironically). "Now, did you carry any pigs?"

"Yes," answered the bewildered commander, "there was----"

"That is sufficient. Kindly answer my questions without comment. I suggest to you that those pigs required their sty to be cleaned occasionally."

"Yes, and it——" said the skipper, getting redder in the face as the lawyer stopped him again.

"Could this man clean out the pig-sty,—yes or no?"

"Yes, he could, but-""

"Answer my questions in a proper manner," roared the lawyer, and so on until, in triumphant tones, the legal gentleman exclaimed:

"Then I submit that you have no right at all to deduct one penny from my client's miserable earnings By your own admission he could perform all those duties—very necessary duties—about which I have questioned you. They had to be performed by some one, and surely you do not expect to get the work of your ship done for nothing," etc.

In the result the man got his wages in full, and the skipper went away in the belief that the law was a dangerous thing to meddle with, even if you knew you were right.

But every sailor worth his salt knows what it means to get a few of these yokels foisted upon a ship. They can be and they are put upon the dirty work, the unskilled labour, of which there is so much to be done; but, in addition to the fact that they cannot do even that work in sailor fashion, all the work which they cannot do at all falls upon their shipmates who can. This often means terrible overwork and suffering for everybody on first leaving home, before "useless articles" have been taught their work aloft. I know of

no more difficult position to be in than aloft on a topgallant yard, for instance, in a snowstorm in the Channel, with three other men, for the purpose of furling the sail, and finding that two of them are not only useless but helplessly in the way. Poor wretches, they are suffering too, no doubt, clinging to the yard in an agony less they fall, sick with fright; but the men who *must* do their work are the ones deserving of pity. They get neither pity nor pence for the extra work they do.

Of all the injustice from which the sailor suffers I know of none that he feels more keenly than this. To be shipmates with half-a-dozen waisters who are getting the same pay and treatment as himself, to be overworked because they cannot do the first thing at sailorising, and as likely as not obliged to keep very quiet in the fo'c's'le because of their being in the majority, is a bitter pill to swallow. One very unpleasant recollection of my own is of a ship on which I was an A.B. In my watch, besides myself, there was a Swede, a very good man; a little Frenchman from St. Nazaire, who was also a smart sailor-man; a Finn, who knew how to do his work, but was so slow and stupid that he was very little good; another Frenchman from the vicinity of Nice, who, strange to say, was useless, and, in addition, knew only about half-adozen words of English; a big, brutal bully of a fellow, who was a Briton, I grieve to confess, and one of the basest sort; also a negro ordinary seaman. With such a watch, those of us who could do what we were asked had a very hard time of it, and, to make matters

worse, the big Briton was, although as worthless an animal as ever stepped on a ship's deck, the "boss" of the fo'c's'le. I was working hard for my certificate and did not care to complain, until at last, in Hong Kong, while the great loafer was quietly sitting in the shade toying with the task of chipping the iron rust off the cable, I was sent over with the negro to scrape the ship's side in the blazing sun. I went, feeling very hardly done by ; but presently the fine dry dust of coal tar which I scraped off the planks stuck to my sweating face and began to blister it just as a mustard plaster would have done.

Then I felt that under these conditions life was not worth living, so I left my job and sought the mate. I appealed to his sense of justice. "Here is a man," I said, "who has not been able to do a single job of sailor-work except take his trick at the wheel (and he's a gorgeous helmsman) since we left Cardiff. I, on the other hand, have been continuously at work, splicing, serving, sailorising in all its details, with never a complaint of my work. Yet because this man is a truculent beast who growls blasphemously whenever he is put on a job, he is allowed to carry things so pleasantly that he might as well be on a perpetual picnic. Is it fair or just?" To the mate's credit I record it that the champion loafer was immediately sent overside to scrape, and I went below to poultice my blistered visage. But even there he scored, for he quietly shifted his stage under the counter, where he could not be seen, and there sat in the shade and smoked his pipe. Still the business did not suit him, and two days after, to the delight of every one on board, he

deserted. He had the assurance to come back for his kit; but he was not allowed to come on board, so I lowered it over the bows to him. He knew that the skipper was too glad to be rid of him to prosecute.

CHAPTER XXX.

THE ABLE SEAMAN-HIS POSITION.

FROM all of the foregoing it will doubtless be rightly assumed that the Able Seaman is in a most anomalous position at the present time. He may be a skilled mechanic, a man of energy, resource, and great abilities, or he may be just an unskilled labourer with precisely the same pay and treatment as the best seaman afloat of the same grade. This is a bad state of things, but it is to be hoped that the system of continuous discharges now being introduced will make some alteration for the better. The maritime nations of Europe long ago recognised the importance of having some definite record of a seaman's service. some means whereby it could be told at a glance whether he was a sailor or not. So that each French. German, or Italian sailor has a little book wherein is entered what manner of man he is in appearance, and the date of every shipping and discharge he has.experienced during his seafaring career. His behaviour also is there set down, and vised by consul or shipping-officer, as the case may be. Without this book he can in no wise get a ship of his own country's flag, but he can, and does, ship in British vessels where the rules are lax; where a discharge may be bought from

a brother seaman outward bound, and used with impunity; where a man may be a worthless loafer, and yet suffer no penalties for taking a job for which he has no qualifications whatever. Let us hope that the system of continuous discharges will be all to the good.

But the prime cause of the lowering of the A.B. and of the anomalies in his position is undoubtedly the advent of the steamship. Blink the fact how we may, it remains true that what is wanted in a steamer is only a burly labourer who is able to steer. That is, as long as all goes well. And the percentages of disaster year by year are so small that no steamshipowners need fear to take the risk of sending their ships to sea without a sailor, properly so called, except the officers on board. As I have said, matters are very different in the sailing-ship. There the sailor must be had, but the supply of British seamen dwindles so fast that the foreigner from Scandinavia, from Germany, from Italy, comes in ever-increasing numbers for the sake of the higher pay and the easier life. But if the influx of foreign seamen was only confined to the sailing-fleet the situation would not be so perilous. In one sense, of course, it will always be a danger as long as sailing-ships are considered-and rightly sothe only real training-places for seamen, because it means that we are not raising any more seamen to fill the places left vacant by death and by men leaving the sea for shore life. But unfortunately foreign seamen flock into the steamships as well, also in ever-increasing numbers. This is not at all easy to understand in the face of the facts that so little technical ability is

required of the A.B. in steamers, and that there are so many unemployed men about our streets.

It may be that what is frequently said by our critics at home and abroad is true : that Britons are getting more and more loth to work at all; that when they get a job their first care is not to see how they can best satisfy their employer, but how little they can do for their money. If this be so, it is a fatal mistake on their part. It would be bad enough for themselves personally if they had the monopoly of the world's labour markets; but, confronted with the down-trodden millions of Europe who will work till they sink from exhaustion without a complaint, who learn our language easily, and swarm into every opening that presents itself, such behaviour on the part of our workers is surely suicidal. This is especially true of seamen, where no restrictions are placed upon the number of foreigners employed, and when they can always be obtained. If a shipmaster happens to have had much trouble with a crew of his own countrymen on a voyage, he is almost sure to look out that he has foreigners next time. They are fully qualified-it is the rarest possible thing to find a foreign sailor who cannot do his work-and they will obey orders without grumbling.

Personally I feel absolutely sure that the British seaman properly so-called—I do not mean a ship-navvy who couldn't make a short splice or seize a ratline on properly to save his life—is the finest in the world. For endurance, for skill, for reliability in time of danger, for resource in time of difficulty he has no superior. But, alas for the truth, he is departing, and

I fear it will be no long time before his place in the merchant service will know him no more. What British seamen are capable of may be seen in the Navy, whose splendid handy-men are the envy of the world. Is it too much to hope that by some better method of training and treatment we might get just as fine a body of men in the merchant service? Perhaps it is, and yet—and yet there are those among us who do dream such a dream as this. We think that by means of a properly fostered and trained Naval Reserve we might build up a magnificent body of merchant seamen with characters to lose, men who would take a pride in their position and be a real bulwark to the country.

But such a Reserve would require the whole-hearted support of the Admiralty, not hardly-veiled enmity. Every seafaring man with the best interest of his country at heart knows full well how pitifully the grand opportunity afforded by the institution of the Royal Naval Reserve has been allowed to go to waste. Perhaps some day before it is too late the history of that Reserve will be written with inside knowledge of all the facts, and an amazing document it would make, though not more amazing than many similar documents dealing with the non-understandable ways of the great departments that spend the country's money.

Theoretically the Royal Naval Reserve should be a success. As far as the obtaining of officers is considered there is little doubt that it is a success, even though merchant officers who seek to pass into the Navy via the R.N.R. are known by the invidious

sobriquet of "the hungry half-hundred." Great shipping companies make it known that they wish their officers to belong to the Reserve, and straightway the thing is done. There is no compulsion; the suggestion is sufficient; and the retaining fee, being quite a nice little sum per annum, is also an inducement. But the numbers of the seamen in the Reserve do not increase. Why? There is a retaining fee of £6 per annum; there is also a guinea a week pay during drill, of which every member is supposed to put in six weeks a year. Seeing what sailors are, one would have thought that such a bait would have allured them in large numbers. And yet there is only about one-quarter of the number there should be. It is to be hoped most devoutly that in the present agitation about the Navy and its various shortcomings this will not be forgotten, and that it will be fully recognised that the only possible source of supply for the Navy in case of war is the mercantile marine.

To secure such a supply it is imperative that the A. B. shall be looked after and made to feel that he is a man of some importance to the state; that the good men shall not be handicapped by wastrels; that a man shall earn the title of "able seaman" before he is permitted to take it; and that every man shipping as A. B. who has no qualifications for that honourable post shall suffer for his misdeeds,—his fraudulent burdening of his shipmates with work that he is unable to perform. Then I believe that we should get in the merchant service a good class of seamen, men who would not say that the sea was a life only fit for dogs. Under proper conditions, such as may even now be

found, that statement is a libel. Speaking for myself I can say with perfect candour that I have been as happy in ships before the mast as any workman could hope to be ashore. Where there is a good crew of men who know their work and will do it, decent food of good quality, and experienced officers : a sailor before the mast may, and does, have a very good time,infinitely better than any journeyman ashore, with all the worries attendant upon loss of employment, rent, strikes, etc. Only get the sailor to see that his business is a business that requires a trained man to make any hand at it; that the door into it is closed against the dock-walloper and the loafer; and that the same consideration that is meted out to mechanics ashore is accorded to him,-I am sure there would be a steady increase in the number of British seamen in British merchant ships, aided, of course, by the institution of such a feeder as the non-premium apprenticeship I have already spoken about would be.

I am quite sure that British seamen are to be got and kept if the powers that be will only go the right way to work, remembering that what is wanted is not so much fresh legislation as a little more use of the legislation already existing. Shipowners are not anxious to carry foreign seamen, except perhaps in Eastern trades, where Lascars and Chinese come in handy, and even in those ships there will usually be found a stiffening of most excellent white seamen, who are usually British. No, the only question for the average shipowner is : "How, in the face of the fierce and unscrupulous competition against which I have to fight, can I get my ships efficiently manned?" He wants

men to earn their pay, pay which is higher than that of any other country except the United States and Australia, and he does not at all concern himself about the nationality of those men. He leaves them, very properly, to those who will have to command them; but if masters of ships are made to believe that, no matter how good the pay and provisions given, they can never rely upon getting, in the first place, sailor-men of their own race at all, and, in the second, men of their own nationality who will work cheerfully for their pay without a constant succession of worrying rows, it must not be wondered at if they prefer the foreigner who comes already broken in, trained in seamanship, polite, and hard-working, no matter where he hails from.

In bidding farewell to the Able Seaman I again earnestly express my full sympathy for and with him, and trust that ere long I shall soon have the joy of seeing A.B.'s of my own race again increasing in the British merchant service.

CHAPTER XXXI.

THE ORDINARY SEAMAN (O.S.).

In the days when the Able Seaman was properly considered to be a man who had learned his trade and would have been ashamed to ship as an A.B. unless he were fully capable of doing any job of sailorising that was given him, the Ordinary Seaman was quite an institution. He was a young seaman who had been through a time of considerable tribulation as a shipboy, but, having grown bigger and stronger, able to take his trick at the wheel, and make himself felt in furling sails, ventured to take a step up the ladder. There was no specified manner in which this was to be With that haphazard disregard of the seamen's done. best interests which has characterised our mercantile marine for many generations, it was left to chance. One would have thought that a recognised method would have been for a boy to present himself before certain properly-constituted authorities for an examination into his qualifications, and that, having satisfied them that he was able to do all that an Ordinary Seaman should be capable of, would be granted a certificate to that effect.

Nothing of the sort. Sometimes a boy would make friends with an officer who would report favourably upon him to the master at the end of a voyage, and

then that master might, if he remembered it or felt so disposed, give the boy an "ordinary seaman's " "discharge." Or, if he were a big fellow, the boy might get a master to ship him as an ordinary seaman, even though he had nothing but a boy's discharge to show. The whole business was as slipshod as it could well be, for it depended entirely upon the caprice or kindliness of the master granting it. There was just this in its favour, that it recognised an able seaman as a seaman who had been through the regular routine of boy and ordinary seaman before he became an A.B., so that the presumption was entirely in favour of his having learned his business. But, as I have shown in the preceding pages with what perhaps might be termed brutal clearness, that has all been changed. Under present conditions you may occasionally find an O.S. on board of a ship, but be very sure that if you do he is having it drummed into him, every watch, that he is a fool. "Why," he will be asked, " should you ship as an ordinary seaman when there's plenty of able seamen going that don't know the knightheads from the main-brace-bumpkin? Don't be a fool. You might just as well have the other pound or thirty shillings a month as them fellows that ain't half as good as you are!" And presently he thinks so, too, so that he makes up his mind that he'll never be an O.S. any more,

That determination is mightily strengthened if he happen to be on board of a ship where there are two or three modern A.B.'s, wastrels who would be dear if they came for nothing a month and found themselves. As, for instance, when I was an ordinary sea-

man in a big ship going out to New Zealand. There was never a job of work came my way that I didn't do as if it was going before a bench of examiners. I was as nervous of blame and delighted at commendation as if I had been striving for a valuable prize. But we had among our A.B.'s four men (if I can call them so) who were not worth a penny a day, and one black night it was my hap to be on the main-royal yard with one of them for the purpose of furling the sail. Had the weather been what it should at the furling of this, the loftiest sail in the ship, I should not have so much minded, but our redoubtable skipper was always loth to waste one breath of a fair wind, and so he had "hung on" until it looked as if the three huge masts would have been blown clean out of her. Then all hands were called in hot haste, royals, topgallant-sails, and other topsails were lowered all at once, and a pretty fine job it was with our crowd. However, as I have said, I found myself up there on that giddy height with all those vast sails battering far below me. a gale of wind roaring against me, a sail before me that was straining madly to tear itself away from its confining gear, and a helpmate who was absolutely paralysed with fear,-an "able seaman," an't please you.

I did not know what was the matter with him. Being on the weather side of the yard I was doing my best to get the sail quiet, and although I wondered greatly what had become of Johnnie I could not go round and see. At last, after a hard struggle, I succeeded in getting the sail snug, only to find that there were no gaskets on the yard. ("Gaskets" are small ropes used to wind around the sails and the yards, to keep the sails fast when they are furled.) All there was available for the securing of what I had gained was the bunt-gasket, a little criss-crossed piece of plaited spun yarn which is fitted to hold fast the centre or bunt of the sail when it is furled, and a feeble thing at the best, but such as it was I made use of it to the best of my ability. Then, twisting my legs round the royal backstay I slid down to the deck, rushed below into the bos'un's locker, and cut off several fathoms of ratline-stuff (small rope). I must here admit that she was a very slackly ruled ship: such a piece of impudence by any seaman would never be allowed—because it would not be necessary—on board of a properly managed vessel.

Having secured my gaskets I hurried aloft and made the sail fast. When the work was done, I discovered Johnnie clinging like a bat to the extreme lee-end of the yard. I shouted to him till I was hoarse, but he made no sign, so I left him, for I did not care to run the risk of putting two men's weight upon the lift, and moreover I was something scornful at that A.B.'s behaviour. I went below and helped in the work that was being done until the time came for us to go below, and there was Johnnie the A.B. talking as boldly as the rest, and ordering me to do this, that, and the other. Then a little explanation ensued, and from that night forward I took orders from him no more. But I had learned something, and when the time came I met the bos'un and put the question to him whether he did not think I was as well worthy of an A.B.'s discharge as some of the fellows who had been unable to

do the work that I had undertaken. In the result I got my coveted piece of paper and never sailed as O.S. afterwards.

The precise definition of an "ordinary seaman's" duties has never been laid before me. But I fancy that those three qualifications which are often spoken of as the *desiderata* for an A.B. should more properly be applied to the O.S., -namely, that he should be able to hand, reef, and steer. Once, and once only, was any question raised with me, when I was an ordinary seaman, about my qualification, and that was by a man who was very sore indeed at having to pay $\pounds 3$ a month for my services. I joined the vessel in Sydney, where able seamen's wages were at the time $\pounds 5$ a month for deep water, resisting all the skipper's efforts to get me for \pounds_2 10s. a month. This so annoyed him that he tried in various ways to pick holes in my work, and at last he declared that I could not steer (although I never missed a trick during the whole voyage) and also that I was not competent to "cross a royal yard," which was fantastically untrue. I should very much like to explain how this piece of work is done, but am almost afraid, because of the inevitable use of technical terms. Still, I feel that so far I have not worried my readers much with sea language, and that perhaps some would like to hear just a little bit of sailor-talk.

It must be understood that this piece of work is one of the smallest of rigging manœuvres that is performed on board ship. By "rigging manœuvres" I mean work aloft which is not always being done or undone, such as furling or setting sails. In fact, the work aloft of a ship may be divided into three categories, the temporary, the sub-permanent, and the permanent. Under the heading of temporary work comes the setting and furling of sails. Sub-permanent work is the shifting of sails—heavy-weather canvas for that carried in the doldrums and trades—and the manipulation of studding-sail gear, although this latter, except in old ships, rarely troubles sailors much to-day.

But permanent work, by far the most important and demanding the greatest amount of seamanship, includes all the care of the standing rigging, the sending up or down of masts and yards, and the thousand and one repairs that are necessary in order that the mazy fabric of a sailing-ship's top-hamper may do its work of propulsion in association with the wind. Of all the heavier work of this kind-that is, shifting the vards and masts-that of handling the royal and skysail yards is the most frequently indulged in, for many skippers commanding old ships dare not put too much strain upon the lighter masts in heavy weather, and they therefore make a rule of sending down the loftiest yards when they bend their heavy-weather sails. Now a royal yard in situ is a spar of, say, thirty-five feet in length (varying of course with the size of the ship), seven or eight inches in diameter in the slings (the centre), and tapering at both ends, or yard arms, to four inches or even less. By means of three (sometimes only one) encircling iron sling-bands in its centre, it is attached to an iron leather-lined collar which goes round the royal-mast and is called the "parral." It is also suspended by a chain "tye" which leads through a sheave-hole at the masthead and is connected on the after side to a purchase for hoisting the yard, the whole tackle constituting the royal "haulyards," "halliards," or "halyards,"—the latter for choice.

From each yardarm to the masthead run pieces of rope which are tight when the yard is lowered. They are called "lifts," and are for the purpose of keeping the yard horizontal and of sustaining the extra weight put upon it by men who go upon it for any purpose. Looped abaft the yard are the "footropes," upon which the men stand when furling or bending the sail; and attached to each vardarm are the "braces" for the purpose of slinging the yard from one side to the other. All this gear is for the yard alone. Then there is the sail, with a rope running through a block under both quarters of the yard, and down to the corners of the sail abaft all,-the "clewlines"; while from a block at the masthead another rope runs down through a block or bulls-eye seized on to the tye close down to the yard, and so-being forked before-all-to the foot of the sail, where it is seized, one leg on either side, to the foot. This is the "buntline." The clewlines, buntlines, halyards, and braces are worked from the deck, and constitute the "running-gear" of the sail.

From the foregoing perfunctory description of the gear attached to one of the lightest yards in the ship, some slight idea may be gathered of the immense combination of cordage required to work about thirty sails, some, of course, with much more gear than a royal. But my principal object in attempting to describe the gear of the royal yard was to show what used to be considered fair work for an ordinary seaman in "crossing" it. The running-gear was of course already aloft; the standing gear and the sail were sent up with the yard, which was swayed aloft by a long rope running through the sheave-hole in the masthead from which the halyards were temporarily unrove. The voungster charged with the duty of crossing the yard goes aloft as it is swayed up, guiding it clear of the rigging as it jerkily ascends. Of course it is so secured that it rises vertically, and the work of keeping it clear of the rigging when the ship tumbles about is by no means easy. And of course the higher it ascends the greater is the motion, until, when it is high enough, it often taxes the utmost strength and skill of the smartest youngster to deal with it. As the upper yardarm reaches the topgallant-masthead he must put on the brace and lift for that side and cast off the "yardarm-stop," then, as speedily afterwards as possible, get the lower brace on, and the lift for that side also secure. As soon as that is done, he can, by casting loose the quarter-stop, allow the yard to be lowered in its proper horizontal position. It will now be supported by the lifts, so that he can fix the parral to the mast, and, those on deck having steadied the braces tight, the worst of his troubles are over.

He can now "come up" the yard rope by which the yard has been hoisted, and, letting it run down on deck, reeve the tye of the halyards in its place. Then he must secure all the gear to the sail properly, sheets, clewlines, and buntlines; loose the sail; sing out "Sheet home the royal"; "light up" the gear, and, when the sail is set, "stop" it loosely with one

turn of roping-twine, so that it will not chafe the sail by being stretched tightly over it, and come down. If he can do all that smartly and well in spite of the ship's uneasy motion, he is superior to two thirds of the so-called "able seamen" of to-day.

In the absence of a boy the O.S. is also, in an English ship, the lackey of the watch. The law in this respect is unwritten, and I have seen a sturdy youngster successfully appeal against it. There is really no reason why an ordinary seaman should be compelled to sweep up the fo'c's'le after every meal; keep the men's plates, knives, and forks clean; trim the lamp; make the cracker-hash. etc. But few indeed are the fo'c's'les where an ordinary seaman would be able to claim exemption from such servitude. And if he did get off from dancing attendance upon the men in his watch below he would almost certainly be made to do much of their legitimate work during the watch on deck. For that is one of the worst features of British ships-that owing to the peculiar want of discipline which obtains so much work that should be fairly distributed falls upon those who are either indisposed to grumble or are in a junior position.

For instance, in a sailing-ship, let us say, which carries no boys or apprentices, but an ordinary seaman in each watch, that young man during his watch on deck will certainly be expected to keep on the *qui* vive. If he have the good fortune to be commanded by a thoughtful officer he will probably be allowed to take a regular trick at the wheel in spite of the grumbling of the men, many of whom will be no better than he is, if as good. But in the great majority of cases

he must mount guard near the break of the poop during his watch on deck at night, solely in order that he may pass the word along to the sleeping men, or do himself any job that he can manage without disturbing them. When any work has to be done that requires the whole watch, the O.S. will do the lion's share of it (I have often seen the whole watch standing waiting for an ordinary seaman to do something because every one of them was too lazy to make a start and the young officer did not care to risk a row by sending any particular man), and when the pulling and hauling is done, the last "Belay" or "Well" has been cried, the men all slouch off to their corners and pipes or sleep again, leaving the O.S. to go the round of the ship and coil up all the ropes.

Of course I am not quoting this as a great hardship. I only mention it to show how peculiar are the notions held by foremast hands of the duties of boys and ordinary seamen. It was doubtless a very good training for the latter, this being made to do everything possible while the men looked on criticisingly, but it was often carried to cruel lengths. T have myself seen as well as experienced such treatment of an ordinary seaman in a ship's fo'c's'le, at the hands of men who certainly did not deserve to wield any authority, as was sufficient to make a lad wish himself dead,-worse, remember, for the ordinary seaman than for the boy. What do you think of a fine young man being compelled to wait for his food till every one else in the fo'c's'le is served, to find then that of his poor allowance he had been robbed of nearly half, and made to feel at all times that the

only object of his existence during his watch below was to be the body-servant of eight or ten men, to preserve before them a silent, respectful demeanour, and to consider himself honoured if any of them addressed him in any other than terms of opprobrium. Yet all this might be changed-has often been changed-in a moment. If one of the little kings, in a burst of magnificent rage at some dereliction of duty on the part of his slave,-the fo'c's'le not swept clean or a plate not washed quickly,-struck the O.S. a shameful blow, and the latter had the grit to return it with interest, following it up with a victory over his aggressor, thenceforward that fo's'c'le would not be a bad place for the hitherto-put-upon junior. But under the altered conditions of modern sea-service this fo'c's'le etiquette is being swept away, and soon will have as completely disappeared as the reluctance to sail on Friday has before the necessities of steam.

CHAPTER XXXII.

THE BOY.

AT last we have arrived at the very bottom of the social scale of 'board-ship life. The "Boy," as distinguished from the "Cabin Boy," has long posed as a hero of romance in sea fiction. We all know that boy. His marvellous deeds have inspired generations of home-bred youths with an unquenchable thirst for the sailor's life, where to quote one of the most charming of song-writers,—

"We watch the waves that glide by our vessel's stately side, "Or the wild sea-birds that follow through the air; "Or we gather in a ring and with cheerful voices sing; "Oh, gaily goes the ship when the wind blows fair."

How many youngsters, lured by the mysterious air of adventure pervading all things connected with the sea, have run from comfortable homes, and, after hardships innumerable, have compassed the goal of their desire,—have found shipmasters willing to take them to sea with him as "boys." And then; well, happily, the young seafarer soon develops a wonderful capacity for patient endurance of evils not to be avoided, and, if of the true grit, in time looks back upon his probationary period of suffering as a training

which he was glad to have endured. And the older he grows the more complacently does he recall the days when he learned to expect the blow first and the explanation afterwards; learned to eat what he could get with an appetite like an ostrich; could sleep in drenched clothing with a bare plank beneath him, and find all his consolation in the fact that soon he would be able to look down upon a newcomer with the lofty superiority of the full-blown mariner.

At the risk of being thought tedious I must repeat that for the ship-boy, as for boys everywhere else in our favoured land, a brighter day has dawned. Within the memory of middle-aged men a boy on board a ship was the butt, the vicarious sacrifice to all the accumulated ill-temper of the ship. To-day tales are told of the treatment of boys in "Geordie" colliers that are enough to make the flesh creep to hear. In those days it was the privilege of every man on board to ill-treat the boy, and if, as very often happened, the poor little wretch died under it,-well, what of it ?---it was only a boy. And the peculiar part of it all was that the brutes who did these evil deeds prided themselves that their actions were right and proper. There was only one way of training a boy,-with a rope's-end if it were handy; if not, a fist or a boot would do. but he must be beaten. One man whom I shall always remember-as smart a seaman as ever trod a ship's deck-beat me until there was not a square inch of my small body unbruised. Scarcely a watch passed that I did not receive some token of his interest in my welfare, and on two occasions he kicked me with

such violence that with all the will in the world to obey his orders I was perfectly helpless. My only wonder is that he did not kill me.

Yet when I left the ship he bade me quite an affectionate farewell, bidding me remember how hard he had laboured for my benefit, that every blow he had given me was solely aimed at making me more useful and fitting me for my duties. At the time I felt that he was lying, and that his treatment of me was dictated by that savage lust for cruelty to an unresisting victim that grows alarmingly with the yielding thereto, and that had I only possessed the strength and courage to retaliate he would speedily have altered his mind. But now, I do not know. I feel that perhaps he may have been sincere. Men were self-deceivers ever, and there are few self-deceptions more common among mankind than this-that cruelty is a splendid aid to education. But here let me say that cruelty to boys was far more common among the officers than the men. If a boy was willing, respectful, and clean, it was very seldom that he got beaten in the fo'c's'le. There was almost always a certain amount of public spirit which made for justice where half a dozen of even the roughest men were gathered together. Ι have known one exception to this good rule,-have experienced it in my own person,-where out of a whole crew of eight there was not one man enough to protest against the daily practice of cruelty to me. More than that, they encouraged a big boy who was getting the same pay as myself, but whose qualifications, except strength, were far inferior to mine. to pummel me too. Such a gang I have never met be-

fore or since, and I am very sure that the combination is uncommon.

The majority of the boys going to sea to-day unapprenticed are drawn from the training-ships, those good schools for the boy who is said to be unmanageable ashore. Coming from the wild and precarious life of the streets into such a ship as the Warspite, Arethusa, or Cornwall is such a revelation to a boy that for a little while he feels as if the bottom had fallen out of his world. For the anarchical condition, tempered by a salutary dread of the policeman, under which he has been living there is substituted law and order, cleanliness and discipline; for regular short commons and dog-like snatching of sleep comes good food regularly eaten, regular sleep at set times, regular play, and a sound prospect of benefits-very real indeed-for the patient worker in well-doing. Here the boy is taught all the essentials of seafaring except the actual going to sea, and in at least one instance that practical want is supplied in that a small squarerigged vessel is kept, which, with selected boys for a crew, under the charge of experienced seamen, plies up and down the river under sail. And it may truly be said that a boy who has passed a couple of years under such treatment as this is as well prepared for becoming a good seaman as it is possible for a boy to be.

But, strangely enough, the training is of very little real service to the lads when they go to sea to earn their living, for at once they find themselves under such conditions as they never before dreamed of. In place of the perfect discipline and stringent rules to which they have been accustomed, they find the greatest laxity prevailing. Rules are almost non-existent. In the training-ship each of them had his work allotted to him. When the signal was given he knew just what to do and how to do it, and when it was done he was done too. In the merchant ship the rigging is different and the method is different; and, instead of the boy's having any set duties, he is at everybody's beck and call and is given tasks to accomplish singlehanded that he has been taught to do man-of-war fashion,—that is, with so many hands that the work was done like magic, and in a few seconds a sail was furled or set, or a mast was sent up or down.

The boy cannot now keep himself clean and smartlooking. In the first place little time is allowed, and, in the next, there is not much water (in sailing-ships). No longer is it necessary that he should present himself at stated hours for inspection; no longer is every movement regulated as if by clockwork. He may be as slovenly, as dirty, as he lists; there is no one to enforce the keeping of the good rules he has so long been under, and that principally because those who bear rule over him know that such enforcement is impossible.

Thus the carefully instilled habits of order, regularity, and cleanliness are broken down at once, and in place of the smartly-clad, well-set-up youth who joined the ship there is presently seen a slouchy, shifty-eyed gamin who is a profound student of the art of "dodging Pompey," and who gets the well-deserved character from his shipmates of being "a young sailor, but a d—d old soldier." There is a

greater evil, if possible, than this impending. It is that all the careful training of the lad will presently be of no avail whatever, because, mixing freely with the crew, he is sedulously taught that the sea as a profession or calling is played out.

"Why, just look at it a minnit," says his Mentor. "You've never got no time to call yer own" (which is a lie, in an English ship at any rate); "yer everybody's dorg; ver fed wuss'n a pig; and what y' got t' look forrard ter ?---t' die in the wukkus. 'Sides, 'n Englishman don't like ter be mucked up all the time with a lot o' foreigners in one of his country's ships. Why, they looks down on us now 's if we wus a d-d lot of interlopers wot got no right to sail under our own flag. An' after all, wot are yer? 'Never nothin' but a dirty sailor all yer days. Nobody 'shore knows nothin' about yer, an' don' care neither. Y' aint got no vote ; v' aint got no 'ome ; v'r jest a bit of wreckage. Quit it, me son, an' git a job ashore, where, if you're a bloomin' scavenger, you've got yer pull on the vestrymin 'cause you've got a vote, an' if they don't look after your interests, w'y, out they goes,-see?"

This is the kind of pernicious stuff (all the more dangerous because of its half-truths) that the boy is regaled with, along with a great deal more that cannot be reproduced for reasons that need not be given; and again I say, without fear of being hauled over the coals for repetition, it is quite sufficient to account for the falling off in the numbers of young British seamen. But I feel certain that some such scheme as I have sketched out in the Apprentice chapters would be efficacious in preventing this wholesale waste of good

material. From the lowest class of seamen up to the second mate (except in the first-class liners) the evil to be battled with is the lack of continuous employment. It does not admit of the sailor acquiring any interest in his ship. Moreover there is ever dangling before his eyes the terror of being "outward bound," those two fateful words that convey such a mountain of meaning to every seafaring man. To be "outward bound "means that he is ashore penniless, dependent upon the kindness of a boarding-master for a little food. To prowl about the docks, boarding ship after ship in the remote chance of securing a berth, and to meet with black looks everywhere; to be told continually that he is a cumberer of the ground, a loafer, a fellow that might, if he would, get a ship, but prefers instead to hang around maritime liquor shops, keeping a keen lookout for "homeward-bounders" who will treat him, instead of being, as he really is in nearly every case, feverishly anxious to get back to sea again,-these are some of the greatest drawbacks to a deep-water sailor's career.

And they tell with tremendous force against the boy. Friendless and homeless in many cases, or with parents so poor that they can do nothing to help him, earning such small wages that he can hardly purchase necessary clothing, much less pay for board and lodging, and with all a boy's natural carelessness, he is sorely tempted to take the first job that comes in his way and quit the sea altogether as a means of livelihood. If he does so, even though the new employment may only last for a few months, he will hardly go to sea again. And no one, knowing the

peculiar difficulties of his lot, will be able to blame him.

I have often wished that it were possible to make lads who at school chatter so glibly about "running away to sea" understand how impossible it is to do any such thing nowadays, except, indeed, in such vessels as are the last resort of the unfortunate. Even after I had been at sea for a couple of years I found it difficult to get a ship on account of the competition of the training-ship lads, who, with their wellreplenished outfits and sturdy appearance, to say nothing of the persistence of the agent charged with the duty of getting them shipped, were readily accepted by skippers to the exclusion of outsiders. The "unfortunate" vessels of which I speak are those small sailing craft which still drag out a precarious existence in competition with steam. They may be seen in all our smaller ports, often lying disconsolately upon mud-banks at ebb-tide, or, looking woefully out of place, at some wharf belonging to a seaside place like Margate or Ramsgate. Oh, so dirty, so miserable they look. They only carry such rough cargoes as it does not pay to put in steam, and in consequence their freight-earning capacity is very low. That, again, reacts upon the equipment. Worn-out gear, wretched food, and not enough men or boys to do the heavy work, they provide a hard school for the young seaman. In them may still be found lingering some of the bad old traditions of half a century ago.

Yet among even these "poor relations" of the sea may be found varieties of grade. The great majority of them are coasters; that is to say, they do not leave the vicinity of our shores except for ports just across the Channel. In these, though the conditions of life are hard for a boy who usually does the cooking (?) at an open stove on deck, the food, if coarse, is much better than it is on vessels of the same kind "going deep water." There no relief can be found for months, while in the home trade it is but a few days from port to port, so that the ill-used or aggrieved youngster has but to step ashore and be off. And under the peculiar slipshod method of engagement and discharge in these vessels there is little danger to the deserter.

In my day there used to be regular houses of call for men and boys shipping in such vessels in London. One public-house of the kind I knew well, having when very young spent many a weary hour in its dingy taproom waiting for a chance of shipment. To it used to come burly skippers clad in pilot-cloth, with blue jerseys in lieu of vests, and fur caps. They first sought a stout, well-spoken man who was always hanging about there from ten till six, and told him their requirements. He knew what men and boys were available and where to find them, in the taproom or just at the door. He introduced master to man, and the first preliminary was always to feel the applicant's hands. If they were horny enough to satisfy the skipper that their possessor had not been too long out of work, a few questions ensued relative to wages, destination, etc. There was seldom any difficulty raised by the sailors. Poor fellows, by the time they got to waiting at the "King's Head" or "Arms" they were in no mood for haggling, and in this way wages

were often cut down very low for men, while I have seen boys going for five shillings a month. When the bargain was made a handsel of a shilling was given to the sailor. Whether he gave the agent anything I never knew, for although I waited there a long timesome three months off and on-I never got a ship or a barge there. Of course the skipper paid something to the agent, who looked fat and prosperous, but beyond the shillings I never saw any money change hands. And that money was always spent forthwith in the same manner: it was like performing a mystic rite. Two pots of "four" ale and two half-ounces of shag were purchased at the bar, and all the waiting hands, without being invited, stepped up and partook. It looked so strange to me, I remember, for many of the poor fellows looked as if a meal would have done them so much more good.

There were never lacking participants either: no matter if the taproom was quite deserted by candidates when the bargain was concluded, the appearance of the beer and tobacco always found them present, drawn thither, I suppose, by some mysterious influence. Another peculiar thing about that place was that men with money did not frequent it,—sailormen, that is to say. It had its own customers among the workers of Thames Street, but they never intruded upon the apartments sacred to the shipping interest.

It was all very sordid and pitiful, a side path of seafaring that must have lent itself to abuses through which many a poor misguided lad got away to sea and found no place for repentance until too late. I have only mentioned it here because in speaking of the boy I am painfully reminded of the great number of miserable little sea-drudges who are still to be found in these vessels, leading the hardest of lives and uncared for by any one. They are worthy of all sympathy, being so helpless, so unable to raise themselves. Their environment is as bad as it can well be, for, whether ashore or afloat, the company they are in is usually of a very bad kind. Now and then, of course, such a vessel will have a good steady seaman, who has an interest in her, for a skipper. A man like that will often carry his wife, and will endeavour to keep a respectable crew with him voyage after voyage. And as likely as not he will take an interest in the boy and try to make something of him.

Here, as far as the sailor *personnel* of merchant ships is concerned, my task ends. Several times during its performance I have felt that perhaps I should have done better to begin with the boy and end with the skipper, as being the more natural way. But I hope that what I have done, as well as the way in which it has been done, will be acceptable to shore-folks, for whom it is written. Sailors do not require any information of the kind.

And now for a few words on behalf of the men of iron who toil below.

CHAPTER XXXIII.

THE ENGINEER.

THESE concluding chapters should be written by an engineer. For no sailor, whatever his position may have been, is fully competent to judge of the work performed by the handlers of marine engines. Much less is he able to appreciate the position of those toiling helots of civilisation, the firemen and trimmers. The benefits of steam are vast and undeniable, but it is not good to forget that the service of steam to-day means a truly awful burden of labour and risk laid upon a large army of civilised men. I believe I shall carry with me the assent of every one who knows anything about the facts when I say that of all modern occupations there is not one so terribly exhausting, so full of peril, as that of the servants of the marine engine at work. The marvel of marvels to me is that men can be found to undertake the task so readily. And if this be true of the merchant service, as I hold it is,-plain unvarnished truth,-it is doubly true of the same work-or what answers to the same description of work-in the Royal Navy. For there the manifold complications of ship-propelling machinery are immensely more intricate, the conditions under which the men labour are far more arduous, and in addition there is always the fighting risk superadded.

But I must not stray into the fighting line of en-

gineering: I have perhaps said more than enough on that subject recently. Nevertheless I honestly believe that I have only been able to put in the tamest and most colourless way what I feel about these men. When I say that such a chapter as this should be written by an engineer, I mean that only an expert in that wonderful profession can fully appreciate the difficulties and dangers thereof. Outsiders may, as I do, admire and wonder, but we cannot fully enter into these things as an engineer can. The country badly needs a writer on engineering matters who knows his business thoroughly, and at the same time is able to tell the people who don't know what marine engineering means. No amount of sympathy and admiration can make up for lack of expert knowledge, yet, as far as it is possible. I feel constrained to draw the attention of my countrymen to the work of the men who, far below the water-line, amid the clanging chorus of their gigantic slaves, bend watchful brows to their mighty task, who for the four hours of their watch on deck (see how the sailor crops up !)-no, their watch below at work-know not one moment's respite. Vigilance unremitting is theirs; the price of effective manipulation must be paid, for no Eastern Afrit was ever more jealous of the power over him held by the enunciator of the master-word than is the high-pressure marine engine of the governance of the engineer.

The casual observer glancing down into the engineroom of a seagoing steamer is apt to imagine that the men who wait upon the engines have an easy time of it. He is inclined to think that once the engines are started—" Full speed ahead" sounded—watch after

watch need only sit and look at them doing their work. Nothing could well be more false, while nothing is more natural. For engineers, like the best of workmen everywhere and of every sort, make no fuss about their work. Quietly, without ostentation, they tend their engines, their trained ears noting the faintest change of tone in the uproar which sounds so chaotic to the ear of the outsider. Every single part of those engines, the amount of strain that it is bearing, the need for nursing, lubricating, watching, that it has, is in the mind of that quiet, nonchalant man who steps cat-like into the thick of the flying steel cranks, and, accommodating his movements to the swing of the thrusting shafts, feels their temperature, the amount of lubricant they are carrying, and regains his perforated platform with an air of indifference, as if he had merely looked over the side from the deck instead of having been on the most intimate terms with an unspeakable form of death.

Perhaps the most noticeable feature about the marine engineer in the merchant service is the high respect in which he is held by every one. The merchant seaman instinctively recognises in him a man whose attainments are not merely theoretical but eminently practical. Every merchant seaman realises that with the engineer has arrived a new stamp of seafarer whose stern stress of duty cuts him off from those enjoyments common to all seamen. For him there is no meditative contemplation of the glories of the tropical night, when in the midst of the mighty solitudes of the untainted ocean man draws near to the great heart of Nature, feels himself akin to the stars and the wind and the waves; no heartuplifting view of the apocalyptic splendours of the dawn, when the grey shadow of night melts away before the palpitating glow of the approaching sun; no speechless delight in the indescribable panorama sweeping past when the swift ship skirts closely the wonders of many shores. At such times the engineer and his crew, deep in the bowels of the ship, are shut in from all sights and sounds and perfumes save those of the engine-room and stokehold, which are akin to those of Tartarus. And when, through the black night, the vessel plunges madly athwart the raging seas, remorselessly driven against the combined forces of wind and wave and current, the engineer works on, all depending upon him. Then do his anxieties enormously increase, as at one moment the whirling blades of the propeller are buried deep beneath the surface, and their thrust vibrates through every fibre and rivet of the ship, and the next, by a downward plunge of the vessel's head, they are lifted into the air, spinning madly with a frightful acceleration of speed on their release from the element they have been toiling in. Then see the engineer erect upon his iron platform, facing his Titanic charges, throttlevalve in hand, and steady eye fixed upon index glasses, every sense on the alert, muscles tense to shut off the supply of force sooner than the "governor" can act, so that engines shall not be torn from their foundations by the fearful strain imposed upon them through the sudden taking away of their work while the driving steam is still bursting in through main feed and slide valves.

No other engineering in the world can for one moment compare in vital importance with this. The conditions are so onerous, the complications are so many, the need for watchfulness is so great, that a new race of men has been bred to compete with them. The engineer ashore may-and does-have all his repairs done by other people: the engineer at sea must, in the very nature of things, be not only the prince of engine-drivers, whose care of his charge under the most severe tests-not applied occasionally but continuously-is beyond all praise; but he must be ready at any moment, by day or night, to undertake the most radical repairs. With improvised adjuncts he must undertake on the instant to do such things with masses of steel that if they were described would sound impossible except to the large room and full equipment of a first-class foundry ashore. Not only so, but the work must be done under conditions of heat, imperfect lighting, and cramped space that render the duty enormously more difficult. Yes; it must be done, because if not-well, they have taken away the steamship's masts, so that the sailor, even with the best ability and good will in the world, can hardly get steerage way on the vessel by means of sails, and then there is a great ship, perhaps with an immense perishable cargo and a large number of passengers, lying like a log upon the ocean, at the mercy of currents that are most likely to be drifting her away out of the track of ships into the ocean solitudes that are to-day, owing to the method of following beaten tracks which is so universally pursued. more solitary than they have been for centuries.

The performance of duties like these call for the highest qualities of mind and muscle ever possessed by men. The forces dealt with are so terrific, the dangers so great, that a weak man could not so much as face them, much less perform the wonderful pieces of work that are necessary in opposition to them. Occasionally a curt paragraph appears in the shipping papers conveying to underwriters and owners the information that the steamship So-and-So, long overdue, has arrived, her broken-down machinery having been repaired by the engineer. Beneath that brief intimation lies a volume of tragic story, the dauntless conflict of man with fire, steam, and steel, and his final triumph over them. But these stories are never told as they ought to be. Some day perhaps an engineer writer will step forth and unfold to an admiring world the Iliad of the engine-room. May I live to read it.

For the evolution of a marine engineer it is first of all necessary that he serve his apprenticeship in a "shop" where marine engines are made. This is essential, and a moment's consideration will convince any one that it must be so. Then, having mastered all the details of engine construction, if the aspirant has a desire for the sea, he will in some way, of which I do not pretend to understand the details, obtain a subordinate position in an engine-room of some seagoing steamship. Here he will become conversant with the duties expected of him as an engineer in charge, and will moreover devote all his spare time to scientific study in order that he may be fit to pass his examination in theoretical engineering. And if he shows himself worthy of the position there will be little doubt that, having passed the required examination before the Board of Trade officials appointed for that purpose, and received his second engineer's certificate, he will find little difficulty in getting a berth as junior engineer. His foot once upon the ladder the ascent is easy. There is only one more examination to pass compulsorily, that of chief engineer, although there is, as in the seafaring branch, a voluntary examination which all self-respecting engineers will take,— "chief engineer extra." Now he may rise to be chief engineer of the *Oceanic* or the *Lucania*, with twenty or thirty engineers under him and a whole host of firemen and trimmers.

It would ill become a mere sailor like myself to say anything about the polity of the engine-room, even if I had ever been in a position to study it. No doubt there are occasional hitches, instances of petty tyranny, of jealousies, of hindrances to getting on, since, with all their virtues, engineers are but human. But I do not know. I know that except in the way of official routine, such as the control of the engines from the bridge, the officer of the watch has nothing to do with the engineer at all. The chief engineer is responsible to the master, and to him alone. Only the master can punish, and all cases of insubordination, etc., among the "black gang" must be reported to him. The master is in supreme command and knows quite well what is due to the engineer. More, he seldom fails to grant him his full due. But I should be sorry to sail in any steamship where the officers took upon themselves to meddle with engineering matters. There would be

much unpleasantness, from which the officers would suffer most. In brief, the engineer's importance is recognised.

The engineers live in a little world of their own. They have their mess-room, with a steward to wait upon them, and the best food the ship can supply. Their accommodation, too, is good; and their pay,well, it varies much with the class of ship, but taken all round it is much better than the officers. And they are British to a man. I would not give much for the peace of a foreign engineer who by any chance found himself in a British ship's engine-room. The engineers, in this respect enjoy peculiar advantages. Some people begrudge them their unique position in the seafaring world and profess to see danger ahead because of it. I do not. I confess that my feeling with regard to the engineer is, that, remembering the awful stress of his duties, the way in which he is not only cut off from home delights like the sailor, but is also debarred from participation in the real joys of the sea, he deserves every advantage in pay, position, and prospects that he can obtain.

The unique position he holds among seafarers of which I speak is that he is in close touch with powerful trade unions ashore. Since every engineer must learn his business ashore before going to sea, he becomes a member of the hierarchy of mechanical workers. Let him go to sea for never so many years, he must remember the workshop where he received his training; he has numbers of associates and relatives who are still working ashore, and who, in safeguarding their own interests in parliamentary ways,

are all unlikely to forget him. They are his proxies, can speak for him, can use their votes on his behalf. Presently we shall find this great organisation having something to say about the prototype of the mercantile marine engineer in the Navy,---the "Engine-Room Artificer." The Admiralty in its wisdom has chosen to train up the naval engineer officer itself, so that he shall be free from the influence of the workshop and shall become a class apart from and above the mechanical engineer. But in the doing of this they have been compelled to build up another corps to do the work. They are known in the Navy as "E.R.A's" (Engine-Room Artificers), and it may be said without any fear of contradiction that, as far as ability and experience goes, they are always the equals and often the superiors of the merchant engineer. Indeed their period of service and the knowledge required of them before they can become chief engine-room artificers in the Navy is much greater than the Board of Trade require for the granting of engineers' certificates for the mercantile marine.

Then comes the great anomaly, the immense gulf that divides the two classes of men. As I have said, the merchant-ship engineer knows no superior on board the ship except the master. He deserves the best treatment, the best pay, and the greatest respect, and he gets them. His work cannot be made lighter, it must always be full of danger and toil; but all that can be done by way of mitigation of these onerous conditions is done. On the other hand the E.R.A. in the Navy is a nobody. His highest pay is trivial as compared with his congener in a merchant ship; he

gets no respect from anybody ; the youngest officer in the ship is his despot, whom to answer back means degradation and loss of pension; and he is berthed and fed as a fireman is on board a merchant steamer, so that he continually smarts under a sense of injustice and looks with longing and envious eyes upon his chums who, wiser than he, have gone into the merchant service. More than that, he knows full well that, as there are no reserves of engine-room artificers, there are not nearly enough of them properly to man the ships that are now afloat. In case of an outbreak of war with a European Power, huge bribes would be offered to merchant ship engineers to come and help in the Navy. He knows, too, that not one of them would come without being rated as an officer and receiving all the deference due to an officer in Her Majesty's service. And so he may find himself, after vears of the most arduous experience, ruled by a nephew who was a babe in arms when he served his time, who has all his life been engaged in one steady occupation on the same kind of engines, never hurried, never bullied, and probably with a sea experience of one third of his uncle's, the "E.R.A."

Therefore, because of these reflections and this knowledge, the E.R.A. is continually warning youngsters from the home shops not to enter the Navy by any means. The merchant service is the place for them if they want to be treated properly; the Navy is a place where they will never be anything else but a "dirty Tiffy," looked down upon by the youngest bluejacket, and liable to be docked of many years hard-earned pension for pointing out a mistake to an

officer who, instead of accepting expert information gratefully, reports them for insolence.

I trust that these remarks about the E.R.A.'s may not be considered malapropos, remembering the great importance of the subject, and remembering, too, that in the engineer of to-day we have not a mere mechanic, a man with no thought beyond his day's work and the receipt of his wages. I am afraid that the importance of the engineer, especially at sea, is insufficiently recognised by non-engineers. Every class of the community is benefited by the work of the engineer, and in modern sea-traffic he is, as Kipling has finely said, "the king-pin of the ship." He cheerfully takes upon himself a burden of toil and danger such as the ancient world never knew, --- takes it too with the full consciousness of what he is doing, and holds himself ready at any time to sacrifice his body for the safety of those whom he is serving. The least that we can do who are thus served is to recognise his value to the full.

For my part I look upon the modern marine engineer as the true nineteenth-century hero. Some day I hope that a roll of honour will be drawn up, giving a list of heroic deeds performed by engineers out of sight, unostentatiously, just as a part of their duty. It would be an inspiring record, and from no source would more details be drawn than from the engineroom in the Navy, where, as has been abundantly proved, the engineer is thought but little of,—so little, indeed, that all his efforts to obtain some meed of official recognition are at present in vain. Good for us that this does not obtain in the merchant service. There the engineer is estimated by his shipmates at his proper worth.

CHAPTER XXXIV.

THE FIREMAN AND TRIMMER.

IT is a standing mystery to me however men can be found who are willing to become the Firemen of marine boilers. Use dulls the edge of apprehension, of course, and in time the mind refuses to be impressed by the sense of imminent danger. Whether on the battle-field or in the stokehold, this is so, but, apart altogether from that, the nature of the work is such that I always wonder what the state of a man's mind can be who is willing to undertake it, or who, having undertaken it, remains in such a business. The engineroom of a large steamship is a terrible place, with its infinite suggestions of incalculable forces exerting themselves in orderly ways under the steady control and guidance of man; but there is a sense of exultation, of high satisfaction in the realisation of their own powers, that goes a long way toward compensating the engineers for the dangers they confront and the discomforts they undergo; and where, as in the mercantile marine, their high abilities and undaunted courage are fully recognised, their treatment in pay, provisioning, and accommodation as good as can be got, they have also something which atones for a great deal of physical suffering. Yes, I can understand a man choosing to become a marine engineer. But a fireman! The very thought of such a life is terrifying. The

sailor in his watch on deck at night is seldom called upon to do anything but stand quietly at the helm or on the lookout. If he be a man of any observation he may hold sweet communion with Nature, may meditate in the sweetest solitude in the world, gazing out upon the ever-beautiful face of the deep. In any case he may smoke or doze undisturbed by any call to duty except some shift of wind calling for trimming or setting sail. It is a pleasant, mellow time for the sailor,—the night watch at sea.

The fireman is called with the sailor at eight bells. Hastily putting on his shirt, trousers, and boots, he descends by many iron ladders past grim walls of iron, that glow with fervent heat and give out a vibrant hum telling of the pent-up power within. Down, down he goes until at last he stands upon an iron floor slightly raised above the very bottom of the vessel. Over his head there is a circular opening down which comes a steady draught of cool air; that is, if the ship be in regions where the temperature will allow of the air being cool. At any rate this air is fresh. It is conducted below by the intervention of those huge bell-mouthed ventilators which are so prominent a feature of every steamship's deck equipment. In front of him towers the face of the boiler that now claims him as its slave for four hours. It is ornamented by divers strange-looking taps and gauges and tubes with the use of which he must be familiar. And it has a voice, an utterance, that, while not loud, is so penetrating that soon it seems to a novice as if it were reverberating within his skull. It is the speech of imprisoned steam that finds no outlet by any channel except the one provided for it, the complaint of the awful giant who is rending at every square inch of his prison walls in the one supreme, never-ceasing effort to escape. It is utterly disregarded by the fireman, and it is doubtful, indeed, whether he even hears it or is in any way conscious of it, for it is more to be felt by the whole of the nerve centres than merely through the ears. His concern is with the three vast throats that occupy the lower third of the boiler. There is no time to be lost. Seizing a shovel he lifts with it the latch of one of the doors and flings it wide open with a clang. The ship may be rolling furiously, tumbling to and fro with that peculiarly disconcerting motion that seems to a landsman the subversion of all principles of uprightness, but he must balance himself somehow. With legs spread wide apart he stands upon that slippery iron floor and stoops and peers within at the roaring cavern of almost white-hot coals. His trained eye can see just how they are burning, where clinkers are forming, whether perfect combustion is going on or certain expert manipulation is necessary in order to make it do so. If all is satisfactory he shifts his position slightly sideways so that he can swing his shovel on one side to the bunker door, at the sill of which a heap of coal is lying, fill it, and then, with a peculiar stroke, send its contents broadcast over the lambent surface of the furnace bed. The mere shovelling of coal into a fire has no relation to the careful, intelligent stoking of a steamship's furnaces, as engineers are never weary of saying. There is as much difference between a good fireman and an incompetent one-although the latter may work

far harder than the former—as there is between a good and bad carpenter or any other skilled worker.

When I was lamp-trimmer in the Australian Steam Navigation Company's employ on the Australian coast I was shipmate with an old Scotch fireman whose invariable practice it was to get most methodically drunk every time we left port. So drunk did he always become that he could not stand, much less walk. But, crawling to the fidley, sometimes on hands and knees, he would somehow get down into the stokehold when his turn came, and there, balancing himself in some mysterious fashion, he would feed his fires. No sooner had he slammed to the furnace door than he would collapse, his legs bending every which way, as if they had been made of indiarubber. Yet the chief engineer used to declare that "Andra" could keep steam better drunk than any other firemen in the ship could sober. I have known him, after a watch of firing, to be still so drunk that he could not climb on deck, but lay huddled up in one corner of the stokehold like a heap of rags, utterly oblivious of the work going on around him.

It must, however, be remembered that pitching coal into the furnace, though it is the principal work of a fireman, does not by any means complete his work. After he has been "firing" a certain length of time he perceives the necessity for "cleaning fires." He has been carefully raking and poking his fires at intervals, so that no clogging of the bars shall hinder the free upward draught, and this operation, performed with long tools called a slice, a rake, and a devil, is very severe. The operator must stand very close to the furnace mouth and peer within at the fervent glow while he searches the vitals of his fire as quickly and deftly as may be, lest the tell-tale gauge shall reveal to the watchful engineer that the pressure of steam is lessening, bringing him into the stokehold on the run to know what the all-sorts-of-unprintable-words that particular fireman is doing. But this is only the merest child's-play to cleaning fires. When that time comes the other furnace or furnaces (each fireman has two or three under his charge) must be at the top of their blast, doing their very utmost. Then the fireman flings wide the door of the furnace to be cleaned. plunges his tools into the heart of the fire, and thrusts, rakes, and slices until he presently, half-roasted, drags out onto the stokehold floor a mass of clinker. This sends out such a fierce upward heat that it must needs be damped down, the process being accompanied by clouds of suffocating steam-smoke. But there is no time to be lost. Again and again he dives into the heart of the furnace, each time purging it of some of the deadening clinker, until at last, with smarting eyeballs, half-choked, half-roasted, and wholly exhausted for the time, he flings a shovelful or so of coal upon the now comparatively feeble fire and retires to call up his reserve of strength.

And this work of course must go on continuously, no matter how the vessel is behaving, even if, as often happens, there descends occasionally from on high a flood of sea-water as waves break right over the labouring ship. The fireman must, to be efficient, nurse his fires, keep them clean, and hand them over to his successor in first-class going order, with the steam up to its ordered pressure, and failure to do this is provocative of bad language and much ill feeling. Surely it hardly needs pressing upon the reader that such an occupation involves a truly awful strain upon the human animal, especially in tropical climates. The amount of strain has been officially recognised in the arrangement of firemen's watches. Instead of getting four hours on and four hours off, as do the sailors, they have four hours on and eight hours off, so that the exhausted frame may be able in some measure to recuperate. And in addition, wherever it is possible to do so, they get somewhat better food. I do not know certainly whether the institution is general, but I have been in several steamers where at supper time the firemen received a mess from the galley called the "black pot." It consisted of the remains of the saloon passengers' fare sometimes made into a savoury stew, sometimes simple of itself, according to its component parts. But it was looked upon as the firemen's right, and no sailor ever participated in its contents.

It has probably occurred to the reader before this to ask the question how, if the fireman is so hard worked in the stokehold, and the space there be so limited, does he manage to get at the truly enormous quantity of coal that must be required to feed those devouring furnaces? The explanation of this brings us to the lowest deep of all on 'board-ship life to-day. The providing of the coal for the use of the firemen is the duty of the Trimmer, the nature of whose work is so terrible that he should receive the sympathy of every kindly man and woman whom he serves. The coal is kept in vast magazines called bunkers, giving onto the stokeholds by means of watertight doors. In merchant ships these bunkers are placed so as to be most convenient for the transmission of coalto the stokeholds and are as little subdivided as possible. What their capacity is may be imagined from the fact that some ships require 3,000 tons of coal for a single passage, it being consumed at the rate of between twenty and thirty tons per hour. At the commencement of the passage the trimmer's work is comparatively easy. The coal lies near the outlet, and by a little skilful manipulation it is made to run out upon the stokehold floor, handy for the fireman's shovelling. But as the consumption goes on, and the "face" of the coal recedes from the bulkhead, the trimmer's work grows rapidly more heavy. His labour knows no respite as he struggles to keep the fireman's needs supplied. And there is no ventilator pouring down fresh air into the bunker. In darkness only penetrated by the dim light of a safety-lamp, in an atmosphere composed of the exhalations from the coal and a modicum of dust-laden air, liable at any moment to be overwhelmed by the down-rushing masses of coal as the ship's motion displaces it, the grimy, sweat-soaked man works on. By comparison with him the coal-hewer in the mine has a gentleman's life. Darkness and danger and want of breath are his inevitable environment. What wonder is it that he becomes a hard citizen? The fact is that no man with longings for decent life would or could remain in such employment. Only those who by carelessness and disregard of all that for the majority of us makes life worth living stay in it and enable the ocean traffic of to-day to go on.

It is absolutely impossible to exaggerate the miseries of such a mode of life, made necessary by the imperious demand for swift travel. Yet, severe as is the lot of the coal-trimmer in an ocean liner, it again is comparatively easy when compared with the lot of the second-class stoker in Her Majesty's Navy. For these another set of conditions comes into play. The necessity for using the coal as a means of protection from shot and shell leads to the bunkers being subdivided into a host of "pockets" holding but a few tons and communicating with each other deviously. The work of getting the coal passed from one to the other of these is far worse than anything of the kind in the merchant service, as much worse as is the firing under forced draught for a Belleville boiler than the steady supply of fuel to a well-equipped naturaldraught stokehold of any of our great merchant steamships, where Belleville boilers-thank Godwill never be used. And coming deeper still there is the firing and trimming of a "destroyer." That occupation defies any attempt to describe it. No words could give an adequately forceful idea of what the firemen, trimmers, and E.R.A's must endure in order that a vessel no larger than an above-bridge steamer shall be driven by engines of five thousand horsepower at the rate of thirty miles per hour. We do not seem to have reached finality yet in this direction, but I should think that, since human endurance has its limits, there must of necessity be a halt soon, from the utter impossibility of finding human beings able to live and work under such awful conditions. When you find the long quivering hull of a destroyer-only

a plate of steel not much thicker than a crown-piece keeping out the sea—packed full of boilers, whizzing machinery, and coal, the tiny air-space left containing something of which one inhalation would make you or me, reader, feel as if we had been suddenly strangled, and the heat greater than one would find in the hottest room of a Turkish bath, it seems time to consider whether there can be any justification in compelling our fellow-creatures, whom the need for bread has driven to accept such employment, to endure imprisonment like that, let alone work in it.

It is somewhat comforting to know that the exigencies of peaceful travel, severe as they are undoubtedly, do not require such suffering as that from their servants. Of course there are times-such as upon the outbreak of fire or the sudden springing of a leakwhen the toilers below are literally between the devil and the deep sea. Also in the case of a boiler explosion or a sudden break-down of machinery in full career, when the danger and attendant suffering are very great. But then we have all to face dangers at times in burning houses, railway accidents, and so on, which come so seldom that we do not lose any sleep in anticipating them. Therefore we do not reckon the possibilities of calamity among the drawbacks to a fireman's or trimmer's business. It is the steady stress of such conditions of labour which is to be deplored.

Before the "black watch" below can be relieved there is always a duty to be performed that makes no unfitting climax to the preceding tale of toil. It is "Ashes up." Some steamers have been fitted with a contrivance for obviating this piece of hard work,-the fitting of a sort of valve in the ship's side or bottom through which the ashes and débris of the fire can be blown into the sea. These, however, are few. The usual way is for the ashes to be filled, down in the stokehold, into long iron buckets, just as much, when full, as a strong man can lift. Some of the trimmers go on deck (how sweet the sea-air is after their long sojourn below) and, sliding open a door in the tube of one of the ventilators, discover there a winch. The chain of this winch runs down into the stokehold, where it is hooked on to the ash-bucket. The trimmers on deck heave away with all their might (for when their task is ended they may go below), and when the bucket reaches them they snatch it and carry it to the ash-shoot, where they dump its contents overboard. In some very-well-found ships there is a small steam winch for doing this work, but usually it is performed as described, and a heavy piece of business it is, involving the raising of several tons of ashes from the bottom of the ship.

Here I must leave the fireman and trimmer. I hope that engineers and their crews will forgive me, being a sailor, for having had the hardihood to say anything about them at all. They know very well the prejudice that even now exists against them in the minds of most sailors, and they will probably look closely into what I have written for some sign of sneering depreciation. But they will not find it. My sympathies are most fully with them. My admiration for them is great. And I think that, as regards the firemen and trimmers, their work in tropical seas is so utterly unfit for white

men to do that, in spite of the hardships attendant upon loss of employment at first, it would be a good thing if stokeholds were entirely manned by negroes, who from their constitutional experience of heat must be far better fitted to endure the conditions of the stokehold. Many southern-going ships carry them now. I should not be sorry to see them the rule, and my countrymen doing something better.

CHAPTER XXXV.

CONCLUSION.

AND now, approaching the conclusion of the whole matter, the end of what I feel to have been an important task while the way in which it has been performed is an open question, I ask myself: "What is likely to be the effect of this book upon the minds of those for whom it has been written? Will they think that the British mercantile marine is a profession which they should exert all their influence to keep their young friends and relatives out of, or will they feel, as I do, that in spite of all its obvious drawbacks it should be by no means neglected as an opening for enterprising adventurous youngsters, the right stuff of which British sailors are made?"

I have been compelled in truth to say many hard things of the merchant service, but there is such a thing as speaking the truth in love. And as I love the merchant service with all my heart, and desire most earnestly to see it flourish and prosper more and more, I am the more anxious that nothing I have said will be taken as spoken in a carping or pessimistic spirit. I want to see the mercantile marine purged of the foreigner, not because I hate the foreigner of any nation, but because this peculiarly and particularly maritime nation of ours cannot afford, in the face of the undoubted hatred manifested toward it by practically every Continental people, to allow the life of its citizens to be dependent upon the good will In spite of what not only Continental of aliens. writers but many of our own scribes may and do say about our unctuous hypocrisy, there can be no doubt that the chief characteristic of the British nation today is its careless magnanimity. Warned by innumerable writers of the risks we wilfully expose ourselves to, we go on, with a good-natured shrug of the shoulders, in the same reckless fashion. We welcome as if we were a new colony with millions of acres undeveloped, with all our resources at their springtide, a continuous flood of aliens to our shores and in our ships. We not only give them all the advantages we ourselves possess, but actually strain a point wherever possible in their favour. Finding no reciprocity anywhere, no feeling of kindliness for all our generous treatment of aliens, we are unmoved, nor is our policy, or want of policy, altered. And this grand air of indifference, which is not assumed, but real, is to the last degree galling to our Continental neighbours. Their attitude becomes daily more difficult to understand. Rejoicing to see how we are, as they firmly believe, exposing all our most vital, most vulnerable points to their attack in matters of both war and peace, they are yet almost frantic with rage at what they are pleased to call our abominable insular insolence, our refusal to be frightened of them. I do not pretend to justify our insouciant attitude ; I only note its universal presence.

In the matter of our mercantile marine I feel sure that we are heaping up for ourselves a most awful

mountain of disaster in the way in which we are allowing it to become really a foreign service. One thing we could do, and should do at once,-apply the same rule to the merchant service that is in force in the Royal Navy. There no alien, unless he has become naturalised, can hold any post whatever. It sounds like a small reform, but it would have, I am sure, the most far-reaching effects. At present it is quite possible-indeed it will be found actually the case in some instances-for a British sailing-ship to be wholly manned by foreigners from the master to the boy. Foreigners in steam are mostly confined to the crew, and, as I have said before, I know of no instance where foreign engineers are employed in our ships at all. This is because, in the first place, our home-bred engineers are the best in the world; and, secondly, they have behind them the support of a great trade union that, although I do not suppose many seagoing engineers are active members of it, would speedily make its voice heard and its influence felt if any attempt was made to bring in foreign competitors.

For reasons which I hope I have made abundantly clear in the preceding pages, such support cannot be found for the foremast hand. But the officers might do much more than they are doing. There are several societies for the mutual help and defence of mercantile marine officers, some doing excellent work, others doing scarcely anything at all. I will not particularise, for that would do no good. I will merely say that if all these societies would amalgamate, would all pull together and enlist the sympathy and support of shipmasters and officers, retired as well as active, they would form a body extremely powerful in their influence on behalf of the best interests of their profession. Such a body, composed of serious, thinking, wellinformed, and trustworthy men in full touch with the subject, could do more in one year for the upraising and nationalising of the merchant service than will ever be done by isolated efforts, however earnest. For their own sakes they would not neglect the foremast hand; in the best interests of the service they could not. Even by the present local efforts of some of these societies much good has been done, enough to show what might be done were they all united.

As to the ships themselves, perhaps enough has been said already to indicate the transition stage through which we are passing. For while it is undoubtedly true that the sailing-ship is doomed to extinction in the near future, at the present day there is still an enormous amount of sailing-tonnage afloat. Thousands of good seaworthy sailing-ships still come and go between distant shores, doing good work not only in earning profits for their owners, but in rearing sailors for the British mercantile marine. But we are not building any more to replace them. We have come to the conclusion that the future of sea-traffic is a to the steamer. Doubtless many shipowners, in the present abnormally inflated state of the coal market, are sighing over the fact that they are so dependent upon the black dirty stuff for the due working of their ships, and vainly wishing for the days to return when the clean, free winds furnished all the motive power needed. But we cannot go back again to sail. Even the Norwegian timber droghers are taking to

steam, and that is a portent indeed. It is the beginning of the end. The end will come, for all sailingships still making long voyages, with the opening of the Panama Canal. Then at one fell swoop the 'Frisco trade in grain and the South American trade in nitrate will pass into the hands or holds of the steamships. Huge cargo-carriers able to stow 8,000 or 10,000 tons away with ease will go lumbering steadily down the Gulf and through the Canal. They will range the western seaboard of the Americas, sweeping into their capacious maws every ounce of cargo and stimulating production in an amazing way.

Presently also will come the petroleum-propelled or electrically-engined ship as the carriage of coal becomes more and more of a burden while its price steadily rises. Meanwhile the inventive genius of America will surely find some way of re-creating for herself a splendid mercantile marine. I cannot think that she will always be content to see all her vast carrying trade over-sea practically in the hands of Britain and foreigners. At present it seems to be evident to all except the average American that such efforts as have recently been made with that object in view are foredoomed to failure. Only one thing is required for the rehabilitation of the American mercantile marine, and that is, that owing to the rapid filling up of all uninhabited land on the American continent, the teeming millions along her seaboard shall turn their earnest attention to the possibilities of money-getting that there are in ship-owning and ship-sailing. Then they will insist upon some reasonable laws being passed that shall help, not hinder, the expansion of American sea-traffic, and the thing will be as good as done.

That, however, will require some considerable time yet. Meanwhile the sailing-ships—wooden ships too —will probably linger longest in our North American colonies, but they too must disappear. Already they are feeling the pinch very sorely, with economically run tramp steamers cutting them out everywhere. This is obvious now, when the thrifty Norwegians are running tramp steamers in lieu of the ramshackle old craft with which they have so long monopolised the lumber and ice trade. To a seaman the spectacle of steamers in the home ports discharging ice comes as something of a shock, for he remembers what class of vessels have always been used for this,—perhaps the roughest of all the carrying trades known.

But the great work to be done is to disseminate popular information with regard to maritime matters; to burn into the minds of our people at home what the merchant ship means to them; to make the villager understand that the cheap and abundant food which may be purchased even in remotest inland hamlets has been brought thus to his door from the other side of the world by the unceasing strenuous labours of seamen and the sleepless enterprise of shipowners. I look earnestly for the day when every newspaper in the kingdom will be considered incomplete without its column of readable shipping matter,---true tales of latter-day daring, of courage as high as any manifested in the attempt to destroy life in battle ; when the British seaman no longer feels that he is as completely isolated from the thoughts and sympathies of his countrymen

as if he were an inhabitant of another planet; and when the British man-o'-warsman, whether he be bluejacket or stoker, shall know of a truth that his friends at home realise what he is doing during his long absence from home,—how he, for their sakes, in order that the steady stream of food-bearing ships from prolific lands far away shall never cease by day or by night through the years, keeps sleepless watch all round the world.

Let no one think that this is a small matter. The acquisition of knowledge like this is not only of the highest importance in itself, but it will bring with it a vast amount of cognate information that now is much neglected. Geography will become what it should be -a popular science-because the immense value of it will be recognised. Economical science will also assume an interest which it has long lacked for all but the minutest percentage of fairly well-educated people. Politically such an education of the people will be of the highest value, preventing them from being led away by clap-trap and jargon, and enabling them to understand why our country has risen to its present enviable height of prosperity, and how essential it is to the well-being of every man, woman, and child in the community that the peaceful flow of over-sea traffic shall never be interrupted.

Beyond and above all this there is the liquidation of the debt due to the sailor, the recognition, in practical ways, of the fact that without him we should not merely be without at least half of what he has taught us to look upon as the necessities of life,—necessities which less than a century ago were looked upon as the highest luxuries; but that we should be a feeble population of slaves groaning under the iron rule of some military Continental despot, who would rob us of our very blood and marrow, and give us in return leave to live that we might toil for him and his satraps until, early worn out, we were flung aside to die and obtain that liberty in death that we were denied in life. We want to atone as far as we may for our long neglect, through ignorance, and by our united intelligent efforts to show that at last we have awakened to the fact that in our mercantile marine we possess the most magnificent heritage ever built up for a free people by the courage and endurance of its sons.

