

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

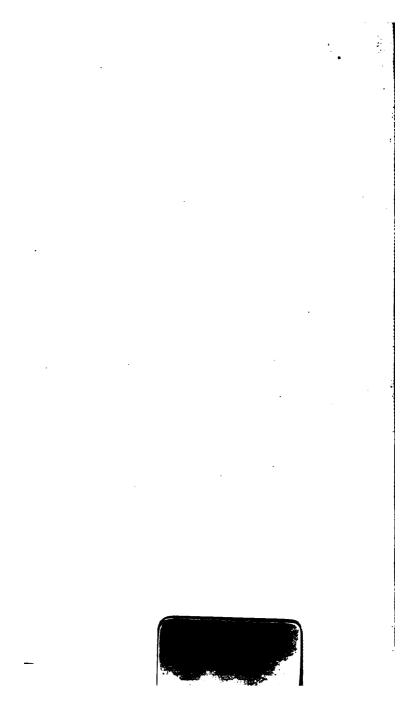
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

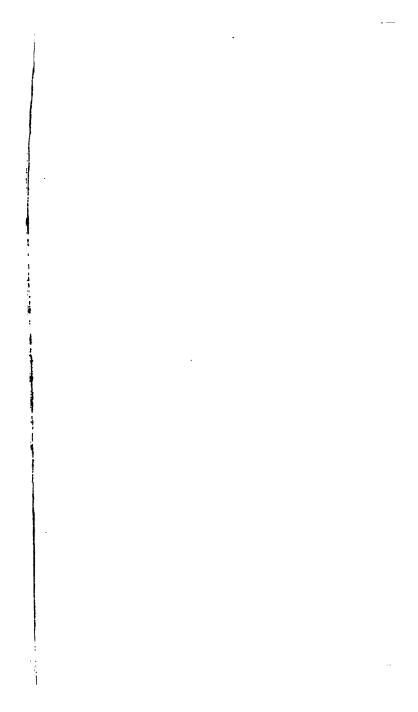
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/



J

Bucknowy MM2 

THE ARTS

OF

ROWING AND TRAINING.

-

THE ARTS

OF

ROWING AND TRAINING,

WITH AN APPENDIX

CONTAINING

THE LAWS OF BOAT-RACING, &c.

Bricknoed

Bricknoed

**Argonaut."

3

LONDON: HORACE COX, 846, STRAND.

1866. (All Rights Reserved.)

II.

LONDON:

PRINTED BY HORACE COX, 346, STRAND, W.C.

Medication.

TC

GEORGE MORRISON, ESQ.,

OF

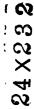
BASILDON PARK, NEAR READING, AND BALLIOL COLLEGE, OXFORD,

THIS WORK IS INSCRIBED,

AS A TOKEN OF ESTEEM AND GRATITUDE.

BY HIS OBLIGED FRIEND,

THE AUTHOR.



to new york PUBLIC LIBRARY 148() UGA

ASTOR, LENOX AND TILDEN FOUNDATIONS R 1924 L

PREFACE.

THE prevalence of erroneous notions on the subject of training for boat races, and the inferior quality of the rowing of the present time, induced me to publish in the columns of *The Field* a series of papers upon each of those topics, in the hope that they might prove of some slight service to the readers of that Journal. The kind reception they met with, no less than the want of a concise, yet withal comprehensive, manual on boatracing, has led to their republication in their present form.

Several new features have, however, been introduced into this volume, to wit: First, a short chapter on modern racing-boats, and their paraphernalia; secondly, a few remarks upon the management of Regattas, and the duties of committees and their officers; thirdly, the Laws of Boat-racing, with annotations; and, lastly, a code of rules on betting.

It would naturally be expected that everything pertaining to a sport of so much importance as boating, was regulated with the greatest precision and by clearly

decreed laws. The facts are, notwithstanding, far otherwise; and perhaps there has never been a single branch of British sports and pastimes conducted on such an uncertain or arbitrary footing, or in such a loosely defined manner as "Rowing;" and until within the last few years it was almost impossible to obtain a copy of the Laws of Boat-racing, such was the apathy and neglect which prevailed. At the present time there are very many points not only even vaguely defined, but positively not defined at all: want of uniformity and irregularity consequently ensue. The writers on the subject have been few and far between; but it seems strange that out of the numbers of highly-qualified and practical oarsmen whose names are enrolled in the annals of the sport, one alone should have been found willing-I will not say able-to bequeath to his successors the results of his observation, and the fruits of his experience; and even he, if I am not mistaken, excelled rather as a coxswain than as an oarsman. principles are, in the main, correct, and his advice sound, but he has handled the art and its accessories so partially as to leave a manifest void, which the following pages will endeavour, however unworthily, to supply.

The points of correct rowing, and the directions laid down for its acquisition, the observations on steering, and likewise the advice proffered for training men, are in a great measure the results of a practical, and not unsuccessful, experience of many years, and they have been submitted to a gentleman who is not only an accomplished carsman, but one of the most experienced coaches of the day, and in their amended form have met with his entire approval; and the more so, as they embody the precepts which have of late contributed to the repeated successes of the Oxford University crew at Putney. At the same time, I must not fail to express my obligations to the Oxford pamphlet, "The Principles of Rowing and Steering," as well as to "British Rural Sports," by "Stonehenge," and also "Practical Dietary," by Dr. Edward Smith, from all of which I have occasionally borrowed.

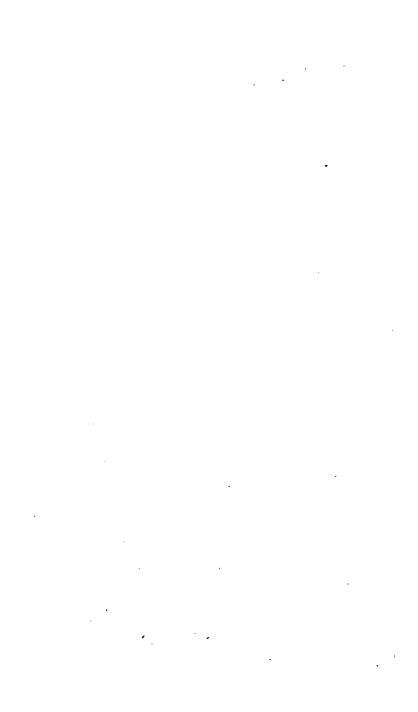
The rules for betting have been drawn up in conjunction with several well-known authorities on aquatic matters, in consequence of the want of uniformity which prevails in the decisions given by the various arbiters to whom contested questions are submitted, as instanced in the cases of the Champion Cup at the Newcastle-on-Tyne Regatta of 1863, and the Scullers' Match between Robert Chambers and Robert Cooper in the autumn of 1864; and it is fervently hoped that Sporting authorities to whom disputes may hereafter be referred, will not deem it inexpedient to give their decisions in accordance with them, so as to ensure one uniform and definite system.

For imperfections in style, and for occasional prolixity, I must beg the indulgence of my readers; but I have used my best endeavours to render the instructions contained in this volume as clear and intelligible as possible, although, from the very nature of the subjects, technicalities could not altogether be avoided. That they may sometimes prove of use to more advanced disciples of the oar, as well as to beginners, is my sincere trust.

London, January 27th, 1866.

CONTENTS.

	PART	l.	ROWI	NG.			
Chap.	.						Page.
	Introduction	•••	•••	•••	•••	•••	1
	Boats and Their Fitt	ings	•••	•••	•••	•••	4
	Rowing Defined	•••	••	•••	•••	•••	16
	How to Use an Oar	•••	•••	•••	•••	•••	21
V.	Faults and Errors	•••	•••	•••	•••	•••	35
VI.	Teaching to Row, an	d Cos	ching R	ecruite	•••	• - •	41
VII.	Coaching for Races	•••	•••	•••	•••	•••	48
VIII.	Steering	•••	•••	•••	•••	•••	6 0
IX.	Sculling	•••	•••	•••	•••	•••	70
X.	Examples of Form a	nd St	yle	•••	•••		75
XI.	The Various Modes	of R	scing	•••	•••	•••	79
XII.	Regattas, and the Du	ıties c	f their (Officer			82
	•						
	PART II	١.	TRAI	NINC	3.		
I.	The Objects of Train	ning	•••	•••	•••	•••	87
П.	The Means Employe	d	•••	•••	•••	•••	94
ш.	The Trainer and Hi	s Mer		•••	•••	•••	105
IV.	The Preparatory Sta	ge	•••	•••	•••	•••	112
٧.	Strict Training	•••	•••	•••	•••		118
VI.	What to Avoid, and	Comn	ion Erro	rs		•	180
VII.	Going Amiss, Accide	nts, d	ic	•••	•••		136
VIII.	Sculling	•••	•••	•••		•••	142
	AF	PE	NDIX.				
The I	aws of Boat-racing	•••	•••	•••	•••	•••	145
Local	Rules of the Thames	Nati	onal Reg	atta	•••	•••	149
Defini	tion of Amateurs, &	3	•••	•••	•••	•••	151
Defini	tion of Junior Oarsn	ien ar	d Sculle	rs	•••	•••	158
Quali	fication Rules of the	Henle	y-on-T	hames	Regatta	•••	154
-	4 To . 142						159



THE ARTS

OF

ROWING AND TRAINING.

PART I. ROWING.

CHAPTER I.

INTRODUCTION.

BOAT-BACING is a sport at the present moment exceedingly popular amongst the younger portion of the upper and middle classes, and the annual eight-oared race between the rival erews of the Universities, as a subject of interest to the general public, is only surpassed by that national institution the Derby-day—each the greatest event in its own peculiar sphere.

The devotees of the oar are numerous and widely distributed, and their capabilities vary considerably, but it can hardly be disputed that the standard of rowing is maintained by Oxford and Cambridge, and their feeders the schools of Eton, Radley, Westminster, &c., and that if boating ceased to be one of the chief recreations of British youth in these its strongholds, it would materially and rapidly deteriorate: there would be little or no competition, and therefore no incentive to excellence. The Henley-on-Thames Regatta, which is the great yearly gathering of amateur oarsmen, and at which the chief rowing clubs of the Thames, as well as the

Universities, are generally represented, also takes no small share in keeping up the standard above mentioned; but what is Henley in the absence of Oxford and Cambridge crews?

In recent years this standard has been in a fair way of falling very low; and that there should have been such a tendency in localities generally looked up to as the acknowledged head-quarters of the sport, is much to be regretted, but the fact is indisputable. The rowing of late has too often been short, scratchy, and ineffective; it has been characterised by a marked absence of length and by an utter want of power, because of an improper application of strength. It has been kept at a low ebb by the constantly recurring offer of a "pot" to every man who will row for a week or a fortnight continuously; by the coaching of ill-informed and ignorant teachers, who, although they may perhaps be able to discover a fault, cannot practically show how it is to be remedied; by the large increase of minor clubs; and last, but not least, by the too general use of light racing boats by young and inexperienced hands. In a word, quality has been sacrificed to quantity, and form to pace.

That pace has increased, especially since the revolution in boating caused by the general introduction of outriggers, there can be little doubt; and although the greatest proficiency in managing boats, as well as in rowing, may be found without much difficulty, yet it can hardly be questioned that a great portion of the faulty style of to-day is to be attributed to the wholesale adoption of the modern racing boat, with all its difficulties as well as with all its speed. This boat, nevertheless, I consider a great acquisition.

There are many ways of rowing, as there are of doing

most things mundane, but there is only one way of rowing properly; what that is, and how it is to be brought about, I shall presently show. It should, however, be understood that no reference whatever is made to sea-rowing, if rowing it may be called; but that I am concerned only with the fresh-water river, where, and where alone, the science is brought to its greatest perfection. I propose to describe the correct method of using an oar, and the readiest way of learning to row; to point out the faults which are most common, and most detrimental to good work, and the way to avoid them; and to enter fully into the coaching of crews and individuals for races—hints which, it is hoped, may not only lighten the labours of the coach himself, but which may also be conned over at leisure by the pupil in the interval between his lessons, so that future oarsmen and scullers may not be moulded on a faulty model for want of precise information as to good and bad form.

The physical training of men is part and parcel of their preparation for the post, but for the sake of clearness, and the better to do each subject justice, it will be kept separate and distinct from the chapters on "Rowing," and will form Part II. of this work.

I shall now proceed to discuss the art of rowing, but preparatory to doing so, it behoves me to say a few words upon the boats in which this rowing takes place, and upon their fittings.

CHAPTER II.

BOATS AND THEIR FITTINGS.

THE boats used in racing by means of the oar and scull are for the most part outriggers. They comprise eightoars, four-oars, pair-oars, and sculling-boats, and they have almost entirely superseded the old style, in which the rowlock was fixed upon the gunwale or wale streak. The latter are, however, occasionally used under special circumstances, but as the race-boats of the day, they are exploded.

The term outrigger means something that is fitted or rigged out-i.e., beyond the gunwale of a boat-and, properly speaking, applies to the iron framework rigged out from the side to support the rowlocks; but it is conventionally applied to the outrigged boats themselves, which, however incorrect it may be in strictness, are commonly called "outriggers"-scilicet, an eight-oared outrigger, a pair-oared outrigger, &c. However, before alluding to them more fully, although without trespassing too much into the province of the boat-builder, it may not prove uninteresting to sketch a short history of the invention and general adoption of these iron rods, or outriggers proper, which enable the width of the boat to be reduced, and yet, by giving more leverage, permit longer oars and sculls to be used than in old-fashioned or inrigged boats. The invention has been generally accredited to Henry Clasper, of Newcastle-on-Tyne;

but the following information, derived from reliable and trustworthy authority,* explains the real facts of the case, and may be considered conclusive.

The first outriggers used in racing were fixed on a boat called the "Diamond," of Ouseburn, Tyneside, when she rowed against the "Fly," of Scotswood-on-Tyne, in the year 1828; but they were only rude pieces of wood fastened on the sides, and were invented by Anthony Brown, of Ouseburn, and fixed by Ridley, a boat-builder of that period. In the same year Frank Emmet claimed the invention, and fixed something similar on a boat belonging to Dent's Hole, Tyneside; and there can be no dispute that the "Eagle," of Dent's Hole, by Emmet, in the year 1830, was the first boat with iron outriggers: outrigged craft then came to be the usual form of racing boats on the northern rivers. Tyne and Wear. However, when regular regattas were established by the Durham University about 1834 or 1835, London-built six-oared racing boats were procured from Searle, but they were found to be so inferior in speed to the native outriggers that the latter were not allowed to compete in the same races, and consequently the boats were divided for separate races into two classes, scilicet, cutters and gigs (as the outriggers were then termed). The force of southern fashion, however, appears so far to have prevailed over common sense and experience, just as four-horse coaches for a long time prevailed over Stephenson's iron horse, that many boats of the London pattern were built in the north after that time, until the Clasper victory on the Thames established the reputation of the northern type of boat. The principle of Clasper's boat was the same as the

^{*} Authentic Letters in The Field, of Jan. and Feb., 1865.

traditional form, only he was the first builder who reduced the substance of the boat to the limit of lightness and fine workmanship, or nearly so, as it cannot be denied that the racing outrigger has undergone a marked improvement since he achieved his well-deserved reputation. In 1842, then, Clasper commenced to build the four-oared boat which was to produce such a revolution in the art of boat-building down south; but he was dissuaded from completing her for the 300l. match with Coombes's crew, which took place on the Tyne on the 16th July, 1842. In this match Clasper was defeated, and this he attributed to his old-fashioned heavy boat. He thereupon completed his new fouroar, and he appeared with her at the Thames National Regatta, at Putney, in 1844, and succeeded in winning the 50l. prize on the 21st June, although he was defeated, perhaps owing to bad steerage, by Robert Coombes's crew in the champion race for the purse of 100l. on the following day: in the succeeding year, however, he won the chief prize for fours. was built of mahogany, in several narrow straikes; she was called, it is believed, the "Five Brothers," and her iron outriggers were only 8 inches long. At a subsequent period Clasper brought up a single-straike boat.

In 1838 a pair-oared outrigger, called the "Knife," was built in Dublin by a coach-builder named Allpress, who constructed various kinds of boats, and at the moment of penning these chapters she is lying in the boathouse of the Dublin University Rowing Club, at Ringsend. She is built in seven straikes on each side, and measures 32 ft. 2 in. in length, 2 ft. 8 in. from gunwale to gunwale (outside) at her widest part, and is fitted with iron outriggers each 74 inches long. She is,

moreover, in fair repair, and in pretty sound condition, considering that she has already attained the age of 27 years.

A sculling outrigger also appears to have been built at Putney in the summer of 1844, the same year in which Clasper brought his novel boat up to London, but six months beforehand, by Samuel Wolsencroft, of that village, for Mr. Westropp, of the Civil Engineers College, which then stood on the spot whence the Cedars now overlook the Thames, below the bridge. She was a single-plank boat, but as the skin was not bent before being fitted she soon split, although when repaired she lasted some years. In 1845, the following year, a fourcared outrigger was built by W. Biffen, of Hammersmith, and was his first attempt at the new craft. her he rowed for and won the Landsmen's prize at the Thames Regatta of that year. The introduction of the outrigger now became general, but at first the new boats were built with keels; in course of time, however, they became more and more improved upon, and outer keels were discontinued. Outriggers were first used in the match between Oxford and Cambridge in 1846, and in 1857 the Universities met in the modern keel-less eights, using also round-loomed oars.

Honour, however, to whom honour is due, and it must be admitted that the boating world of the present day are indebted to Harry Clasper for the adaptation and adoption of the racing outrigged boat. At the hands of Clasper himself, Searle, Biffen, Salter, Jewitt, Messenger, and others, she has received those finishing touches which make her what she now is.

The modern single-straike race-boat is composed, if it may be so said, of two parts, viz., the body or boat

itself, and the outriggers or iron rods which carry the rowlocks. The body is usually built of cedar wood, in lengths, with ribs or "timbers" of ash (and occasionally of beech) fixed above in the inwale-a long strip of deal running lengthwise down the inside of the upper edge of the bost-and below in the inner keel or kelson. Upon the inner keel is fastened a long piece of wood, generally fir, which rises in the centre, under the thwarts or seats which are fastened to it, to their level, and tapers off fore and aft; the object of this false kelson or backbone being to impart strength to the floor of the boat, and to assist in carrying the thwarts. The inner keel, kelson and inwale are first laid down, bottom upwards, on the frame upon which these boats are usually built, and, when built on moulds, the moulds next; the skin is then bent on to the inner keel, inwale, and moulds by the application of hot water, and made fast to the two former. This having been done, the boat in her then condition is turned over, right way uppermost, and firmly fixed on the stocks or frame; the timbers are thereupon put in, and the moulds removed as their places are thus supplied. Some builders, however-Biffen for instance-cut out the timbers by rule, and, using no moulds, fasten the skin at once on to them. before turning the boat over. The stem and stern are made of solid pieces of wood-which is sometimes mahogany, cedar, or fir, at the option of the builderand the skin worked up to them; the stem is usually strengthened and protected by a brass clamp; and the nails used are all made of copper. Besides the ordinary timbers, larger or "outrigged timbers" are inserted where the iron outriggers will be fixed, and to them the latter are fastened. The interior of the boat is divided into three portions by bulkheads, upon which are fastened

the wooden decks, at whose upper corners are small holes for allowing the water to run out, when leaky, by turning the boat topsy-turvy. The washboard rests upon the forward deck, and prevents rough and broken water from coming in. The breakwater runs round the sides of the boat to the coxswain's thwart, and crossing the boat abaft his thwart, so ends. The remainder of the boat is covered over with what is technically known as the canvas, but the covering is made of linen, well varnished, stretched, and nailed to the inwale. supported by a long strip of wood running longitudinally down the centre and called the rising piece, and by cross-beams which run transversely from the rising piece to the inwale. The canvas is nailed on outside, through the skin to the inwale, and its edge is hidden by a thin beading which runs fore and aft.

The skin meets in the centre of the boat at the joints, and is fastened on to the inner keel; and there being no outer or visible keel, the bottom is round. The lengths of which the skin is composed are joined by "scarves," put in opposite one another. There are usually four scarves, two on each side; and the boat is thus divided into three lengths of skin, one long and two short, but this rule is not universal. The centre portion of a scullingboat is called the "box," and of oar boats the "body." It is almost needless to observe that all these boats are well varnished outside and in. The stretcher against which the rower's feet are placed is a strong piece of fir fitted into a rack with brass thumbscrews, and shifts according to length of leg; a leather strap for the toes is fastened to it by a small staple. In some boats there are bottom boards or burdens, and in others there are Different builders, however, have different ways of putting their work together and of fitting their boats;

it is therefore of no benefit to enter into a dissertation on all the technical minutiæ of their business, for it will answer no practical purpose.

The iron outriggers are made of four round stays; not long since they were square, and the two lower or middle stays were then crossed. The two upper stays are the shortest, and, with the rowlock plate, are in one piece; the thowls, generally of beech wood cased with iron, are separate, and being fitted with shoulders through holes in the rowlock plate, receive the lower stays, fastened underneath by means of nuts. All four stays are fastened (at their lower extremities) through the outrigged timbers by means of nuts and bolts. There are likewise cross-stays inside the boat as occasion requires. The forward thowl is called the "thowl," and the after one the "stopper;" a piece of twisted string crosses the top of the thowls to keep the oar or scull from jumping out of the rowlock.

In addition to the ordinary racing outrigger, there is a mongrel boat—a sort of compromise between the former and the old-fashioned craft—in request at the Universities. These boats are outrigged, but composed of several straikes of fir, with keels, and by reason of their greater weight, are chiefly used in preparing coarsmen for the lighter and faster kind; they are called tub-boats, and comprise eights, fours, and pairs. Wall-sided gigs are also frequently made use of in instructing young hands, on account of their width and steadiness.

The oars and sculls are made of the best white spruce fir, and consist of the handle, the loom, and the blade. The length of oars varies according to the description of boat in which they are used; but wager-boat sculls should never be less than 10 ft., or more than 10 ft. 4 in. long. Both are kept in their proper place in the rowlock by a circular button of a peculiar shape, on the leather, which plays against the inner side of the thowl. Under the old system the oars and sculls were square loomed; now they are round, and are much less noisy, and far easier to work with.

Rudders are fitted to eights and fours, and are made sometimes of cedar, mahogany, fir, and even oak. Across the top of the rudder, which is fastened to the sternpost with a pin and tubing, is a brass crosspiece or yoke, from each end of which a yoke or rudder-line passes (through rings on the top of the canvas and inwale) to the coxswain's thwart, which should be made not less than a foot deep, so as to allow him to aid in trimming the boat by sitting on the forward or after part of it as occasion may require. The best mats for rowing upon are made of washleather stuffed with horsehair, or of plain sheepskin.

The following tables, however, furnished by J. and S. Salter, boat-builders of Oxford, set forth in the smallest available compass the dimensions and other particulars of the boats in general use, and contain all the vital information likely to be required by the ordinary reader or rower. The prices charged by Biffen & Son, of Hammersmith, or Jewitt, of Dunston, near Gateshead, and others, are, it may be added, somewhat below those shown in the tables.

DIMENSIONS OF MODERN BOATS.

Length of boat Breadth (over all) Depth, amidships Depth, stem
0 7 1 1 16 to 17 in.
21 82 8
0
093

Breadth of sculling boat not taken over all but to the putaide of boat only.

BOATS.
OLD-FASHIONED
0
DIMENSIONS

	Old-fashioned four	Old-fashioned gig pair-oar.	Outrigged gig pair.	Outrigged sculling- whiff.
Length of bost	Feet inches	Feet inches	Feet inches	Feet inches
	8	9 8	60	69
: :	17 in. if flush top	17 in, if flush top	411 0 1	0 104
Depth, stem stem	9	9 1	1 14	6
•	1 4	7	්	0
Distance from thwart to thowl	1 1	-	-	
nside	1 44	44	1	ea
Length of amidship oars	12 2	1	ı	1
at	89	I	ı	1
	11 9	12 8 8	129 6 8 6	
Length of soulls Buttoned at		1	:	% 66 87
Space between coxswain's thwart and stroke's stretcher	2 ft. to 1 ft, 6 in.	2 ft. to 1 ft. 6 in.	1 6	J
Price	633	£23	£26	413

Two other kinds of boat only require mention, viz., the twelve-oared outrigger, and the old-fashioned sculling wager-boat.

The twelve-oared cutter, of which there has been but one, is a novelty, and was built by R. Jewitt, of Dunston, to the order of Mr. H. H. Playford, for the London Rowing Club, to aid in the selection and coaching of their Henley crew. She is somewhat longer than an eight, but was curtailed more than she otherwise would have been, in order that she might go into, and be safely lodged in, the club boathouse at Putney. A new twelve either has been or shortly will be ordered by the club of the same builder, to replace the old one, now nearly worn out.

Old-fashioned wager-boats are only used by watermen and other professional rowers, viz., in the race for Doggett's Coat and Badge, and in occasional sculling matches, in which an express stipulation is made in the articles of agreement to that effect. Of late there has been so much latitude allowed in their construction. and several specimens recently turned out have approximated so closely to the modern sculling race-boat, with the exception of wooden batwings in lieu of iron outriggers, that endless objections and disputes have arisen on the occasions of their use. They should properly be built in not less than three straikes, with an outer keel. The lower or keel straike should not be more than 5 inches. and the other two straikes not less than 21 inches each, in breadth at the thwart; the former may be made as much less than 5 inches, and the latter as much more than 21 inches as the builder thinks fit. The boat should also have a wooden saxboard and wooden chockheads: further than this no limitation can well be laid down. At the Thames National Regatta there was once a rule

that, in all bond fide old-fashioned wager-boats, constructed in not less than three straikes, a line drawn from the keel to the rowlock should touch each plank; but, as the boats are now built, this is very far from being the case, for they resemble outriggers to a great extent, their sides being brought up sharply, and the timbers and wings which support the rowlocks flaring out at a considerable angle.

In conclusion, it may be added that, as wager-boats frequently split, the rents are easily mended by tingles—that is to say, when the two separated edges have been pressed back into their proper place, a tingle, or thin flat piece of cedar wood, should be fastened inside the rent by being nailed through from the outside—the heads of the nails being on the outer surface of the boat, and the ends, which pass through the skin and tingle also, being clenched inside, and upon, the tingle.

CHAPTER III.

Rowing Defined.

Rowing is the act of propelling a boat through the water by means of oars or sculls, the person operating sitting with his face towards the stern, and his back to the bow or front of the boat. It consists in reaching forward with the oar in the air, then dipping the oar into the water, and throwing the body straight backwards-thus dashing the oar through the water, and finally pulling the handle home with the arms to the chest, by means of the resisting power of the thwart or seat, and stretcher or footboard; the water being the fulcrum, and the boat or rowlock the weight to be moved. Rowing with the sculls is the same, except that instead of using one implement or oar with both hands, two implements called sculls, one in each hand, are substituted: the latter feat can be performed by one individual alone; but when oars are used, two or more men are necessary, and, as a rule, they require an aide-de-camp in the person of a steersman or coxswain. The action is twofold, as it is made up of two portions, viz., the stroke and the feather. The stroke is the pulling of the oar through the water, with the bladeto which the water offers a resistance in its passage -at right-angles to the fluid traversed. Feathering is, strictly speaking, the turning of the oar at the conclusion of the stroke, by dropping the hands and turning

down the wrists, and thereby bringing the blade into a plane with the surface of the water; but the term is also commonly used as including the carriage back of the oar, in the same position or plane, to recommence another stroke, as the oar is then said to be on the feather.

There are two kinds of pulling, one for pleasure, the other for speed; the former in wholesome weight-carrying craft, the latter usually in thin racing boats. Still, the science is one and the same; for, whether a man take the stroke-oar in an "eight," or set the time in a family skiff, the actions he performs and the paces he goes through are, or ought to be, identical. In the one, however, he works more steadily and at a less rapid rate than in the other, on account of the increased weight and resistance he encounters, which necessarily render his labour more severe. Such being the case, I shall proceed to consider rowing for speed as combining both.

Rowing is an imitative art, and men are not carsmen born, although some persons appear to have an intuitive knowledge of it, and are at least unusually apt disciples; whilst others never can and never will row properly, no matter how persistently they may go to work. To excel requires a long and willing apprenticeship, commenced at an early age; for of all sports, there is, perhaps, none that is slower in being picked up, and none that is so manifestly devoid of a short or royal road to a knowledge of it. To a casual looker-on it may seem a simple matter to jump into a boat, and row her away as cleverly as is daily done by scores of men; but such is far from being the case in practice, and no idea is more deceptive than that the grace and style of an accomplished oarsman or sculler are easily copied.

"The laws of rowing," as the author of "Principles of Rowing and Steering" well observes, "are ascertainable and definite; we acknowledge but one standard, and form the learner upon one ideal. This standard is embodied in the traditional knowledge of professed teachers." Now, a perfect oarsman is clearly and ineffaceably impressed upon our mental vision, and he is instantaneously and instinctively singled out by our powers of perception from the crowd of fellow-labourers who surround him. is as different from the clumsy recruit as a "flying fifty" from a collier brig, or a Derby favourite from a drayhorse. His actions and his form are definite, and although they cannot be so easily put down upon paper as to be transparent to the uninitiated, yet they are as clearly appreciated by, and held in the view of the experienced observer as the sun at noon-day. When an old hand embarks in a boat and handles an oar or a pair of sculls, it is discernible at a glance that he is no novice; even the very manner in which he takes up his position is sufficient to carry conviction to the mind of the critic. Indeed, the way in which a man sits in a boat is a very good test of his rowing capabilities, because, as a rule, no good oar sits badly in a boat, and no bad oar sits well. How to sit and how to hold an oar properly are the first principles in rowing. A crew may be "got together" and be "licked into shape" to a certain extent, but unless these two things have been well taught, no amount of "coaching" will make the individuals good oars-they can never be taught after their style has once been formed; therefore we see how necessary it is that everyone who has to deal with young oarsmen, should pay particular heed to these points-points, however, which are seldom sufficiently attended to.

Some time ago, an impression prevailed amongst the general public, and also amongst portions of the rowing community, that there were several kinds of perfect rowing—for instance, the Oxford style, the Cambridge style, and the London style, and yet all widely different. The natural inference to be drawn from the fact is, that if one was right the others were wrong; but each had its advocates, who stubbornly upheld their own creed, and as stubbornly condemned others as heresies. All these theories are exploded now, and very justly so. There should be but one text for all, and upon one model alone every oarsman ought to be formed.

The characteristics of this model are as follows:--A firm, clean entrance of the oar into the water: a powerful, steady, and horizontal stroke; a feather quick, low -yet sufficiently high to clear the water in whatever state it may be-and concise both at the beginning and the finish. How these component parts of a perfect whole-without the knowledge and practice of which no man can be said to have even graduated in the art-are compassed, and by what means, I shall shortly proceed to explain; but in the interim it may not be amiss, for the sake of clearness, to mention that these attributes are denominated "style," and the mode in which the oarsman performs his labour "form." The first-mentioned term is more particularly applicable to the work done, or the quality of the rowing; and the latter to the manner of doing this work, or the actions gone through by the performer. Numberless little rules, in themselves apparently trivial, must be strictly abided by; numerous conditions, seemingly insignificant when taken singly, must be faithfully observed; an undaunted determination not to neglect work, and a zealous attention to sound advice tendered, and correct principles imparted by others, must be shown, if it is desired to attain a position, and to offer an example worthy of imitation.

And here I would draw attention to the fact that simply being able to row does not constitute a master of the art. To be competent to guide and manage a boat, in as well as out of difficulties, to discover when anything is wrong or out of order, and to rectify the evil, is quite as important. A man may easily be able to pull without being, in technical language, a waterman.

For the present I shall defer the consideration of sculling, as it is of greater moment to deal first and fully with the oar, yet I would have it remembered that the same actions take place in both; I have already explained wherein the difference, such as it is, consists. *Pari passu* with rowing an oar comes steering the part of the coxswain; this also I shall take before sculling.

CHAPTER IV.

How to USE AN OAR.

IT is almost unnecessary to premise that a boat rowed with oars has an equal number on both sides, so as to preserve a straight course. These oars number from the bow or front of the boat towards the stern or after part; thus, the first oar is called Bow, the second No. 2. and so on, Nos. 3, 4, 5, 6, 7, and the eighth, or last. Stroke, as it is rowed by the man who sets the time or stroke. The odd numbers constitute the right, starboard, or bow side, and the even numbers the left, port, or stroke side oars. This is the rule; the exception, which is very rare, is in the case of a few north-country boats, which carry the stroke on the right or starboard side, and the bow oars on the left, larboard, or port side. The terms starboard and port are, however, seldom or never applied to rowing-boats, but "bow side" or "stroke side," as the case may be. The coxswain sits on the aftermost thwart, or that nearest the stern of the boat, and faces the crew; he therefore looks towards the course he is travelling. But of him more anon.

The oarsman about to row, having taken his oar in hand, should proceed to embark. This he should do by laying the blade of his oar on the water, if an outside, or on the bank if a shore-side oar, and then (holding the handle or not, as the case may be) stepping into the boat with his face to the stern, putting one foot on the kelson,

or backbone, lengthwise-not athwart it, for fear of putting his toe or heel through the boat—and, stooping, should let himself gently down on his thwart, by placing one hand on each gunwale, or saxboard; the second foot may also be placed on the backbone of the boat, or may depend in mid-air until firmly and finally placed under its strap on the stretcher. He should next ship his oar, placing the handle in the rowlock outside, if there are strings, and drawing it inboard until the button is within the rowlock, and the oar in its proper place, when it should be allowed to lie flat and feathered. He should sit quite square, but not too near the edge of the seat, because, if so, the chances are that the lower part of the back will not be straight; also if the man's seat is not very firm he cannot possibly balance the boat. He should sit about three-quarters of the thwart aft -in an ordinary racing boat about 11 inches from the edge: but perhaps the best rule really is that the fold in the skin where a man's legs join his seat should be on the edge of the thwart; hence the bones will feel the thwart about 11 inches from the edge. He must be exactly opposite the handle of his oar, not askew. His feet must be planted firmly against the stretcher, and both under the stretcher strap, if long enough—although it is usual to find most of the straps in eights made for one foot only-and immediately opposite his body and his oar; the heel as well as the ball of the foot pressing against the stretcher, and the two heels close together, with the toes wide apart. This position keeps the knees open and separate, without which no man can possibly row in a proper manner. The stretcher strap should be as tight as can be borne, so long as it causes no inconvenience or undue pressure, as by means of the thighs it partly contributes to raise the body after the completion of one stroke, preparatory to commencing the next; but a light touch only is allowable, pulling the body up solely by the strap being entirely wrong, and resulting from the back not being straight, or from the knees having been dropped too low. By this means a man swings backwards and forwards in a line parallel with the keel and course of the boat, or, as it is called, straight fore and aft. I may here mention that the oarsman does not, as a rule, sit in the centre of the boat, because the oar, when of a proper length inboard, will just reach beyond the outer gunwale; and to hold it firmly and usefully he must, as previously stated, be exactly before the handle, and, consequently, close up to the side of the boat opposite to his rowlock. The distance of the stretcher, in a horizontal line, from the thwart will vary according to the length of a man's legs; but it should be as short as possible, compatibly with clearing the knees and doing the work in an easy manner, and with a perfect control over the oar. body should be erect, with the shoulders slightly thrown back, and the elbows close to the flanks.

The oar should be held firmly, yet lightly, in both hands, the outside one close to the end of the handle—but not at the end, capping it—with the fingers above and the thumb underneath it, although some men prefer the thumb of the outside hand in the same position as the fingers—and the inside hand, or that nearest the loom or body of the oar, from $1\frac{1}{2}$ to 2, though not more than $2\frac{1}{2}$, inches away from, but grasping the oar more convexly than, its fellow—the thumb underneath; bearing in mind always that the outside hand does the greater share of work in the bare pulling, and the inside hand the most in guiding and manipulating the oar. If the inside hand is held too low, a good deal of

force is lost, the arm is bent, the shoulders are not squared, and the beginning of the stroke is weakened. The fore-arms should be below the level of the handle, and the wrists dropped and relaxed, the oar being now quiescent, at right-angles to the keel of the boat, and feathered. The diverse positions of the two hands and wrists, enable the oar to be wielded with greater facility than if alike, and permit of both arms being stretched out perfectly straight—not crooked and bent—when getting forward.

In rowing the stroke, the body should be inclined forwards, with the backbone perfectly straight, the stomach being kept well out and down between the legs, the chest forwards and raised as much as possible; in fact, the position of the trunk will be like that of a soldier at drill, excepting that in rowing the great secret is to keep the stomach out, whereas in drilling it must be kept in. The knees must be pressed slightly out, as far, however, as the strap and gunwale, or boat's side, will allow, but both must be inclined at exactly the same angle-one very common fault being the dropping the inside leg too far down, and too much into the boat: the body soon follows the leg, and thus the more serious fault of leaning into the boat is produced. To obviate this it is as well to keep the inside foot nearly upright, and to get the heel of the outside foot as much into the boat as possible. It will be found that both legs will thus incline at the same angle, both knees will be at the same height above the water, and a firmer seat will be the result. The shoulders should not be allowed to come too far forward, neither should one be advanced before the other, nor should one be higher than its fellow, this being a sign that the weight of the body rests more on one side than the other-a great fault in.

rowing in a light craft over a long course, as the boat is thus unsteadied, and somebody else has to balance her, and so undertakes more than his proper share of work. The arms should play freely in the shoulder joint, as stiffness here and at the hips is a real hindrance to the best form. They should be perfectly straight from the shoulders to the wrists, and they should be treated in the first part of the stroke as mere connecting-rods between the body and the oar. If they are crooked, they give immediately the weight and strength are thrown on to the handle of the oar, and thus the first part of the stroke is lost. The inside wrist, however, must be somewhat raised, and the outside one be bent slightly round in order that the knuckles may be parallel to the oar, as the oar must be firmly grasped with both hands, otherwise the beginning of the stroke will be weak; but it must be kept nearly flat, though pressed down the least bit in the world-in other words, it must show only the natural hollow. The hands should hold the oar firmly, not with the tips of the fingers, as is usual, but with the whole of the fingers well round the oar, and each separate finger-not merely the first two fingers-must feel the oar distinctly. The knuckles of the thumbs should be not more than 11 or 2 inches apart at most, for if kept too far off one another, the inside arm is sure to get bent, the inside shoulder thrown back, and very likely the weight brought into the boat. The head must be held up, the eyes looking in a direct line astern, and the feet must be firmly planted against the stretcher. In reaching forward, the hands should be shot out straight from the body without the least pause—a peculiar way of doing this, but impossible to describe though easily discernible, being the mark of first-class oarsmen. Almost as soon as

the oar has passed the knees, the wrists should be . raised to bring the blade at right-angles to the water preparatory to dipping it, the fact of delaying this motion often resulting in not putting the oar in square. Care must then be taken not to lower the hands, as this practice almost invariably leads to chopping, and cutting the stroke. Men differ slightly in their length of reach, but everyone ought to be able to get the handle of his oar just over his stretcher, and when there he should raise his hands straight up and at once, as if not raised at once the result is a hang, and if not straight the stroke The oar should then be instantaneously covered up to the shoulder, but no further; and immediately it is in this position the stroke should commence. The rower should "knit himself up," as the north-country phrase is; he should then spring back like a bow when the string is loosed, and bring the muscles of his back and legs into play, at the same time raising his weight off his seat-thus using his whole strength and weight at once and together. These motions at the end of the feather and the beginning of the stroke are, however, so simultaneous, and take place so rapidly, that it is very difficult to analyse them: the faults, nevertheless. are easily enough detected. They consist of hanging, chopping, cutting the stroke, and not catching the beginning. It is in this part of the stroke that five minutes' looking at a good oarsman rowing is worth more than any number of words; in fact, no words really convey what is wanted. The coach may tell his pupil to "hit" the water, to "smite" it, &c., which may convey to the mind of a man who knows how to row, what is required, but which can never impart the idea to a tyro. Catching the beginning properly-like swinging-must come from inspiration as it were.

will, however, assist a crew immensely if the coach will get into the boat, and row a few short spins at a slow stroke, employing all his power at the beginning, and making the crew follow his example; but he must be a strong man, as he will have the whole weight of the boat to lift at the commencement of the stroke.

Having thus learnt to catch the beginning of the stroke with his body only, the rower should finish it with his arms and shoulders, taking care to send his elbows close past his sides, and to drop his shoulders well down and back, keeping his head up, and his chest out. In the next place, the whole strength of his arms and shoulders should be put into the finish of the stroke. This may seem to be recommending the fault of rowing the stroke out at the end, but really it is not so. This fault arises either from the beginning of the stroke having been shirked, from not using the full force of the body, or from not bending the arms soon enough: if this happens, the body has to be kept waiting until the arms come up to it, and hence an unseemly jerk. It is very difficult to determine the exact period at which the arms are to be brought into play, but it ought to be done about the time that the body is perpendicular. Thus the full weight and strength of the rower will be applied, and the oar will be dashed through the water in the way that marks a good oarsman. Without enumerating all the faults in this part of the stroke, one word of caution to a coach will be sufficient; it is, "Don't tell your men to kick their stretchers, or to row with their legs." Tell them to lift their bodies as it were off their seats. so that the weight rests on the handles of the oars, and on the stretchers. Tell them that while rowing the stroke through the water they ought to be able to sit on

an egg without breaking it, but don't tell them to kick—kicking invariably leads to shifting about on the seat, to dropping the knees too low (which prevents a quick recovery), and to half the faults that are incidental to this part of rowing.

The oar should be brought straight home to the chest, the knuckles touching the body about an inch, or less, below the bottom of the breast-bone, where the ribs branch off: thus every inch of water is made use of. When there, the hands should be dropped straight down, and then be turned over and shot out again close along the legs, and the body should follow without the least pause. If this be not done the oar will be feathered under water, and thus the boat will be buried. water will be thrown on the next oar, and the recovery will be impeded. To effect a quick recovery the back must be perfectly straight, the knees must not have been dropped down too low, and the straps must not be used too much—a light touch is all that is proper: the muscles of the body-in this case those that cross the stomach—must be used, and not the boat itself, of which the strap is a part. The body should be swung evenly forward from the hips-not with a jerk or a plunge, or quicker at one time than another, but freely and easily, as if the hip joint worked well, and not stiffly. Much benefit may be derived from watching two or three of the best oarsmen that can be found, observing them carefully-forming an ideal model, and then endeavouring to copy it.

Two or three points should particularly be borne in mind: First, that when the hands are raised at the commencement of the stroke, and the oar, ipso facto, struck down below the surface, the whole of the power should be brought to bear at the moment of the oar's

contact with the water, so as to create the greatest effect in the first or vital part of the stroke-one of the most important and too oft-broken laws of rowing; secondly, that the pull home to the chest should be in a perfectly straight line, thus causing a horizontal stroke through the water, which is another law frequently disregarded; thirdly, that the finish of the stroke should be as quiet and easy as it is possible to make it, but without lessening the force applied, which naturally diminishes, because at the first part of the stroke, before the rowlock, the oar is at an acute angle to the boat, and after that at an obtuse angle. Here it is that one so often sees the stroke wind up with a jerk, as if to make some use of the little strength remaining in the human frame, the oar flirted out of the water, the elbows dug sharply back in an awkward and unsightly manner, and the body harshly and suddenly jolted forward.

Next in importance are the movements described by the oar itself, starting from a state of rest, i.e., feathered, and at right-angles to the keel of the boat.

When the forward reach is taken, the blade of the car should travel backwards in the air, horizontally, at the distance of a few inches from the surface of the water—of course depending upon the state of the surface, whether smooth or rough—until dipped for the stroke. As regards this dip, it is imperative that the blade descend to the proper depth before any force is applied, otherwise the stroke will be cut. To effect this, the hands must be raised sharply, and the stroke must be instantaneously commenced. In a word, the car must be put into the water with energy—not suffered to drop in of its own weight. When on the feather, the oar, after passing the knees, should be

gradually turned preparatory to immersion, the feather concluding and the stroke beginning at once, with no interval whatever. Hence it will be perceived that the line described by the end of the blade, about which there are numerous theories and a variety of opinions. will be nearly parallel with the water until entering it, when it will immediately be dipped with a powerful scoop.

The entry of the oar into the water cannot be too sudden or too decided, so that it be not a chop and a splash; and for this purpose the muscles of the arms should be gathering themselves together as the hands reach forward. It is a well-known and indisputable law that the greatest power can be applied in the first half of the stroke, that is to say, before the oar becomes level with the rowlock, and that the further aft it goes subsequently to passing that point, the more that power Such being the case, it is only common sense to endeavour to do as much work as possible when it will tell most, and when it contributes to lift a boat lightly along the top of the water. On the other hand, if the application of the strength is deferred until the last part, it is brought to bear when it is of least service; a great and useless expenditure of power ensues, and the boat, instead of being assisted over the water, is driven down and buried in it, her way being necessarily checked thereby. The same result ensues from men letting their weight rest on the seat, and then giving a wrench, and feathering under water, instead of letting the weight rest on the stretcher and handle of the oar-in a word, from rowing with the arms rather than with the body, instead of using both.

I now come to the position in which the blade is immersed, and I would observe that this is a most

important point. It is said that the blade should descend at right-angles to the water. In this opinion I cannot altogether coincide, although I admit that even such a position is far superior to an entry with the back of the blade forming an acute angle with the water, and the front of the blade an obtuse one. In either of these cases, however, there is something wrong with the thowl rowed against, with the side of the loom which bears against the thowl, or with that on which the oar rests when traversing the water. The proper position is for the front or hollow of the blade to be looking slightly downwards upon, not along, the surface; its entry is consequently at less than a right-angle. This enables the oar to take full and square hold of the water at once; it prevents it running down too deep, and, if firmly and scientifically manipulated, it obviates splashing. At the same time the oar ought not to be turned over too much, as otherwise it will not enter the water easily, and will be apt to twist in the hand, besides straining the wrists. No effort whatever should be made to force it over. The depth to which the oar descends through the medium of this peculiar catch, is to the shoulder or upper end of the blade. In this position it must continue until the arms are up to the chest, not stopping at the distance of a foot from it, when the stroke is concluded, and the feather commences. In its traverse through the water the blade of an oar should be barely covered, and no more—this is an accepted rule—and, with the extraordinarily light boats used at the present day, strict attention to this principle must be paid When bringing the stroke to an end, the blade of the oar, by a sudden movement—caused by dropping the hands and turning the wrists—is feathered or brought into a plane with the surface of the water, from being

previously at right-angles thereto. This action should take place at the moment of the oar's leaving the water, and the lower end of the blade, by being suddenly turned cleanly aft as the loom rotates in the rowlock, throws the water astern in a little eddying whirpool, and the whole business of the stroke is completed. The appearance of this whirlpool should be carefully studied by a coach, as it is a pretty good criterion how a man is rowing; and if the coach happens to be pulling himself, as is occasionally the case, it is one of the only guides he has in judging how his pupils are rowing behind him. One cannot well describe the look it ought to wear, but plenty of small air-bubbles should keep rising, as in a soda-water bottle, long after the swirl has left the oar: the smaller eddies should be deep and well marked. Very light rowing makes a splash that soon subsides, and deep rowing shows no air-bubbles.

The foregoing component parts of a stroke and its succeeding feather, it must be admitted, are numerous, and to a certain extent apparently incompatible; but yet they are so blended in the work done by a first-rate oarsman as to seem but one action. Each, however, is fully and correctly performed, and the sum of these separate actions is consequently also perfect.

At the risk of appearing prolix, I will briefly recapitulate the main points to be recollected. They are as follows: First, a full, fair reach-out over the toes, with both arms perfectly straight; secondly, a square hold of the water at the dip of the oar, with an application of the whole power at the moment of immersion; thirdly, a firm stroke of a medium depth, pulled straight through the water without wavering and without vibration, yet always kept long and duly light; fourthly, a graceful, easy finish, with a clean turn of the water off

the after-edge of the blade—the feather being light, moderately low, and rapid—and an instantaneous movement when the oar completes the feather, and descends under water.

Besides pulling, which, as before stated, does not constitute the whole science of rowing, there are various manœuvres of which a knowledge is necessary; these are paddling, easing, holding water, and backing.

Paddling is simply a milder form of rowing hard, of which the opposite extreme is spurting. The difference consists merely in the strength applied, and consequently in the number of strokes taken to the minute: it is, without question, the form most suitable for discovering and correcting faults, and it is, therefore, peculiarly valuable for the purpose of coaching crews that have races to row, especially over long distances.

Easing signifies either a reduction in speed from rowing hard to paddling, or else ceasing to row altogether. More commonly, however, it denotes a cessation of rowing, the command "Easy all" being generally understood to mean "Leave off pulling." Should it be desired merely to reduce the speed, the usual term employed is "Bow easy all." Herein consists the difference between this order and that of "Easy all," which should always be given before the conclusion, or at the commencement of a stroke.

Holding water is the act of stopping a boat suddenly, and is accomplished by partially reversing the oar and running it down under the water, so as to check the way; but the oar should be held, when deeply immersed, with the blade nearly in the same position as on the feather, but under instead of above the water—certainly not at right-angles to it. By a simple twist of the handle from or to the body, the blade can be

raised or lowered according as it is found necessary to slacken or increase the power exerted to check the boat; that is to say, by simply turning the blade with its upper edge downwards towards the nose of the boat, the oar sinks, and by depressing the after or lower edge, it immediately rises to the surface of the water.

Backing is exactly the opposite of rowing, and is accomplished by reversing the oar, as in the last-mentioned manœuvre, and pushing instead of pulling the handle. The same principles which apply to rowing apply here also, for the blade should never be sunk too deep, but the back stroke through the water should be long and light, and the oar should be feathered, and carried on the feather, exactly as when pulling in the ordinary manner, although in a contrary direction. The action is commenced with the body well back, and is finished but little beyond the knees; here, again, the first being the vital part of the stroke.

Rowing and backing a boat round should, however, be done as gently as possible, for nothing screws an outrigger so much as the application of force under these circumstances. If this is attended to, a boat will last twice as long as she otherwise would.

The celerity with which these various movements can be performed, must be acquired by practice, and a rapid change from one to the other can only be skilfully executed after much experience. Theory is all very well as a guide, but actual practice and manipulation are the only things capable of rendering a man thoroughly conversant with these technicalities.

When about to disembark, the oar should be unshipped, and lifted out before leaving the boat.

CHAPTER V.

FAULTS AND ERRORS.

THERE are two kinds of faults connected with the art under discussion, and they are as follows: First, errors of position and appearance, which, although ungainly and slovenly in themselves, do not prejudicially affect the progress made; and, secondly, faults of labour, or errors committed in the manipulation of the oar, which militate against the speed of the boat, as well as against an efficient performance of work. By far the greater part of them come from men not holding their oars properly, and not having good seats; yet how very seldom does a coach teach either one or the other.

The chief errors of position and form consist of sitting askew, with rounded shoulders, head down, body sunken in and dropped, knees close together—the outside hand capping the oar, and the inner hand too far off the outer; shoulders out of a level; stretcher so short as to prevent the handle of the oar from clearing the knees; reaching out without letting the body come well between the legs; over-reaching; looking out of the boat, and at the oar; staring about (perfectly inexcusable in an eight); dropping the head; throwing the head backwards and forwards when at work, as if it hung on an easy and well-used hinge; meeting the oar, attributable to not going back far enough, by not keeping the chest and stomach out, and by not using

the muscles of the latter; feathering too high or too low; failing to row fore and aft, but rolling, instead, across the boat, generally away from the oar—called rowing out of the boat—and screwing; beginning at one side, rowing round, and finishing with the body on the same side; sticking the elbows out at the end of the stroke, and falling back too far, or not sufficiently, beyond the perpendicular. There is also a bad habit of letting the oar remain in an improper position when feathered, when the boat is lying still, or driving with her own way—I allude to the fact of keeping the blade off the water and in the air, with the handle low down in the boat. It is a sure sign of a "duffer."

Next come faults of labour, and they are numerous; many of them, also, are beyond measure subtle. and foremost is that of not straightening the arms when reaching out. In this case both wrists are generally in the same position, that is to say, either convex or flat. instead of one in each. One arm—the inner—is also usually crooked, and one—the outer—straight. sequently, when the oar catches the water, the whole of the weight is thrown upon one arm, or else the stroke is not begun at the proper time or with full purchase, and the water is laid hold of comparatively late, and so the opportunity of getting the earliest and lightest lift on the boat is neglected. Next are those of not holding the oar tight; of dropping the hands very low when reaching out, and so raising the blade too high on the feather; pausing or dwelling in the air before beginning a stroke, generally consequent upon the previously mentioned error of dropping the hands too much; dipping the blade quietly and indecisively, or letting it fall into the water, and pulling after it has attained a certain depth in its downward course, and when nearly level with the

rowlock, or abeam; rowing the stroke through with a vibratory motion, or, as it were, making two distinct and separate pulls, instead of one firm, clean, decided stroke-commonly a sign of weakness, or of too much muscle in the arms, men accustomed to gymnastics usually doing it; bringing the hands high up, over, and down again, like turning a mangle, the hands rising as the blade descends, and being subsequently pulled violently downwards so as forcibly to clear the blade from the water, instead of a long, easy, light sweepthe effect of this manœuvre being a deep, digging stroke, and a descent of the bow of the boat by reason of the downward force brought to bear on the handle; and finishing the stroke with the oar a long distance off the chest, instead of touching it. Beside these are jerking, compassed either by an uneven and jerky entrance of the oar into the water, or fetching the body up suddenly before concluding the stroke, doubling up over the oar, and at the same time flirting the oar out of the water with a sudden jolt of the arms, as already mentioned in Chapter IV.; dipping the oar into the water, with its face forming an obtuse angle with the surface, when it often runs down deep under water, and the momentum of the boat and the resistance of the water driving the blade astern, overpower the oarsman, and nine times out of ten knock him backwards off his thwart—this is called catching a crab. Catching crabs also frequently results from not clearing the blade at the end of a stroke, or from not carrying it back at a sufficient height above the water, when, without warning, and in an instant, the oar is whirled out of the control and, maybe, hands of its wielder, and sometimes breaks, the rowlock more frequently giving way. It is seldom, however, that men catch regular crabs in an

38 BOWING.

eight, but they very frequently cut through the water in coming forward—a fault that arises from not dropping the hands sufficiently on the feather. It is by no means a trivial fault, as it throws water on to the oar of the next man on the same side.

Of all faults, perhaps the most common, and one of the most difficult to discern, is that of shirking. Now, shirking may take place either at the beginning or end of the stroke, or both. At the beginning of the stroke it is more likely to pass muster, and is, therefore, more frequently adopted, especially by men who can really row well, but who, for the time being, either through laziness or because they are not quite up to the mark, are desirous of sparing themselves; and so cunningly may this be done by a clever oarsman, that ninetynine out of every hundred persons who witnessed the performance would not discover anything amiss. A less experienced man than the culprit would scarcely be capable of detecting the error, and of fixing it upon the guilty party. It consists in abstaining from bringing the whole of the power to bear at the moment of the oar's contact with the water, by rowing with unstraightened arms, or, rather, slackened muscles-thus quite putting aside that firm grip of the water which is so essential a qualification of correct work-when, although the oar may be dipped simultaneously with others, and apparently with as much effect, the strength is not actually laid out until the weight of the boat is already lifted by those men who are doing their work as honestly as willingly; and even then only partially so. At the end of the stroke the shirker finishes his work before anyone else in the boat, being the first to commence the feather, as well as the last to begin the actual labour; his oar may enter and leave the water at the same time as the rest, but though keeping time he is not following the stroke, the work of those who do keep stroke being uniform and simultaneous. The best way to detect this fault is to look at the water that comes from the suspected oar; it cannot present the proper appearance if the rower is shirking. At the same time, the converse does not hold good, for a man may be rowing too deep. Rowing very light is shirking.

Among other tricks that should be avoided, I may mention those of throwing up on to succeeding oars the water which should be turned aft off the lower end of the blade, as the oar is feathered, for, if thrown up, the wash falls upon the back of the next oar on the same side, and grievously incommodes the man who is rowing it, even if it does not actually knock it out of his hand: feathering too soon and under water, which is a most productive source of crab-catching; feathering and returning—that is to say, simply feathering and then carrying the oar back unfeathered, or bringing the blade momentarily into a plane with the surface of the water, and then as suddenly turning it back again until at right-angles thereto, thus not only spoiling the appearance of a boat, but positively doing it an injury by offering an unnecessary resistance to the wind. besides incurring the risk of catching the water; letting the oar fall on the water, after feathering, with a pat, and so not only hindering the boat's way, but provoking crabs. In many cases this habit is prolonged into a continued dribbling of the oar along the surface of the water, when feathered-frequently witnessed in pairoared rowing, and usually the sign of a want of balance in the boat. Occasionally, too, the hands are not sufficiently lowered as the feather is being brought to an end before taking a stroke, and the bottom corner of the oar, in consequence, knocks up water and splashes. Neither is the entry of the oar into the water always firm or decided enough; nor should its face be turned up, but on the contrary, downwards, as previously explained.

Finally, the body is not always swung sufficiently well fore and aft, nor are the muscles of the hips and legs brought into play upon the thwart and against the stretcher as they should be, but rather are the arms left to do double duty, and to act a part which does not and cannot properly belong to them.

CHAPTER VI.

TEACHING TO ROW, AND COACHING RECRUITS. An oarsman's form depends entirely upon the manner in which, and the person by whom, he has been originally instructed. A slovenly style once acquired, there is more difficulty in unlearning it than in imparting correct principles to the greenest hand. The majority of the men of the present day learn their rudiments in such a heterodox manner, even if they learn any at all, and increase so rapidly in faults, that inferior rowing must not be wondered at. I grant that the fashion of boat has much altered of late years, and that the style of rowing has also altered considerably, but it can hardly be said that the workman has altogether kept pace with his tools. This, I am convinced, is in no slight measure attributable to the use of very light boats by young and inexperienced devotees of rowing, but no error is more fatal to the acquisition of good style. No one would think of teaching a racehorse to gallop before he had been first put through the steadier paces. No one would put an unbroken colt as one of the leaders of a four-inhand drag by way of introducing him to harness. child cannot run before he has been taught to walk. Yet men are daily set to row in racing boats before they know which end of an oar to handle, or how to handle it! The rational plan of putting them into steady wallsided craft, with something to pull, and accompanied by

a made oarsman—exactly as the young horse is put into the break with an old stager—is either lost sight of or contemned; but of one thing we may rest assured, viz., that it is the only correct mode of teaching the young idea.

Again, a great deal of the faulty execution of the period is due to the fact that form is sacrificed to pace. It is easy enough to get a crew to row together, and, when together, to send them over a short stretch at a very quick stroke; and this, unfortunately, is the way that most crews are coached. Such a style of rowing, will do well enough for a very short distance, but for a longer one—even for the Henley course—it is of no avail. Getting a crew to row in good form, as well as together, takes a long time, and a great deal more work in the coach, but it really is well worth the extra trouble even on short courses, and it is absolutely necessary on a long one.

The writer of these chapters was years ago shown by a Thames waterman, when on his way to and from school, how to use both oar and scull. The boat selected for the lessons was no rickety race-boat, but a good oldfashioned waterman's wherry-now-a-days only to be seen doing duty as a ferry-boat. The description of craft, however, in which, after these few rudimentary lessons, his early practice was taken was a tub-not a University gig-boat of the present build, but a tub pure and simple—that is to say, a large flat-bottomed, squareended brewing-tub, with pieces of deal board nailed across the top for thwarts, four large iron nails for rowlocks, and for sculls (occasionally also used as oars) two broom-sticks-or, to be correct, rake-handles-with oblong pieces of board nailed on for blades; and his practice-ground neither the Isis, the Thames, nor the

Cam, but a mill-head on a country stream. I fear I have to a certain extent digressed from my theme.

At the present time the pupil has every opportunity of beginning in the proper way, if he will only make use of the many advantages which present themselves to him almost unsought. These advantages, it will readily be perceived, depend more or less upon the locality in which he abides. The first thing to be done is to take him out in a steady craft, such as an old-fashioned wallsided gig-necessarily not outrigged-or a skiff. Care should be taken that his seat, mat, stretcher, and oar are all en règle, or else much mischief may unintentionally arise. He should be placed upon the stroke-thwart, close under the observation and within reach of his teacher, who should sit upon the coxswain's thwart, with the yoke-lines in his hand, or perhaps with an oar or scull instead, by the use of which he can guide the boat better than with lines. The earliest point that should now be impressed upon the pupil's attention is the taking up a correct position, for upon this hangs future form, whether good or bad. I need scarcely recapitulate seriatim the details of this position, as they are fully and clearly laid down in Chapter IV., and if the instructor does not know them by heart, and cannot practically impart them, he is no teacher. It will be sufficient to mention that the pupil should sit upright and square on his seat, with his feet firmly pressed against the stretcher, the heels close together, and the toes wide apart: the oar should be held with the outer hand close to the end of it, the inner hand from 11 to 21 inches off, as already stated. He must then be told to reach out—keeping his arms straight, his body and shoulders square, head up, chest out, and knees apart—and to take a stroke, his

instructor not only minutely explaining every separate action and the manner in which it should be performed, but also showing him how to do it. The oar must invariably enter the water with the back at least at right-angles to it, although it is naturally somewhat difficult to get a raw recruit to lay hold of the water, with the blade of his oar in a perfectly correct position. He must next endeavour to pull the stroke through with the edges of his oar vertical-pressing against the stretcher with his feet, and bringing the weight of his body to bear-and then to finish it as steadily as he can, being careful to avoid flirting it out of the water, or winding up with a jerk. There is no necessity to teach him to feather at first, as it is of the greatest importance to instil into his mind an idea of getting a firm, square drag through the water, and of bringing the oar out square, yet meanwhile keeping himself as upright as possible. He must be taught to maintain command over his oar from the beginning, as it too often happens that the oar and not the man is master, and for this purpose great care should be taken that his seat is high enough. This elementary lesson should last, at intervals, until the pupil has gained a knowledge of what he is required to do and how to do it; and the more easily to impart shape, he may be told to unship his oar, and to swing his body backwards and forwards, unaccompanied by the oar-yet at the same time going through the usual evolutions with his arms and legs, as if he were actually handling it. Occasionally he may change places with his coach, and sitting down on the after-thwart watch minutely the mode in which the oar is used by the latter, and then returning to his place endeavour to put the same into practice; and if the boat selected for the initiatory

lessons is a wide, roomy skiff, the teacher may now and again sit on the same thwart with his pupil-between the latter and the rowlock—the more readily with his own hands to put straight any inaccuracies of arms. elbows, back, knees, or feet. He should then be shifted to the bow thwart, and be taught to go through the same performance with the bow-side oar. Having satisfactorily accomplished this, he may be taught to feather. When, from simply pulling by himself, he has quite mastered the essential point of rowing an oar horizontally through the water, the next thing is to put a good carsman into the boat to row stroke, the pupil taking the bow-oar as before. It is as well for the teacher to continue to steer-of course now using the yoke-linesas he can the better watch every movement of his pupil; for if the former row the stroke-oar, he cannot by any possibility pay proper attention to his own rowing, which is supposed to be copied, and at the same time watch his bow-man. The pupil will now be taught to keep time and stroke with his model, rowing at a steady, even pace, with frequent breaks for rest; and with this example constantly before his eyes he will make rapid improvement, and should, as he progresses, be further instructed in all the various manœuvres which compose the science: of course, until he can row a fair oar, and in proper form, he will be confined to a pair-oared old-fashioned craft. During these lessons the instructor must be beyond measure careful to teach kindly and considerately, intelligibly explaining any matter not perfectly apprehended by his pupil, and never losing his temper !

When considered sufficiently advanced in knowledge, the pupil may be put into an outrigged pair-oared gig, if at hand, or into a four-oared gig or tub-boat, though

not with other recruits as unpolished as himself, but with companions of known capability; and he should be shifted from bow to No. 2, and back again, until able to row equally well on both sides, otherwise he will be but an addition to the ranks of those men who can only row on one side-owing to the mischievous way in which they were originally taught-and of whom there are many. From the four he will, in due time, get promoted into the gig eight; but the first racing outrigger he enters should be an eight, as the latter is far steadier and easier to row than a four-oared outrigger, to say nothing of its greater weight, which, under the circumstances, is a desideratum. Of course he will be as closely as possible looked after by his coach in one as in the other, but necessarily less so in an eight than in any other boat.

With regard to coaching recruits, it must not be expected that the same strictness and attention to rule will be necessary as in the case of selected crews preparing for races, of whom the succeeding chapter will fully treat; still, a great deal depends upon a proper supervision of their work on their entry, as it were, into harness. It will not be advisable to place more than one or two such in an eight, of which the remaining part should be composed, as far as practicable, of men of experience and acknowledged ability, though not, perhaps, of the highest order: the stroke oarsman, however, should be the best that can be conveniently obtained. Long rows, without stoppages, are by no means desirable in this stage, because men unaccustomed to the work soon get tired, and, when weary or distressed, will resort to every expedient to spare themselves, and possibly thereby contracts faults all but, if not quite, ineradicable. This is not our purpose at all; what is

really wanted is to teach them to swing and to work simultaneously and uniformly with other men. ness, length, and slowness of stroke-in fact, mere paddling-are the means by which alone this end can be attained; and the crew should be frequently stopped during this practice, so as to give rest and wind, and in order to explain and remedy any error observed by the coach. This personage must studiously avoid abusing or bullying his oarsmen, and he should frequently run or ride along the bank, putting someone else at the lines, so as to regard his pupils from every point of view, and to enable him to detect faults which are indistinguishable from the after-thwart. Notwithstanding all this, there is no place like a steady pair-oared boat for minutely supervising minor details of work, and for teaching certain things, but it should be combined with the eight, as men cannot swing in a pair, and must check themselves going back: again, the position of the feet will be different. When form has been learnt, but not till then, a full application of strength and speed may be allowed.

After a time it will be readily seen from this desultory practice who are promising oars, and, as occasion requires, and as they approach the necessary standard, they will be promoted to higher positions.

CHAPTER VII.

COACHING FOR RACES.

THE preliminary step in making up a crew for a race is to select the men who are to compose it, and in this particular the most consummate judgment and knowledge are all in all, for everything depends upon the person whose duty it becomes to choose no less than to coach This individual, who is seldom or never the regular coxswain, is usually an oarsman of experience, chosen from amongst and by the men themselves; but the responsibility that rests upon his shoulders is im-It must not be supposed that his work is confined to supervising the men's rowing; on the contrary, he is their physical trainer as well as their teacher of rowing; but as the requirements and duties of the former office will be fully and minutely entered into by me in my chapters on "training," to which I must refer for further particulars, it will suffice at present to consider the latter office, or the general duties of a coach. One great error that trainers often commit is to suppose that their labours are over as soon as their men get out of the eight: now, many faults in rowing are so subtle that it is impossible to find them out unless the men are studied in pairs.

As far as physical conformation goes, tall men are to be preferred to short, well built to thin, and heavy men to light, especially for an eight-oar. The limits of weight, which should not be passed without very strong grounds, may be set at 10st. for a minimum, and 12st. 7lb. as a maximum, that is, in condition. best men will be found to average from 10st. 7lb. to 12st., although there have been many good amateurs. and among them some of our very best, little if at all exceeding 10st. I am now alluding to an eight-oared crew, more especially if engaged in a race over a long distance: for a four, the men and the limits may be much less; but for a pair it is almost a matter of chance what weights come together, though where there is the power of selection, light, quick, active men are to be preferred. No man of less weight than 9st. 10lb., or thereabouts, should be admitted into an eight if it can by any possibility be avoided without causing detriment to the crew; but it is far better to have a light man who can row, than a heavy one who cannot, and who is so much dead weight to lug along. Long bony arms, good back and shoulders, strong legs, and above all things. a powerful, muscular loin (generally accompanied by extreme width at the hips) are desirable qualifications. Yet it is quite possible to have too much muscle, especially about the arms and legs.

It frequently happens that the oarsmen put up for selection are ready-made, and do not require much, or in fact any, instruction in rudiments, but that they, nevertheless, from the different nurseries in which they have been taught to row, want more or less rounding off and polishing, so as to get them into uniformity. The stroke must first be decided upon, and more discretion must be exercised in his appointment than in that of all the other men put together. Scores of men are able to follow time or stroke with the greatest exactitude, who have no idea whatever of setting it. They are none the

less valuable in their proper places, but an accomplished stroke, who possesses first-rate form, great pluck, a good head on his shoulders, and who can maintain the same number of equally well-rowed strokes, whether rapid, medium, or slow, and who when pressed can raise a spurt without hurrying his men or throwing them into disorder—such a man, I say, is a pearl of inestimable price. Some men, on the other hand, are so uncertain, and so frequently shift their time and stroke, that no crew can keep together and row steadily behind them. A welltried man is also indispensable at No. 7, to take up the stroke duly. The remainder of the crew must be picked after repeated trials, and after being moved backwards and forwards from one place to another in the eight. It is impossible to write down the exact difference which renders one man more eligible than another; this must be left to the knowledge and discretion of the coach, but if two men are pretty much alike in every other respect, preference should be given to him who does his work in the easiest and most commanding manner. After a crew has been to all intents and purposes finally decided upon, it is not unusual to find faults develop themselves as practice proceeds --- to say nothing of breaks-down through sickness-and an occasional change, in consequence, cannot be prevented.

In allotting to the men their respective places in the boat, it will be essential to be guided chiefly, but not entirely, by their weight. The heaviest men should be located near the centre, at Nos. 3, 4, 5, and 6—especially at 4 and 5—and the weight should be so distributed as to make both sides of the boat equal, in order that she may be evenly trimmed. The after part of the boat should also be fairly weighted with the fore part, to enable her to ride evenly, otherwise her bows will be

depressed, and, in boating phraseology, she will "be by the head," or else her stern will drag, and her way be thereby checked; and it is as well to remember that the coxswain adds to the weight in the stern of the boat, and that the fact of shifting his seat a little forwards or backwards will cause a difference. Another point also that should be attended to is the placing the carsmen on either side so that the four stroke-side equalise the four bow-side oars. It will likewise form part of the trainer's duty to pay strict attention to the state of the boat when ashore, to take care that everyone's stretcher is of the proper length and securely fastened, the thwarts of the correct height, the mats not too thick, the outriggers unbent and screwed up tight, the rowlocks true, and the thowls, especially those rowed against, in the proper position, and the oars neither sprung nor warped; in fact, he cannot look after his boat too much or too carefully, especially on a race-day. During the earlier part of the practice his proper place is on the coxswain's thwart, where he has the men all within his ken; and it is usual for him to stand up, for he can by that means more readily distinguish the actions and form of every oarsman; but it is more difficult to judge of the time and stroke kept throughout—though not of body faults—when standing than when sitting; and a crew often appear to anyone standing at the lines to be rowing very well together. but the instant he re-seats himself he will discover that the time is anything but good. He should frequently accompany the eight on the bank-by far the best place for coaching-putting the regular coxswain, or some other experienced hand, at the yoke-lines, as errors which might pass muster when viewed from abaft, stand out in full relief when seen from alongside, in front, or from

a spot ten or twenty yards astern, off the quarter. is also a very good plan to row behind each of his men. for he can thus detect the true cause of many faultsin most cases, a bad seat in the boat; perhaps without doing this he cannot thoroughly coach his men, because he has not seen them in every possible position. must use every endeavour to rectify, while in the practice-boat, the smallest fault he may discover; but should his efforts prove unavailing, he will be obliged to take the man offending out in a pair-oared gig after his return from, or before his next embarkation for, a row with the crew, and insist upon its being remedied at once. The main point, however, to be first brought about is the getting the crew to row well, commencing and finishing their work honestly and without shirking. This desirable end is by no means to be compassed at once or in a hurry; and the men will not have attained the qualifications which constitute a perfect crew until after a lengthy probation and constant repetitions of the same lessons, no matter how good they may be individually.

To commence work, the men having been told off, the coach should take them out for practice in an eight; this boat ought to be a tub or gig eight. Sitting down upon the coxswain's thwart, he will tell them, when satisfied that they are all ready, to row on. He need not be very critical at first, because, if they are strangers to one another—as far as rowing together is concerned—the boat cannot be otherwise than unsteady, and lurches will be by no means few or far between. It will be sufficient to let them alone for a mile or two, merely causing them to keep a long, easy stroke, and to row as steadily as they can under the circumstances: no bullying is permissible, because at such an early

stage, before the men have got accustomed to their seate and oars, much fault-finding will of a surety disgust them; at the same time, a word or two of caution may be addressed to the worst and most careless performers, when they need it. The boat may be stopped after a mile or a mile and a half has been completed, for a brief rest and for shifting any of the paraphernalia which may not be quite shipshape. The row should then be continued, with a short stoppage or even a few minutes' run ashore, when about to turn back, until several miles (out and home) have been covered: the coming in of the crew will then be very different to their going out.

Before embarking in the eight the next day, it will be just as well for the stroke and No. 7 to go out in a pair-oared gig with their trainer, occasionally varied by a row together in a pair-oared wager-boat, for the purpose of assimilating their rowing as much as possible; and the remainder of the crew ought to be daily taken out in a gig, one after the other, with either the stroke or No. 7. during the earlier portion of their preparation, so as to bring them all as far as possible up to the standard of their stroke; and for No. 7 to be a counterpart of No. 8 is no less desirable than necessary. The stroke will take out the bow-side and No. 7 the stroke-side oarsmen. The latter (No. 7) will, of course, row stroke on the bow side, and it will be just as well to have two gigs put aside for this purpose, as two lessons can be going on at the same time. These lessons in pairs should be repeated day by day until the coach is satisfied that they are no longer requisite.

It now becomes necessary to say a few words upon the rules to be observed by the oarsmen themselves. They must do their work willingly and with a good grace,

paying marked attention to the advice offered them by their coach, and giving it a careful consideration when proceeding to put it into practice. Each man, when pulling, should fix his eyes on the back of the man in front of him, in order to keep accurate time. Now, there are two kinds of time, viz., the time of the oars, and the time of the bodies. The first may be acquired by watching the after oar, but in order to get the second, everyone must study the man in front of him, and try to perform each individual action and motion at the same Time consists in an immense number of moveinstant. ments taking place precisely at the same moment, and can only be brought about by fixing the attention on one particular person, and by performing each action contemporaneously: this is the reason why No. 7 is such an important place in an eight-oar. A conscientious attention to his own work is required of every man; and when told of a fault by his coach, and ordered to remedy it, the point should be retained in mind and be acted up to. Unless this is done, there is every probability of a recurrence of the error, after a brief interval. The advice I once heard a well-known amateur on the Thames, who was coaching an eight, give to an oarsman who persisted in his fault-more perhaps from carelessness than obstinacy—was much to the point. After repeated expostulation and explanation, he at last said: "Think of it, sir! think of it; and bring your mind to bear as you row each stroke." This is exactly what every handler of an oar ought to do.

During the earlier period of training, which I shall denominate the "Preparatory Stage," the work which the crew will be called upon to undergo will be long, steady pulling, over long journeys, say from eight to fifteen miles. The rate of stroke, which should not be

exceeded, varies from twenty-eight to thirty-two to the minute, and this will be found quite quick enough, if every stroke is begun at the proper time and fairly rowed out. The same pace should be maintained throughout each day's practice, without quickening or slackening at To be well together, every oar must enter and leave the water at the same moment, each stroke being . rowed through equally by all. Every back must rise, swing, and fall at the same instant; all the oars must catch the water at one and the same time; they must all be rowed through the water at the same depth, all be feathered and carried on the feather to each succeeding stroke so simultaneously as to appear but as one pair of oars, or even as a pair of sculls; and if they all get hold of the water fairly and at once, the peculiar noise appertaining to this catch, which is like the sound produced by a stone falling perpendicularly into the water, after being thrown up into the air-a rotten egg, as it is called—will be distinctly audible some distance off, and the rattle of the oars in their rowlocks, and the rush of the water aft off the blades, will each be blended into one. The coach should pay particular attention to any oarsman whose faults he may have endeavoured to remedy in the pairs, for fear he should revert to them, and he must impress upon all his crew the necessity of not rowing a single stroke carelessly. After several weeks of this practice, and about three weeks or a month before the day of the match, the pace may be quickened and regular racing work commenced, the equivalent of the racecourse being gone over every day. The number of strokes in the minute may be increased up to thirtyfour or thirty-six, but it will be found no easy matter to row a quick stroke in a heavy tub-boat. Therefore, if the progress made by the crew is satisfactory, and they

have got well together, a regular racing outrigger may be substituted for the tub, but even then thirty-six strokes to the minute will be ample. Great care is required at this point, as the change of boat is occasionally accompanied by a change of style, in a greater or less degree, and individual quickening on, or cutting short, the stroke must be carefully guarded against. Formal starts, as in a race, should after awhile commence the quick row-the coach, when satisfied that the men are prepared, asking them if they are all ready, and if not answered, giving them the word "Go." gives the men confidence, and, moreover, it accustoms them to get a boat rapidly under way from a state of repose, without catching crabs or making mistakes. During this latter period the regular coxswain should be in the eight, and the coach alongside on foot, or perhaps on horseback; but running is to be preferred, especially if there are gates to pass through, or many men on the bank, for then the eye need never be taken off the boat-the great secret in coaching. The coxswain may regularly take the time occupied in the row, so as to compare one day's work with another; but the conditions of wind and water vary so much and so frequently that, except in the most experienced hands, time is, as a rule, of all guides the most delusive in existence. This state of things may continue until two or three days before the race, when the crew may be eased in their work so as to gather a little extra strength, and an increase of a pound or two, per man, in weight is not to their disadvantage. On the day preceding the race one row, and that a short one-say a mile and a half out and the same distance backwill be all that is neccessary, and this may be spent in

practising starts at top speed, easing up after a hundred or a hundred and fifty yards. The rate of stroke may be increased during the last week to thirty-eight and forty per minute, and the number compassed in the starts will be forty, or perhaps even forty-two; but, for rowing the course through, thirty-seven, thirty-eight, and thirty-mine are plenty. On the day of the race it is not advisable to get into the boat before the hour fixed for starting, though it is occasionally done.

The Metropolitan is the only long course now rowed by eights, viz., from Putney to Mortlake, on the occasion of the annual match between the Universities of Oxford and Cambridge at Easter; but the usual length of racecourses for eights, and all other descriptions of boats, varies from 1½ to 2½ miles. As a rule, therefore, it will not be necessary for eights and fours, when training, to row sharply over a much longer distance than the course actually to be contested. At the same time, it is sound policy to go over a greater scope of ground, though at a steady, well-defined stroke.

The coaching of a four—a somewhat more delicate machine, and therefore requiring greater nicety—will be much the same as that already described; but it frequently, though by no means necessarily, happens that a four is made up of a portion of an eight-cared crew in training for races at one and the same regatta, and requires nothing more than practice.

Pair-oared rowing proper is an affair of quite a different complexion. It is a sort of connecting link between sculling and four-oared rowing, as to a certain extent it partakes of both, though in a greater degree of the former, and yet it resembles neither. Good

pair-oared pulling is perhaps the perfection of the artat least, it is so in my humble estimation-and it is without question the most difficult mode of rowing. vagaries described by a couple of badly matched men in a pair-oared wager-boat are as amusing as they are absurd: this is chiefly owing to inability to steer, and want of practice. In these boats, which carry no coxswain, two men row a pair of oars, as the term implies, the stroke oar being on the larboard, or proper stroke side, and the bow oar on the starboard, or proper bow side. The bow-man is the responsible individual of the twain. as he not only steers, but directs the stroke what to do: and the duty of the stroke is to keep on rowing uniformly, but yet to pay the strictest attention to the orders of his bow-man. The latter, it is scarcely necessary to state, should be the more experienced oarsman, and he steers by pulling with greater or less strength than the stroke, according to the course he is desirous of taking, looking over his left shoulder as in sculling: a well-practised sculler, therefore, makes the best possible bow-man to a pair. If he finds that he cannot get his boat's head round quickly enough, he tells the stroke to row easy-but not to stop rowing, as such a course of proceeding would most probably culminate in a capsize—and lays out himself accordingly. More practice is required in this branch of the sport than in any other-that is to say, to perform well, but plenty of rowing together, coupled with watchfulness and attention on the part of the bow-man, is all that is really wanted: coaching, as with eights and fours, is seldom or never thought of, though occasionally needed. When training for a race, the daily spin should equal, or rather slightly exceed, the course to be gone over, but it will be productive of much benefit to take long, steady rows,

and to wind up the practice with the spin in question. The pair should ease up one day before their race.

I had almost omitted to mention that the heaviest man should be placed aft, unless the boat is specially built for a heavy bow-man.

CHAPTER VIII.

STREETING.

THE duties of a coxswain are, generally speaking, simple, but they are often most inefficiently performed.—I am now speaking of a regular coxswain, and not of a coach or trainer, temporarily acting as such, although while in charge of a boat and her crew he will partially fulfil the same office, use the same words of command, and act in all respects like any other coxswain. These duties consist in controlling the movements and actions of the carsmen in the crew, of giving the requisite orders for starting, stopping, or easing, and especially of steering a straight or true course without deviation. At the present day he does little else, because it is the prevailing fashion to have a coach with each crew until they row their race; and this person exercises many of the functions which were formerly the part of the steersman, as mentioned in the foregoing chapter: indeed, it is questionable whether a coxswain can ever be a good coach, because the latter ought to show his pupil how each motion in rowing ought to be performed, practically; and how can he possibly do this unless himself a fair oar 8

In consequence of this practice, coxswains are now usually chosen on account of their light weight; but excepting in very special cases this "feather" weight is accompanied by want of judgment—not to say knowledge

-and especially by want of decision and presence of mind in moments of danger and difficulty. At the same time, if a coxswain can be found combining, in his own proper person, lightness of weight, a minute knowledge of rowing, a clear and cool head, with an unerring eye, he is a most valuable acquisition—he is the Jemmy Grimshaw of coxswains. But, on the other hand, it is far better to carry a stone or two of extra weight, combined with these qualities, than to put at the yoke-lines a mere child without discretion and without discrimi-How often do we see races hanging in the balance, utterly thrown away by a sudden sheer to the right or the left, when the exercise of a fragment of judgment, and an appeal to the crew for a spurt at the nick of time, would land them winners by a yard. need only mention one name—Henley—to recall many such to the minds of my readers. One of the most memorable instances on record was the final heat for the Stewards' Cup in 1859, between the Third Trinity and London fours. These crews rowed as nearly level as possible, all the way from Remenham to Poplar Point, where the Cambridge boat, on the outside, led by a few feet; halfway to the finish the London four in its turn led, and when close home both crews answered to the final and impassioned appeals of their coxswains, and Third Trinity were declared the winners by about eighteen inches, or, at the most, two feet! I never. I must admit, saw such a race before or since, and long shall I remember it. I don't hesitate to assert that the steering of the Cambridge coxswain alone won that heat, for, notwithstanding the disadvantage under which he laboured in being outside, and despite the attempt of the Londoner to throw him out at the fatal spot, he scarcely budged an inch from his course, kept his eyes and his mind on the stretch, and landed himself the winner with the most consummate skill. The same regatta also furnished a memorable example of the mischief done at this same critical spot by the idiotcy of the outside coxswain in sheering out, though but a little. Oxford men know well enough to what I allude.

In selecting a steersman it is not a bad plan for the captain to take the crew to one end of a straight reach of water, then to get the boat pointed perfectly straight on some plainly visible object, and to tell the coxswain to steer directly at it; the captain of course will stand still at the starting-place to see if a true course is kept. Few coxswains will do it well.

The steersman should take up his position on the aftermost thwart, upon which he should sit upright, with his body tilted slightly forward, his legs crossed, tailor fashion, and brought as close under him as possible, each foot resting sideways on its outer edge, and his knees wide apart. The yoke-lines should be stretched quite taut, and be held one in each hand, with a single turn round the palm; and there is usually a loop tied in each line, for the insertion of the thumb. times the thumbs are put in the loops without taking a turn of the line round the hand, but in every case the lines should be fastened together in front of the coxswain's body-even if they are not made of one piece, which seldom happens—or to the sides of the boat. otherwise by a sudden lurch, or from some other accidental cause, one of them may go overboard and tow astern-a contretemps by all means to be avoided. The steersman's hands may rest one on each gunwale, the thumbs being inside, and the fingers outside. enables him to balance himself, and to assist in steadying the boat; and, by a simple turn of the wrist, he can

tighten or slacken the line accordingly. A coxswain can thus steer just as well, and can keep quite as true a course, as by holding the lines in any other manner, always providing he keeps them taut, which is essential. Another way of holding the strings is with the hands in the lap; but in either case the knees, by resting on the gunwales, contribute to regulate the body of the coxswain, which too often renders the after part of the boat top-heavy and unsteady. The coxswain should ease himself forwards, with the slightest possible departure from an upright position, at every stroke. The lift of the boat will guide him correctly enough; but he must especially be careful never to bob backwards and forwards, after the absurd and erroneous fashion of days gone by.

The words of command that are commonly used in directing a crew are few, and the fewer the better. The same terms should always be employed, as there is then no chance of being misunderstood; but various localities have various practices. When starting a crew in any ordinary sort of way, although it is frequently necessary for bow and No. 3, or 2 and 4, to pull a stroke, the coxswain generally says, "Are you all ready?" followed by "Row on, all!" but on the London water these instructions are divided into three—i.e., "Are you ready?" "Get forward, all," and then "Go!" This may be all very well in a race or in practising starts; but it is preferable to economise words. When it is necessary to diminish the pace, but not to cease rowing, the term "Row easy, all" is employed, or "Row easy, bow side," or "stroke side," as the case may be; but when discontinuing pulling, "Easy, all," at which command everyone ceases to row. This last order should be given at an appreciable interval before

the conclusion of a stroke, so as to prevent the crew from getting into another. When deemed desirable to stop the boat suddenly, the coxswain should say "Hold water," or "Hold her up, all," or "Stop her up, all;" and this may be followed, when her way is checked, by "Back water, all:" in turning round, "Pull, bow side. back, stroke side," or vice versa, or "Bow and 3 row," and so on, according to requirements; "Easy, all," or "Easy, bow and 3," as the case may be, bringing them again into a state of rest. In the event of getting too close to an obstruction, such as another boat, a barge, bridge, or the bank, so that there is a chance of the cars on one side touching it, the attention of the men wielding those particular oars may be called to the fact by the words, "Oars, bow side," or "stroke side;" or .. "Mind your oars, bow side," &c. The former is the shortest, and therefore the best.

In steering a boat when the course is straight, the coxswain should take for his mark to be steered to, the most conspicuous object in the proper direction in which he is to go; but the further it is off, the better. A chimney, a craft at anchor, a tree, a house, or any other equally visible mark, will serve his purpose. When, however, the stream takes a turn in the distance, the boat's head should be guided straight to the supposed point in the water at which she will commence to make her bend, but yet wide of the corner; and any notable but distant object in this line will be the correct mark to aim at until close to the promontory. The boat's head should not be brought round until nearly opposite the apex of the bend; but the main point to be recollected is to fetch a boat round gradually and by slow degrees, because the greater the application of the rudder, the greater the diminution of speed: in some cases it is even advisable to ease the oars on the inner side of the boat, or to call upon the outer side for an increased effort. The following maxim, however, is well worth remembering, viz., that "a boat should be 'coaxed' by its rudder;" and by judiciously increasing the pressure on the tightened line when the oars are out of the water, and slackening it when they are being pulled through the water, the labour of the men is lightened. It is only permissible to jam a rudder hard up, or hard down, when turning a sharp corner, as at the Universities, or in cases of threatened collision, or to wash a boat off.

The reason for coming up wide to a corner is sufficiently obvious, viz., to pass clear of the point without the necessity of pulling first one line and then the other; for, if a boat's nose were steered straight to a corner, the rudder would have to be used just before reaching it, to sheer her head out sufficiently to clear it, and immediately afterwards it would again have to be put on the opposite way so as to follow the true course. A zigzag, instead of a regular, steady bend, would be the result, and ground would be thereby lost. To obviate this, a boat's head should always point towards the shore opposite to the corner round which she is travelling—and correctly so, for the reason I have just indicated, notwithstanding, at first sight, it may appear somewhat strange.

The most difficult time for steering is during a strong cross-wind, because a boat drives away rapidly to leeward. Under these circumstances, it will be necessary to keep her head slightly to windward of her true course-experience in the force of the wind will alone determine how much; consequently, her line of keel will not be coincident with the line of motion. Should the

wind happen to be abeam, or on the quarter, the stern of the boat will be driven to leeward, and her head be brought up to windward; this must be counterbalanced by a proportionate use of the lee-line, always bearing in mind that the stern is more powerfully acted upon by the wind, than the bow.

· When preparing a crew for a particular race it is as well to let the coxswain have almost as much practice as the oarsmen; they will then get accustomed to one another, and if of an inquiring turn of mind, and of quick apprehension, he will soon learn to pick out any little fault that may pass unnoticed from the bank, and thereby will exercise a double check over his men. He will naturally make the most of every opportunity to study the set of the tide or current, and will use his best endeavours to pick up items of information on the point, from persons qualified to advise The ordinary rule is to keep close to the banks when against the stream, and nearly in the centre when with it; but particular courses require special directions, into which it is not my purpose now to enter, if I make two exceptions—these are the Putney and Henley courses.

Notwithstanding the elaborate and somewhat voluminous instructions upon the course to be steered between Putney and Mortlake, given by the Oxford writer previously quoted, I may mention that the correct and best course is to make for Craven Cottage Point, rounding it rather closely, but avoiding getting in under the Fulham bank between Putney Bridge and that landmark; thence in nearly a straight line to the Soupworks Point, which should not be passed too wide; through the Surrey arch of Hammersmith Bridge, and close in until opposite the bottom of Chiswick Eyot,

off which the best position is at a third of the width of the river from the towpath, giving the corner opposite Chiswick Church a moderately wide berth; thence in midstream until off the Bathing Creek on the right-hand side, and then at the distance of a third of the width of the stream from the Middlesex bank to the Ship, taking the shore arch of Barnes Bridge, and keeping close to the buttress. And here I may perhaps be permitted a few. observations respecting that bone of contention, the proper arch of Hammersmith Bridge to pass through. If the course of a boat is kept all along for the centre span-coming wide round the Soapworks corner-it does not signify much if that arch is taken, but the boat must not be pointed first for the Surrey arch, and then be suddenly changed for the centre, as has occasionally been done. Nevertheless, distance is undoubtedly saved by taking the shore arch, especially if on a good threequarters flood. It is simply necessary to go afloat and watch the set of the tide when running up, and to note the awkward position in which the steamboat pier and buttress are situated for a boat intending to take the centre arch, to be convinced of the justice of these remarks. Unless brought unusually wide round the bend off the soap-factory, a boat must be thrown athwart the tide to pass on the Middlesex side of the pier. Down with the ebb the course should be kept nearly in midstream until passing the bottom of Chiswick Eyot, where the boat should be steered slightly to the Middlesex side of the centre until off the Doves: thence in midstream to Hammersmith Bridge, which should be passed pretty close to the Surrey buttress or steamboat-pier; and about midstream to Putney Bridge, unless the tide is very low, when the towpath shore should be hugged from the Crab Tree until arriving at Craven Cottage;

thence in midstream to the Aqueduct. A voyage in one of the steamers which ply for hire in the summer-time is an easy way of finding the channel, for they always follow it unless the river is very full.

At Henley the course to be kept is in midstream (or according to position at starting) until nearing Poplar Point, when the towpath bank should be hugged quite close until halfway up the last straight reach, when the second arch of the bridge from the Berkshire side should be aimed at. The towpath side is generally considered the best at starting—that is to say, in the absence of wind, or if there is a breeze off the Berkshire shore; but the centre of the river is the preferable course, unless a gale blows down the reach or off the Buckinghamshire bank, when the shelter of the bushes on that side may be sought and cultivated for three-quarters of a mile.

It is almost unnecessary for me to mention that no coxswain should allow himself to be bored out of his course by an adversary, but it is much better to give way than to assist in bringing about a foul. however, must not be understood to mean that one is always to give in to such conduct, for if, on being cautioned, the opposing coxswain persists in boring, and causes a foul, he does so at his own peril, and must take the consequences. In a difficulty, the coxswain has to depend upon his own judgment; but his mind should promptly be made up, and his determination as promptly be acted upon.—No wavering on the horns of a dilemma. Perhaps one of the most awkward things to allow for, and pass, is a sailing barge making short boards across the course of a racing boat, and an inexperienced and nervous coxswain is sure to make a bungle. intervening distance between the two craft, and their

respective rates of progression, should be calculated to a nicety in deciding upon the proper course to be taken.

Lastly, a knowledge of the mysteries of giving an antagonist the wash, by getting a rapid lead, is only to be gained by repeated handling of the lines; but the large wave travelling at a tangent from a boat's quarter, if judiciously thrown upon the bow or side of the enemy, will grievously prejudice their chance, even if in other respects the crews are pretty well matched.

CHAPTER IX.

SCULLING.

I WILL next turn to the consideration of sculling, a form of rowing which appears to be highly popular, though necessarily not so much so as that of taking an oar.

That the ranks of scullers are numerous there can be no doubt; but that there are in proportion as many first-class scullers as oarsmen, is by no means the case. This state of things is chiefly due to the Universities and public schools, where the facilities and inducements to row as one of a crew are far greater than to scull: besides which, the former is much easier. For a long period very little attention was paid to sculling at either Oxford or Cambridge, and it is only during the last two or three years that it has again been taken up con amore at the chief seats of learning-with what success the races for the Diamond and Wingfield Sculls on the last three or four occasions amply testify; and I can scarcely see how, at least for some time to come, the lead can be wrested from them. That they should take the first positions with the sculls, as well as with the oar, is only natural, when the large number of men in practice on the Isis and the Cam, is taken into consideration; but for a period of twelve or thirteen years London produced several scullers of more than ordinary merit, who, with two exceptions, kept possession of the

great prizes for amateur scullers from 1849 to 1862; and it came to be looked upon as a natural consequence that the metropolitan river should keep at the head of the scullers, whatever might be her prowess with the oar. All this, however, appears now to be changed.

Sculling, as I mentioned in Chapter III., is performed by one person, who sits in the centre of a small boat built to contain one individual only, and uses a pair of short oars, called sculls-excuse the apparent contradiction—one in each hand. The great art is to pull equally and evenly with both hands, because a straight course will not be kept unless this is done: and there being no coxswain, the sculler has to do his own steering, partly by keeping the stern of his boat straight to some fixed object astern, and partly, but more especially, by turning his head-not his body-round to the right or left, and casting the right or left eye, as the case may be, as far along the water as possible: long practice, however, is required before a sculler can keep going in a perfectly correct direction. Perhaps the best way is to turn the head to the left, and then the left eye not only catches sight of any obstruction or impediment in the path, but also notices the shadow of objects some distance ahead, whose exact nature cannot at once be discovered; custom, however, is the great thing.

A learner should begin by taking lessons in a skiff, or old-fashioned gig; a skiff is best, because its leverage is greater than that of a wall-sided gig. At first it is advisable to have some one at the lines to guide the boat, and to coach: an amateur sculler or a waterman may occupy the post. When sufficiently advanced, an outrigged gig or funny may be tried, and then a wager-

boat. In holding the sculls it is a mere matter of fancy whether the right hand or the left hand is uppermost, the sculls overlapping more or less. Some men prefer one hand and some the other, but whichever plan seems easiest and most natural should be followed. The great points to be borne in mind are, to sit upright; to reach out well over the toes, dropping the body between the knees, which should open out as the arms stretch forward; to get firm hold of the water at the moment of contact—as explained in connection with the oar—and to lift the boat over the water with the first part of the stroke. The power applied will of itself gradually diminish as the stroke is brought to an end; but the "waterman's dig" and jerk should, above all things, be avoided, as no boat is so susceptible of downward pressure as a thin, frail, sculling outrigger. The elbows should be kept close to the flanks; the body should not be allowed to fall back too far: the blades of the sculls should clear the water when on the feather; and the pick up of the body by means of the muscles of the stomach, slightly aided by the toe-straps, should be rapid. to the rate of stroke, he is no mean sculler who can row thirty-four or thirty-six thorough strokes in the minute.

Good watermanship is a sine qua non in good sculling, but it can never be taught theoretically: nothing but practice and long solitary rows will ever impart it. A sculling-boat may be stopped almost dead—in less time than it takes to relate it—by running the sculls down under water in the same manner as the oar; and backing water is precisely similar, only with two sculls instead of one oar. To turn, one scull is backed and the other pulled. When starting a sculling-boat out from a boatyard, the accepted rule is to put her side-

ways, not end on, into the water, with her head against the stream or tide; the inside outrigger is then held by an attendant whilst the sculler embarks, taking his outside scull and placing the handle through the rowlock from outside, and drawing it inboard until the button is within the thowls. The inside scull is shipped in the same way. The sculler being settled and ready to go, the attendant takes the blade of the inshore scull in his hand, and, keeping it down close to the level of the water, pushes it gradually out, and with it the sculler and his outrigger together. The boat's nose can also frequently be sheered out sufficiently to get a pull with the inside hand, by backing or holding water with the outer one, when her head is up-stream or against the tide. In coming in at a landing-place, the boat is easily brought up alongside, by holding water with the inside, and pulling the outside scull; but, if coming down with stream, her head must previously be turned round and put up against it, as at starting. The sculls, when not in use, should invariably lie flat on the water, to balance the boat.

When rowing in rough water, the longer the stroke, and the higher the feather—so as to clear the surf—the better. In races, it is a common and useful practice to get a friend to run along the bank to steer, by shouting to "pull your right" or "left" as required. This obviates the necessity of perpetually looking round. If the water is wide, a pilot frequently follows in an eight or some such boat, and by beckoning to the right or left indicates the course to be kept.

Backwash acts more powerfully on a sculling-boat than on any other description of craft, excepting perhaps a pair; it is, consequently, prudent to practise rapid starting, as by getting away with the lead and throwing the backwash on to the opposing boat, a sculler is a long way on the road to victory.

One point I must particularly impress upon my readers, vis., that "no one ought to get into a sculling-boat until he can swim."

CHAPTER X.

Examples of Form and Style.

I BELLEVE I have now written down all the hints which it is in my power to offer upon the correct mode of handling both oars and sculls, as well as of managing rowing-boats; but I must not omit to cite a few examples from amongst the numerous ranks of oarsmen and scullers, worthy of being imitated. The task is perhaps an invidious one: nevertheless. I shall endeavour to perform it as conscientiously as I can. Opinions, of course, vary, just as doctors differ; but the majority of the persons I shall hereinafter mention are admitted to stand pre-eminent by the general consent of the initiated. At the same time, it should be understood that in my selections I have eschewed pace unless accompanied by good form. Examples of pace are plentiful enough, not so examples of correct style; many names, therefore, which are familiar to my readers are omitted for that reason.

To commence with eights. Perhaps the best specimen of a well-trained and well-taught crew that has been seen afloat for many years, was the Oxford eight of 1861—the crew which avenged their University's defeat by Cambridge in 1860, and which inaugurated the long succession of victories over the larger University, which commenced in 1861, and have continued without intermission up to the present date. The names of the

men who composed that eight are indeed worthy of being held in remembrance by every Oxonian: they were as follows:-1, Champneys (Brasenose College); 2, Merriman (Exeter); 3, Medlicott (Wadham); 4, Robertson (Wadham); 5, G. Morrison (Balliol); 6, Poole (Trinity); 7, Hopkins (Corpus); W. M. Hoare (Exeter), st. It is a coincidence that it was the first appearance at Putney of a celebrated stroke oarsman who will ever be identified with Oxford successes, and who in the two following years again led his crew to victory, thus rowing thrice and winning thrice. Isis has since 1861 turned out some good crews, but none to be compared to that above mentioned. Among other first-class eights may be enumerated the London Rowing Club crews of 1857 and 1859, the First Trinity (Cambridge) crew of 1860, and the University College (Oxford) crew of 1863-all winners of the Grand Challenge Cup at Henley-as well as the Cambridge University crew of 1860, winners at Putney.

Prominent amongst remarkable four-oars were the celebrated Argonauts crew, composed of Nottidge, Casamajor, J. Payne, and H. Playford (st.), who won the Stewards' Cup at Henley in 1856, and who, under the name of the then newly constituted London Rowing Club, repeated their victory in 1857; the Cambridge First Trinity crew of 1860—a powerful boat; the University College, Oxford, four of, 1863; the London Rowing Club crew of 1864; and the Third Trinity four of 1865—all winners of the Stewards' Cup at Henley in the years specified; and the Kingston Rowing Club crew of 1864, winners of the four-oared Challenge Cup at the Barnes Regatta.

Good pair-oared rowing is almost entirely dependent on long practice, for two inferior men who are always together will frequently defeat two men individually better, but less practised. Among the most noteworthy pairs that have competed for the Silver Goblets at Henley, may be named Nottidge and Casamajor, of London, winners in 1855 and 1856; Warre and Arkell, of Oxford, winners in 1859; Woodgate and Champneys, also of Oxford, successful in 1861 and 1862; Hawkshaw and Chambers, of Cambridge, unsuccessful in 1862; and Fenner and May, of London, who won in 1865.

Individually, the most celebrated oarsmen were H. H. Playford, of London; J. W. Chitty, G. Morrison, B. W. Risley, W. M. Hoare, W. B. Woodgate and M. Brown, of Oxford; and J. Hall and W? R. Griffiths, of Cambridge.

Amongst watermen few have surpassed Francis and Hammerton, of Teddington; Winship and Bruce, and Winship and Chambers, of Newcastle; Kilsby and Cook, of London and Oxford; and Hammerton and Hoare, of Kingston and Hammersmith, as pair-oared crews.

Last, but not least, come scullers both amateur and professional. Amongst the former perhaps the most justly celebrated for all the points of good form was Herbert Playford. In pace he was inferior to the late A. A. Casamajor, but his style was indisputably the better of the two, just as Casamajor's was the longest and most telling rowing over a distance. Better sculling, indeed, has seldom been seen than that witnessed at Henley from the years 1854 to 1862, and at Putney from 1854 to 1861, inclusive, when the Diamond and Wingfield Sculls were kept in the hands of three Londoners, Playford, Casamajor and E. D. Brickwood; but since University men have monopolized the chief sculling prizes above and below lock, form has unquestionably gone to the wall; pace may have increased, but such is not my opinion. It would be unjust to omit some notice of several scullers who, though defeated by great cracks, appeared in the lists at Henley-on-Thames, from time to time, and whose sculling was far beyond the average. In 1860 an ever-memorable race was rowed in the trial heat between Herbert Playford—the ultimate winner of the final heat—L. P. Brickwood, of London, and T. R. Finch, of Wadham College, the holder of the Oxford sculls—all three close together at the winning-post, the two latter, who finished in the order named, displaying excellent form. In 1861 and 1862 another London sculler, who proved unsuccessful, showed more than average merit. I refer to George R. Cox, who it should be added rowed the stroke or in the London eight which won the Grand Challenge Cup in the latter year.

Among the University men who succeeded in winning the Diamond or Wingfield Sculls, or both, and who comprise W. B. Woodgate, J. E. Parker and E. B. Michell, of Oxford, and also C. B. Lawes, of Cambridge, the best as well as the most effective sculler was Parker. Michell's form was perhaps superior to that of the other two, but he was by no means such a glutton at a distance, or physically so strong as they.

Of watermen, the greatest master of the art of sculling was the late Robert Coombes, whose successors in the championship of the Thames were T. Cole and J. Messenger. At the present day, Henry Kelley, of Putney, Robert Chambers and Robert Cooper, of Newcastle, T. Hoare, of Hammersmith, and G. Hammerton, of Kingston (formerly of Teddington), are remarkable alike for pace and style. For form and fashion, Kelley, Cooper, Hoare and Hammerton are pre-eminent; whilst the sculling of Chambers stands alone for its marvellous length combined with effectiveness.

CHAPTER XI.

THE VARIOUS MODES OF RACING.

THERE is but one generally recognised and standard mode of boat-racing, viz., breast, or level races, as at Henley, Putney, and every locality where the width of the water is sufficient to allow of two or more boats starting abreast. It is necessarily the fairest and most satisfactory of all possible forms, for no objection whatever can be urged against it.

In some places, however, such as at Oxford, between Iffley and the Barges, and at Cambridge between Baitsbite and the upper end of Long Reach, where there is not sufficient room, and where the curves are too sharp for boats to row alongside one another, bumping and time races are resorted to; but they have their drawbacks. The former are rendered necessary when the number of boats competing is large; the latter, as a rule, take place either as a wind-up, when the boats have all been bumped out but two or three, or else when the entries in themselves are scanty. bumping races the boats start one in front of the other, as it were in a row, a stated distance intervening between them, and a post being fixed for each to start from. Each boat endeavours to bump or touch the boat in front of it, and, when this is accomplished, both the boat bumping and the boat bumped draw on one side, and allow the remainder of the competitors to pass onward. In the eight-oared races the result of a bump is that, in the next race, the two boats concerned, whether making an ordinary bump or bumping over two places, change positions. Bumping over two places results as follows: If out of four boats close together the two in the middle touch and draw aside, and, the last one rowing on, overtakes and bumps the first of the quartette, that is called a bump over two places. Excepting in the eight-oared races, the boats bumped are disqualified from further competition. Rowing past a boat is equivalent to bumping it.

In time races the boats start in the same manner as before, from posts a fixed distance apart, and finish at posts separated by a like interval; the endeavour of each being to get to its own post first.

The latter are less objectionable than bumping races, which frequently resolve themselves into efforts to run into one another by a quick start, or by putting on a spurt at sharp corners. The time races, on the other hand, are better tests of merit, as they must be rowed through from beginning to end. In both cases the wash of preceding boats leads to much unsteady rowing; but they are by no means such a true criterion of respective excellence as breast races, for boats which did not succeed in bumping their leaders in the college eights, have defeated them in a level race on wider water, scilicet, at Henley Regatta in 1862, and at King's Lynn in 1865.

Handicaps seem more or less coming into vogue, but they are only applicable to scullers. There does not seem to be much objection to them, for they hold out encouragement to men who otherwise might never take to handling sculls, and if framed on sound principles, and good men are not too heavily penalised, will often produce first-rate sport. The great bane of handicapping, generally speaking, is that competitors of quality are, by reason of their superiority, handicapped out of the race; this is contrary to the intentions of the art, which is supposed to place everyone on equal terms. A handicapper should neither err on the side of leniency, nor on that of severity.

CHAPTER XII.

REGATTAS, AND THE DUTIES OF THEIR OFFICERS. BOAT-BACES are usually managed by a body of gentlemen called in one place stewards, and in another the committee. The duties of this board, after electing a secretary, consist in arranging the terms of the various races, and fixing the day or days on which they are to be rowed; in receiving, through the hands of their secretary, the entries and entrance fees of intending competitors; in investigating and disposing of any objections made against particular crews or individuals; in considering any proposed alterations in the conduct of the races which the exigencies of the moment may render necessary; and in awarding the prizes according to the decision of their umpire and judge, who also should be duly appointed by the committee.

One error they should particularly avoid, and that is entertaining any objections from disqualified or dissatisfied competitors against the decision of their umpire, in cases of fouling or other disobedience to the rules which he is appointed to administer. It is utterly impossible that a body of committee men, who are mostly ashore or close to the winning-post, can form a correct opinion upon any race if they have not accompanied it, and watched its every incident, from the start to the finish. It is to obviate this very difficulty that an

umpire is appointed under the laws of boat-racing, and his duty in the matter is there clearly laid down.

The province of the umpire, who is commonly also the starter, is to follow-generally affoat, and less frequently ashore—the race throughout, and to decide upon fouls, should they occur. If the race is rowed fairly out upon its merits, without accident or collision. his post is not an arduous one; but when fouling-the bane of the rowing-match-does unfortunately take place, he must act in accordance with the laws and his own judgment. If, as sometimes happens, he has to perform the unpleasant task of disqualifying an offender, he should make up his mind at once, carry his judgment into execution, and above all things, abide by it. He is almost sure to offend one party or the other, both naturally enough, in the heat and excitement of the race, considering themselves the offended and not the offending party; but this cannot be helped. He has a duty to perform, and he must do it without fear or favour. It is unnecessary to enter minutely into all the rules by which he is to be guided, as they will be found with annotations and explanatory directions in the Appendix. An umpire, now-a-days, commonly acts as starter, as previously mentioned, and from the moment of giving the word up to the time of passing the winning-post, the race is under his sole charge. The readiest and simplest mode of effecting a start is to inform the competitors that he will ask once, "Are you ready?" and that if he receives no reply, for which he will allow a reasonable time to elapse, he will say "Go;" upon which the race will commence. Should any of the men not be prepared when he asks his preliminary question, they should sing out in a loud voice, "No!" After allowing a sufficient time to pass, the umpire

should again ask the question, and, upon not receiving an answer, should give the word. The signal "Go," given after asking once only if the men are ready, is much to be preferred to the word "Off," as the former is easier of utterance in a loud and marked manner, and is more readily caught by the oarsmen or scullers lying at the post.

The judge is nominated for the purpose of watching which of the competing boats passes the post first; and with this view a couple of plainly marked posts-one on each side of the course-should be placed in a conspicuous position, so that he may have a clear and distinct line of sight. A flag on one or both of these posts enables the competitors to distinguish the spot where the race ends. It should be clearly understood that it forms no portion whatever of the judge's duty to offer any opinion upon the merits of a race; he is simply to name the boat which passes his flag first; and in level or breast races he should judge the race by the bows of the boats, and not by their sterns. In time races at Oxford the boats are judged by the sterns, and as the rudder of each passes its proper post a pistol is fired, the boat whose pistol is first discharged being declared the winner. It seems to me that the pistol might just as well be fired when the bow of the boat is opposite its post, so as to conform to one system, as the Oxford plan is analogous to judging the Derby winner by his tail-a monstrous idea!

The majority of the races at amateur regattas, with the exception of Henley, are for presentation prizes, which become the absolute property of the winners, but at some meetings so-called challenge cups are offered, with the condition that they must be won two or three years consecutively by the same club or crew before they can become their absolute property. When this is the case, a row over by a single crew should be considered a win, and the prize should be handed over to them, even supposing there was only one entry—otherwise much injustice is liable to be done. At the same time, it is a question whether these quasi-challenge prizes are not objectionable; and it would perhaps save protests, heart-burnings, &c., if they were at once made permanent challenge, i.e., perpetual floating prizes, or else absolutely presented. If the former, a presentation prize of some value should be given to each winner in addition to the cup.

For the information of regatta committees, no less than of competitors themselves, a table of the qualifications and general rules for the chief prizes at Henleythe greatest amateur regatta in existence—is subjoined in the Appendix, and so also are the qualifications of senior and junior oarsmen and scullers, as ably drawn up by the Barnes Regatta Committee. Although different regulations prevail at different places, one point should always be studiously attended to by committees, and in this respect the Henley stewards do not set an example worthy of being followed. It is, that the convenience of the competitors should be studied as much as possible, and that as many races as practicable should be rowed towards the cool of the evening instead of under a broiling mid-day sun-at great discomfort and inconvenience, not to say danger, to the rowers-for the sake of entertaining the lookers-on, and currying favour with the multitude.

Dead heats should be rowed off after the last race upon the card.

Club races and matches between crews of different clubs are arranged and conducted according to the

established laws of boat-racing by their committees and officers.

Lastly, there are the two umpires and referee, who officiate in watermen's matches. These umpires—one for each competitor-were originally supposed to be well acquainted with the laws of boat-racing; and in cases of foul, the umpire of the offended sculler claimed the race of the umpire of the offender, who, if he considered his man to have erred, allowed the claim, and so the matter ended without troubling the referee. At the present time, however, the two umpires, directly a foul takes place, both claim the race from the referee, and therefore the primary object of their appointment is defeated, and the decision is always left to, and thrown upon the shoulders of, the latter. It is to be regretted that these so-called umpires are not abolished, and one official—the present referee—left to adjudicate upon the matches, under the designation of umpire, as in amateur races. It may be added, that these watermen's matches are governed by the regular laws of boat-racing, and that when one man takes another's water he is bound to keep it; or if he subsequently departs from it, he does so at his peril! This point is not sufficiently known or understood.

PART II. TRAINING.

CHAPTER I.

THE OBJECTS OF TRAINING.

Ir cannot be disputed that the Oxford and Cambridge match, the College and other races at the Universities, the various regattas held in the summer season, and the private races of the numerous rowing clubs in the kingdom, all tend to render the number of men competing for aquatic honours during the year very large. Now, before going to the post to take part in a contest which beyond all others taxes the powers and endurance of the human frame to the utmost, every one of these men ought to undergo a careful and gradual process of preparation, which, in technical language, is called By training is here meant the physical amelioration of the oarsman as opposed to his scientific education—the improvement of the bodily powers, not the inculcation of the principles and correct form of rowing, which has already been dealt with. The one is not a part but an adjunct of the other.

Training is the art of attaining physical excellence, viz., increased strength and muscle, improved wind, and accelerated speed; and it is undergone in order that a man may be capable of putting forth the most violent efforts without injury or detriment to himself, of exerting the whole of his strength for a considerable

period of time without flagging, and of maintaining a certain number of rapid actions without distress; in fine, that he may perform an allotted task with comparative ease.

No man, however powerful, muscular, and plucky he may be, or however much he may have practised, can, if untrained, hope to contend, with a reasonable chance of success, against an opponent who is brought out in good condition, even although the latter may be immeasurably inferior in the attributes of muscular Christianity. It must be patent to everyone that such an unusual and excessive strain upon the constitution as a punishing race for four, two, or even one mile, cannot safely be undergone, or, in fact, be undergone at all, by a person in an ordinary or every-day state of health. or the strength will infallibly give way ere more than the smallest portion of the task is completed, and it would be a marvel if the rower did not faint, vomit, or exhibit other symptoms of acute distress, and thereby make manifest the injurious effects of the effort upon the untutored system. On the other hand, the welltrained pupil will go through the same ordeal with apparent ease, because he will have diligently schooled himself to perform the task, as a part of his daily duties.

As an illustration, take two men of no great dissimilarity, the one totally untrained, and the other in perfect condition; start them level, and mark the result. The former will most likely go off with a lead of his opponent, and may probably maintain it for a quarter of a mile; but having got so far he will have arrived at the end of his tether, and will be compelled to give in through exhaustion. The trained man, so far from feeling inclined to slacken his exertions, even should his

first wind be going and his second coming, will be just warming to his work, and will continue on his way with undiminished or, at the worst, insensibly diminished speed.

It is a common saying that a good big man is better than a good little one; and there is much truth in the observation, supposing both to possess the same advantages as to skill, practice, health, and fitness; but a man of inferior muscular ability, if properly trained, will not only defeat, but defeat easily, a more herculean antagonist, if he be devoid of preparation: this has been proved over and over again.

For what purpose is it supposed that the crews which, year by year in the spring, repair to Putney to decide whether the dark or the light blue ribbon shall add yet another to its already lengthy list of victories, undergo the long and careful preparation which is regularly chronicled in the Sporting Journals, if there is no necessity for training? For what purpose in the midst of summer are eights, fours, pairs, and scullers daily taking their breathings on the Isis, the Cam, and the Thames, as the royal regatta of Henley approaches? For what purpose does the trainer bestow for months his time and attention on the high-mettled three-yearold which is to play a prominent part in the great carnival on Epsom Downs-an attention and a watchfulness that become stricter and more intense as the eventful day, big with the fate of thousands, draws near? It cannot be imagined that all this anxiety is suffered, all this inconvenience endured, and all this expense incurred, uselessly and for nothing. The end sought for is perfect condition, in order that the animal, whether biped or quadruped, may be brought to the post in the very acme of fitness. That object is attained by training, and by training only.

In further testimony of the assertion that the most-careful preparation is indispensable to success may be mentioned the occasional defeats of crack carsmen, scullers, pedestrians, or even thorough-breds, by inferior antagonists—defeats which are as opposed to previous public form as they are unexpected and, at the time, unaccountable. The reason in nine cases out of ten is want of condition, caused either by overwork, by suddenly going amiss, by failing to conform to rules or instructions, by forbidden indulgence, or, as it is not uncommon, by treating with levity the task to be gone through, in the belief that victory is easy of acquisition; and, last, but not least, by under-estimating the capabilities of the enemy.

There can be no question but that a highly erroneous impression of training frequently prevails; and this is in no degree lessened by occasional cases of injury, supposed to arise therefrom, being paraded before the eves of the general and uninitiated public by ignorant and irresponsible writers of sensation articles, with all their exaggerated details. With these scribes the mortality among the members of former 'Varsity crews is a favourite topic, though they deal in vague generalities, and seldom or never adduce facts to prove their case. They probably draw their conclusions from what happened long ago-long before training was nearly as well understood as it is now. Supposing the only oarsmen in training at Oxford and Cambridge during the year were the identical sixteen who appear in the lists at Putney, there might be some justice in putting the rate of mortality at a high figure, though I do not: think there would; but if the actual bond fide number of men who undergo this preparation at both the Universities—to say nothing whatever of the hundreds

of oarsmen and scullers in our public schools and metropolitan and provincial clubs—be taken into consideration, it will be found that the per-centage is by no means extraordinary. The case is far otherwise with our jockeys, who reduce themselves by hard work and starvation to an unheard-of lightness, frequently to find after a few years in their vocation only an early and a premature grave. The jockey is, no doubt, at a great disadvantage compared with the oarsman. He is limited to weight, and must bring himself down by severe exercise in the thickest clothing, as well as by reducing his scanty ration of daily food. Our oarsmen are not restricted in their weights, They take their rows in the thinnest garments compatible with the weather. Their appetites are not stinted and starved. And even admitting that some of the cracks of the boating world fail to live to an advanced period, and exhibit signs of an impaired constitution at an early age, the reason will generally be found to be not training per se, but severe exertions on an unfit or half-trained system. Nevertheless, training is a searching ordeal which none but the sound and healthy should undergo.

Apropos of this question, the condition of the athletes Tom King and Heenan, upon the occasion of their fight, has been made the subject of much discussion—or, more correctly speaking, the failing of the powers of the latter at a comparatively early period of the contest. The general conclusion arrived at is that the American was over-trained; not that his blows lacked force, but that his muscular power was developed at the expense of the vital. This may or may not have been the case; but perhaps the true origin of his failing when the pinch came may be more properly attributed

to the life he led in the interval between the battle of Farnborough and the battle of Wadhurst. His mode of life previously to the first-mentioned event was, if report may be relied on, careful and strict to a degree; but the same cannot be said of it afterwards when, in company with Tom Sayers, he was for a long time exhibiting in the provinces. Besides, the recurrence of the long and severe work and regimen of training could not fail to tell in a marked manner on a frame which required a reduction of at least a stone and a half. If not stale, how is his jaded and careworn look to be explained? Per contrà, it is clear that King was in the finest condition it is possible to imagine. It is evidenced by his rapid rally from a brief state of insensibility produced by the bear-hugs of his antagonist, and by his energy and material effectiveness towards the conclusion of the combat. It was well known that he had taken especial care of himself for a long time prior to the day of the battle, and that fact was forcibly advanced in his favour by his supporters, notwithstanding the "talent" and the money pointed to an opposite, and, as the sequel proved, an erroneous conclusion.

Again, there are ample grounds for believing that training is frequently made a matter of difficulty, labour, erroneous treatment, and abnormal existence. Men, both stout and lean, are sometimes taken in hand suddenly, and at once physicked, sweated, and rattled along at hard work, their customary hours of rest abruptly shortened, their hitherto varied and agreeable diet exchanged for one continual round of chop and steak, and steak and chop, served up half raw, the thirsty cravings of nature denied, and a state of existence forced upon them which may, in a word, be termed

martyrdom. The fruit of all this unnatural, unwhole-some handling, of all this ignorance and folly, is debility, lassitude, cessation of appetite, disgust, and sickness. Is this, I ask, preparing the body to undergo a severe trial of strength, endurance, and pluck, verging on, if not actually amounting to, distress? Yet such, unfortunately, has been too often the course adopted.

Not so the case of the athlete educated according to nature, common sense, and the correct principles of the trainer's art. When brought out to perform his long-expected task, his strength is gathered up, his fully developed muscles are hard as iron, his wind is sound, his tread elastic, his speed great, his flesh firm, his skin fair and clear, his face hard and healthy, though perhaps fine-drawn, his eye bright and sparkling like a diamond—the white a clear blue—and his spirits, accompanied by a proper confidence in his ability to go anywhere and do anything, of the very best.

These are the essentials of perfect condition and of success.

CHAPTER II.

THE MEANS EMPLOYED.

To arrive at a state of good condition, strict attention to certain principles is indispensable.

In the first place, the general health should be improved by the ordinary precautions of regular and early hours, cold bathing-which in these days of matutinal tubbing is almost universal-wearing appropriate clothing, taking plenty of out-door exercise, such as walking or occasional running, in addition to rowing; by eschewing smoke, drink, and ill-ventilated or heated rooms; by abstaining from excesses of every description. e.g., by keeping the body in temperance, soberness, and chastity—the motto of a trainer; by relaxation from literary or sedentary occupation; by amusing the mind and elevating the spirits; by moderation in all things, and by the strictest regularity of habit. The system must be invigorated by good sound food, proper bodily work, and refreshing rest; and above all things it is necessary that the man trained should enter heart and soul into the task before him.

The next point is the reduction of fat: I do not say weight, because I am convinced that to reduce a man purely and simply because he is heavy is an error. Much, of course, depends upon his appearance, general health, and constitution; but if a man is tall, fleshy, of full habit, powerful frame, and corresponding bulk,

he must be fined down. This is to be brought about by 'hard work and by sweating, either natural or artificial. The ancient custom was to reduce by artificial means, such as giving sudatory medicines over-night, the process going on during sleep-about the most insane course that could well have been adopted, nothing, perhaps, being more debilitating than night sweats. Another mode was to wrap the patient, when denuded of all clothing, in a cold wet sheet, then to roll him up in a blanket, and half smother him with a feather-bed. would quickly break out in the most profuse perspiration, and, after having been so treated for upwards of an hour, would be doused over with cold water and rubbed dry. A more modern application of a somewhat similar method is the Turkish bath, which has of late been much in vogue, but which, however good it may be for invalids, is not quite the style of treatment for a healthy oarsman, although one or two baths might commence the reduction of a very heavy and fleshy subject, as it might purify the blood, would clean the skin, and perhaps have a tendency to diminish boils. The plan has been lately tried upon racehorses, but it has resulted in failure. It is scarcely reasonable to suppose that a horse, reduced to a proper degree of fineness by the Turkish bath, would be as fit for his work as one brought to the same state by long, steady gallops, which, besides getting off superfluous fat, have the additional and allimportant advantage of improving the wind-for this reason, that, according to its advocates, it does not get rid of fat, but merely the water in the blood; and even if it did, it could not much affect the internal fat, the great hindrance to good wind. So with man. artificial modes of inducing perspiration may therefore be put under a ban (except in the extremest of extreme

cases), as far as rowing is concerned. Natural sweating is far more to the purpose, and may be brought about by rowing, walking, or running, in extra clothing, especially by increasing the clothes where there is most fat. One thing, however, should invariably be avoided, namely, a too-rapid reduction; it should always be gradual. The daily work in the boat will, to a great extent, assist in bringing a man down; but, in addition to this, it is absolutely necessary for him to undergo a process which will more effectually rid the heart and muscles of any undue accumulation of fat, and thereby improve the wind. Walking at a smart pace, as a rule, will not alone compass this end, though in some cases it may, and therefore recourse must be had to running. A sharp run of a mile, or even less, is far better than a dull, steady drag of four or five miles, which will depress the spirits, and tire the body; for it must be borne in mind that the race to be gone through is not a running, but a rowing match, and therefore plenty of rowing, as opposed to much running, should be insisted on.

The improvement of wind will be brought about, with the reduction of fat, by the running just alluded to, and by avoiding a too free use of fluids, as well as by abstaining from indigestible and unwholesome articles of food, but especially by the work done in the boat. It has been laid down as a golden maxim, that men in training should be stinted in the quantity of fluid they drink, and as far as wind goes nothing is so important. An extra glass of port wine after dinner invariably shows itself the next day. Care should therefore be taken that the glasses are always the same size, for even such a trivial matter makes a difference. The quantity of gruel taken at night before going to bed should be limited to one pint, and must neither be increased, nor

may the men mix water with it for the purpose of augmenting its bulk. At Oxford the allowance in summer is usually two cups of tea at breakfast, one pint of beer at dinner (before rowing), and a pint and a half at supper if required; and if men feel thirsty just before retiring for the night, no objection is made to their taking a glass of water. For my own part, I incline to think that in hot weather a glass of water cannot do any harm if there is real thirst, as opposed to the merely temporary dryness of the mouth just after pulling. No liquid, however, ought to be taken immediately before or directly after rowing: in either case an hour at least should intervene. Much greater laxity should in every way be suffered to prevail in summer than in winter or spring, but when half a pint of liquid three times a day only is allowed, even during severe work in hot weather, coupled with the consumption of much dry and flesh-forming food, it is no wonder that excessive thirst, accompanied by its handmaid, fever, supervenes: a greater liberty in satisfying the cravings of thirst will be followed by a corresponding zest for the daily meals.

An increase of strength, and development of muscle, will be gained as follows: First, by conforming to a diet composed of the most wholesome and nourishing food; secondly, by steady but hard rowing. The use of gymnastics and dumb-bells is not recommended, because they strengthen the muscles of the arms and shoulders; now, the former ought to be used but little, and the latter but little also. The pulling will in itself strengthen the muscles required in rowing, and power in other muscles leads to their use in the place of the proper ones. At Oxford, oarsmen at all given to this practice are invariably regarded with suspicion and generally rejected.

A far greater latitude is admissible in the matter of diet than is generally allowed, and the more varied the repast the more gratefully will it be accepted. Nothing is so sickening as to be for ever sitting down to chop. stale bread, and tea, varied only by steak, stale bread. and beer; and no one will thrive on such a bill of fare for a week, still less for a month or more. The meals should be taken at the same hour every day, and no stone should be left unturned to make the time spent in refreshing the inner man as genial and agreeable as possible. It cannot for an instant be imagined that it is better to sit down and silently gobble up one's daily rations, with the certainty of indigestion following upon bolted morsels, than to spend a reasonable period in properly masticating one's food—the while enlivened by agreeable conversation—and in allowing it to digest. As to articles of diet, everyone knows, or ought to know, what suits him best, and what does not; and short of allowing anything positively injurious or unwholesome to be put on the table, too much consideration cannot be shown to men's inclinations; for it should not be forgotten that what is one man's food is another man's poison. And here I cannot do better than quote the advice offered on this point in the above-mentioned pamphlet, "Principles of Rowing and Steering:" "Whatever a man's habits have been, if reasonable and temperate, let him merely modify them now, upon general sanitary principles; and let him not be converted, just four weeks before a race, into an artificial creature, feeding only on the most flesh-forming food, dreading the innocent adjuncts of everyone's table in ordinary life, and trusting to beef and mutton, and strong ale to deliver him."

As regards the work to be done at the oar, the same

rule which applies to the diminution of obesity holds good: it should be commenced steadily, and it should be continued gradually; and as the system becomes by degrees improved, and more fitted to bear increased exertion, it may be quickened or augmented. No error is so unpardonable as to set a crew to racing work when first made up. To say nothing of the ruination of style, it is the surest way to break them down. The proper mode of procedure is to take them long, steady rows, as much to accustom the constitution to bear the fatigues and distress to be subsequently undergone, as to get them together, point out faults, and perfect form. The wind, the strength, and the stamina will be put to the proof when the day of the race arrives, and in order that they may not be found wanting at the critical moment, it is a sine qua non that the work during a portion of training should be the same as the distance to be raced over, in order that the men may get accustomed to their task. Consequently, after they have had sufficient practice in steady rowing, sharp work must be commenced, and be continued until shortly before the race day, when it will be necessary to ease up. Every man in the boat thereby becomes capable of rowing the course at his utmost power, and of having, in addition, a little fund of strength treasured up in reserve for occasional spurts. which are frequently needed; this can never be gained by shirking daily work, or by the employment of half measures, for a man should row every stroke as hard as he can—he will have plenty of strength left for spurts. During the foregoing trying period great care and discrimination must be exercised as to the amount of work which each individual is capable of enduring without detriment to his health and strength; and the slightest

symptoms of training off must be attentively studied and remedied, or all the time and labour bestowed will, at the eleventh hour, be rendered nugatory. It must not be supposed that the men composing the crew will all require treating indiscriminately by one set of rules; on the contrary, one portion will be benefited by a slight relaxation of the daily work, and by a moderate indulgence in diet, while the other will require much harder work and a less varied table: still, no absolute law can be laid down. Unfortunately, it is by no means rare, even now-a-days, to see a crew brought down too low, and weakened by too severe work, so that they are weary and unhinged, when they should be going to the post hearty, and exulting in their strength; and when men are weak, even though their wind may be better, they can scarcely stand the strain of a punishing race as well as if they were stronger, though with less wind: they can never spurt, because they have not strength or pluck left for it. Again, a true style demands dash, which they have not. This is especially the case during the midsummer training.

The present is an opportune occasion for citing the observations upon training made by Dr. Edward Smith in his recently published work on Practical Dietary (founded to a great extent upon his Reports made to the Privy Council, after a full and complete investigation of the diet of the various classes of the community), although all his statements will not apply to our present mode. Dr. Smith, referring to jockeys, boxers, and competitors in running and rowing matches, says:

"The training of these classes involves the following sound principles:

"1. That bulk and weight depend largely upon the fluids contained in the body, and that in order to lessen

them it is necessary to limit the supply of fluids and to increase the discharge of them from the body; also, that there are certain fluids which when taken, tend more than others to increase weight and bulk, and that the excretion of water by the skin is more directly within the control of the trainer than by any other outlet.

- "2. That it is possible to lessen the amount of fat already existing, and greatly to restrict the further formation of it, whilst the muscles are increasing in tone and vigour. This may be effected by limiting the supply of fat-forming, and augmenting the quantity of flesh-forming food, at the same time that much exertion is made with the whole and with certain parts of the body.
- "3. That this may be rapidly effected so that an average reduction in weight may amount to from 1lb. to 2lbs. daily, according to the bulk of the person so trained.

"In applying these principles to practice, the trainers limit the supply of separated fluid to about a pint and a half daily. Tea and water are universally allowed; but whilst some allow coffee, wine, and hard old ale, others forbid them. In the training of Tom King half a pint of sherry and one or two half-pints of hard ale were given; whilst in the case of jockeys (it having been affirmed that a single wine-glassful of wine increased the weight 3lbs. to 4lbs.) wine has been rigorously withheld. The removal of fluid from the body is effected by causing the person to walk briskly for some hours daily when well clad in flannels, and thus inducing profuse perspiration; but the duration and severity of this process are less with spare than with bulky men. The solid food consists of meat in large

quantity, whilst bread and vegetables are eaten very sparingly, and sugar and butter are usually forbidden. Eggs are allowed. Thus, King ate for breakfast two chops, with dry toast or stale bread and one cup of tea, without butter or sugar; for dinner, 11b. to 1½1b. of fresh beef or mutton, toast or stale bread, a little potato or greens, and half a pint of dry old als; for tea, one cup of tea, an egg, and dry toast; and for supper, gruel, or half a pint of dry old ale. The exercise consists in gentle and fast walking to the extent of at least twenty miles per day, and of such special exertion as may call into action the sets of muscles upon which the result of the strife will chiefly depend.

"The result of the whole training is that the muscular system gains in development, so that the muscles are rendered more prominent, and feel hard and resisting to the touch; but some of this is more apparent than real, since the fat having been taken away, and the quantity of fluid greatly reduced, the spaces between the muscles are enlarged and the muscles appear more prominently than before. It is not a process which even one who had before been trained would undergo again for pleasure only, since it demands much self-denial in all, and in some is effected with much difficulty, and felt most severely. It is, moreover, not conducive to improvement in health, but on the contrary, when too prolonged, exhausts the system; and in ordinary cases, when the struggle is over, the person finds it imperatively necessary to return to the ordinary quantity and admixture of food. It is believed that when judiciously effected, it gives freedom of motion and endurance, but afterwards the prostration of strength (as in the case of Heenan) is oftentimes deplorable. The case of jockeys is much worse than that of prize-fighters, since the

object in the training is to reduce the bulk of those who are already below the average weight; and equal pains are not taken to sustain the general health and vigour of the system. The restriction of fluids and the production of perspiration are carried out severely, whilst alcohols are often interdicted, vegetable foods reduced, and animal foods insufficiently increased. Hence we have in the training itself an explanation of the feebleness and early mortality of this class of persons.

"I doubt if much improvement can be made in the present system of training. I will, however, offer one or two remarks of a general tendency:

"1. The small allowance of fluid as food, conjoined with the daily diminution of fluid within the body, is fitted to lessen the digestion of bread and other farinaceous food; for the fluid will be absorbed into the blood almost instantly, instead of being appropriated to the solution of food in the stomach. The same fact conjoined with the excessive elimination of fluid by the skin, and the consequent diminution of the secretion of the kidneys, renders it almost impossible for the waste of animal food and of the tissues to be removed from the body; for this proceeds almost exclusively by the latter channel. Hence a state bordering upon disease must always be present, and a gouty condition of system will follow, and it is only the limited period of the training which prevents the occurrence of serious mischief. I found in my experiments that three half-pints of cold water, taken alone in the early morning at intervals of half an hour, caused an evacuation of thrice the amount by the kidneys before mid-day (no food having been eaten), and thereby materially lessened the weight of the body. I suggest to trainers the adoption of this plan every fourth day.

- "2. Alcohols in every form tend to lessen the elimination of fluid from the body, and should only be given in training when support of the digestion and the action of the heart is called for—that is, when the training is carried on too severely. The statement that a glass of wine increased the weight of the body by several pounds within an hour or two was evidently an error. No food can increase the weight of the body immediately, beyond its own weight, but it may lessen the rapidity of decrease of weight, as by lessening the perspiration.
- "3. Coffee lessens whilst tea promotes perspiration, and hence the latter is to be preferred.
- "4. The application of cold salt and water after the sweating is of the highest value, since it limits the sweating action and restores the tone of the skin.
- "5. It is highly probable that the large quantity of meat which is given at dinner is only partially digested, and it would be much better to limit it to half a pound at that meal, and, if needs be, to supply more in the evening. The value of eggs is far inferior to that of meat." But to return.

The time occupied in making a crew properly fit will, in a great measure, depend upon the season of the year, weather, length of course, and other concomitant circumstances; but, generally speaking, from three to six weeks will be requisite from first making up till they are ready to go to the post. This period of conditioning may be divided into two portions, of which I will denominate the first the "preparatory stage," and the second "strict training." As such, we will proceed to consider them minutely, but before doing so it may perhaps be as well to offer a few observations upon the trainer and his men.

CHAPTER III.

THE TRAINER AND HIS MEN.

THE trainer is a highly important personage, and exercises an all-powerful influence on his crew, either for good or for evil. His duties are of a varied character, and many of them are exceedingly simple; but at the same time a minute technical knowledge, which can only be gained by long experience, is absolutely requisite.

Amongst other things, it will be part of his duty to select the best men from a number of oarsmen placed at his disposal; to reduce to the actual number necessary for manning the boat the lot originally selected, and to assign to each his proper thwart, after repeated trials; to be their constant companion both indoors and out of doors; to regulate their hours of work, leisure, and repast; to order and preside at their meals, exercising a strict supervision over everything, and practising as much as possible what he preaches—his text should be: Never ask a man to do anything you won't do yourself. He should be careful that his men run into no excess, and that they do not break through the rules laid down for their guidance, excepting in so far as he may permit in peculiar cases. should watch over them as far as practicable in their hours of idleness, although it generally happens that much is unavoidably left to their own honour and discretion; nevertheless, no one who has any regard to the

object in view, or to integrity of principle, will abuse the confidence thus necessarily reposed in him. should keep his men in good humour, and in perfect accord with one another and themselves-for it is better to have a bad oar than a bad-tempered man in a crew-studying their various constitutions and tempers, smoothing down and making easy any little disagreements and want of patience that may arise on account of the severity of their treatment, by pointing out the temporary nature of the hardships which they are undergoing, and by calling their attention to the great and glorious result to be achieved. He should at all times lend a willing ear to complaints, either as to oars and the mechanical portions of the boat-although he should recollect that "a bad workman quarrels with his tools," and that putting bits of wood on the stretcher and seat sometimes confirms faults rather than mends them-or to incipient symptoms of training off, weakness, or other bodily ailments, giving them an attentive and careful consideration; and should any of his men exhibit signs of going amiss, it should be his endeavour, by a slight relaxation of work, and by permitting a somewhat more free indulgence in the matter of diet, as he may think best in the exercise of the great discretion left to him, to prevent bad becoming worse. In fact, he should always encourage his men to tell him of the slightest thing that is wrong with them, reticence in this respect being probably the greatest difficulty he will have to contend with; for, be it recollected, it is much easier to train a man down than it is to put on condition once lost. He should accompany the crew in their walks and runs, directing them like a skilful general; and he should be particularly strict and attentive when they are in their boat. He must take care

that they can get at their work properly, that it is neither too near nor too far off; that their seats are of the proper height, and that all the little technicalities of oars, buttons, rowlocks, mats, stretchers, &c., are correct in every detail. He must watch and instruct them from the banks of the river as well as from the stern of the boat (especially the former), pointing out their faults, suggesting remedies, and correcting errors; and in order to do this he must thoroughly study each individual oarsman in his crew, and find out the cause of his faults-no such easy task as it appears, as it differs in each individual, and is usually quite different from what it appears to be at first sight. He must see that they do not over-exert themselves; but he must likewise take care that they undergo sufficient work, and that there is no shirking, and yet that the willing horses do not bear all the labour. He should occasionally cheer the whole crew when doing well, and likewise encourage particular men if they deserve it, holding them up to the least careful and painstaking, as models to be followed; but he should repress untimely efforts on the part of individuals. He must reprove offenders, temperately but firmly, and always insist on being obeyed. He should be competent not only to detect the slightest fault or tendency to error, but to show how to remedy it for the nonce, and to guard against it for the future. should know exactly the proper amount of work to be done, and the manner in which it ought to be done. He should be able to distinguish the signs and appearances of men being underworked or overworked, and should guard against their going amiss. He should be a first-rate judge of time, form, and pace, as well as of condition. Now, judging condition is perhaps the most

difficult thing a trainer has to do, because men, from pride and fear of being turned out of the boat—from too much pluck, in fact—will not tell him if they are ill. Hence many of the evil consequences of rowing, sure to do damage to the individual himself after the race is over, and likely to lead to the most troublesome of all things as far as the crew are concerned—defeat. In this especially it is as well to take the advice of some old rowing man—a trainer if possible—who sees the crew at long intervals, as the changes from good condition to training off are very slight, and are apt to escape the observation of one who sees it every day. This refers more particularly to individuals, as it is not very difficult to tell if a whole boat is going wrong.

He should be able to tell at a glance whether men are thriving or falling off under the regimen he is enforcing, and to single out those who have been doing their best from those who have been sparing themselves during a hard pull. To sum up, he must be an accomplished and thoroughly practical oarsman, possessing an accurate knowledge of rowing and training in all its details; and this can only be acquired by a long apprenticeship at the oar, and by a minute and critical observation of the style and form of every one afloat. Finally, he should be concise yet withal intelligible, perfectly audible, vigilant, impartial, good-tempered, and considerate.

The men to be trained necessarily vary much. Some have been living a different life from others—this one steadily, that one fast. One is tall and heavy; another gaunt, thin, and wiry; a third of middle height, broad shoulders, and sturdy build. It is therefore self-evident that they will require treatment more or less diversified. However, it is sufficient for the present purpose to

assume that none are positively out of health or without practice: such an event is, or ought to be, rare; for no one who has any regard for his future well-being, and who does not positively desire to injure his constitution, will subject himself to the hardships of a course of strict training unless he is sound and free from disease. It would, in fact, be a good plan if every man who was selected for a crew, were to undergo a careful medical examination, and so learn whether he would be running a risk in submitting to be put to very severe work. any rate he would have the satisfaction of knowing that he was not doing wrong; for it is scarcely to be supposed that, if forbidden by his medical attendant, he would still continue to follow the bent of his own inclination, however mortifying it might be to be debarred from forming one of "the eight." Sufficient attention is not paid to this point. If it were we should hardly ever hear melancholy tales of A. being short-lived, B. suffering from disease of the heart or lungs, C. rupturing a blood-vessel, and so on: albeit, here and there a man will be found who persists in over-doing it, and suffers in consequence.

The requisite number of men having, after repeated changes and alterations, been finally determined upon, they must make up their minds to devote themselves to the object in view, and to spare no pains to render themselves perfect. They must do their work willingly, however unpalatable it may prove, and not shirk. They should obey their trainer in all his orders, and comply readily with his instructions, recollecting that he is advising and admonishing them for their own improvement and benefit. They should work and submit with a will and with a good grace, not sullenly or in ill-humour. They should always confide in their Mentor, and should

not hesitate to make him acquainted with all their little grievances, of whatever nature, in order that he may suggest a remedy-not maintaining an obstinate and dogged silence, nor brooding over imaginary wrongs and hardships. If they find themselves getting overdone or distressed, let them speak, that one stitch may save the otherwise inevitable nine. They should not neglect ordinary precautions against cold-such as always taking a comforter and jacket out with them in the boat ready for stoppages, &c .- or to occupy their spare moments with light and agreeable reading, or some other innocent diversion; and they should be careful to avoid dwelling upon the probable chances of defeat, or worrying themselves as the anxiously expected day approaches. above all, when left to their own devices and the bent of their own inclinations—as must sometimes inevitably happen—they should never break through their fixed limits, and run riot, as by such conduct they will in one short hour undo all that it has taken perhaps weeks to accomplish. A little while longer and, the race being over, they are free to eat what they like, to drink what they like, and to do what they like, in reason.

Oarsmen may be divided into two great families, namely, those who are pursuing their studies at the various seats of learning, and those who are following their avocations during the whole of the day, labouring for their daily bread. The first-mentioned have usually plenty of spare time on their hands, and can do their work and take their meals at whatever hour is most suitable or agreeable; and they have the all-important benefit of recreation and exercise in the middle of the day. Not so the latter, who are compelled to take their daily rows the first thing in the morning and the last thing in the evening, if they purpose practising twices

during the twenty-four hours, and who must, therefore, submit to do a portion of their work while the morning is yet young, or be content with one hard row in the evening, when their systems are none the better for their mid-day confinement: and it surely requires no sage to discover that hard work at a very early hour, especially if in the heat of summer and before breakfast, is anything but beneficial. Men, it is true, differ a good deal in their capabilities for work before breakfast; some do not feel the evil effects of it much, whilst others are ruined by it. Hence the folly of insisting on running before breakfast in most cases; indeed, there are many men who ought to have that meal soon after rising. time, of course, being allowed for a walk. The manifest advantage which the former class commonly possess over the latter, when they meet, should always be taken into consideration in looking into the future or in commenting upon the past.

I wish it to be perfectly understood that watermen are not alluded to in my training chapters, and for the following reasons: In the first place, because crews of watermen are very rarely made up; and secondly, because when they are made up they train after their own manner, some one way, some another, although the salient principles of the art apply equally to the amateur and the professional. On the other hand, their sculling matches are common enough; but in those cases the competitors generally place themselves under the eye and guidance of a trusty person who has had considerable experience in that line, and of whom there are several of more than ordinary celebrity. The same course is occasionally followed by the amateur sculler, but he has generally to do the best he can for himself.

CHAPTER IV.

THE PREPARATORY STAGE.

WHEN the selection of the men has been made, the first thing to be done is to put them through a steady preparation, in order to bring them into a state of rough fitness, or half-condition, as a gradual introduction to the harder stage of actual training; but this refers less to oarsmen at the Universities and public schools, who are usually in fair health before training, than to those who live in large cities, and are engaged in business.

To enable them to derive the greatest individual benefit, it will be necessary to take into consideration the mode of life which each man has been pursuing, and then-varying it as circumstances may demandto commence a judicious course of treatment which shall not be particularly stringent, because, as this is the period of practice and general improvement only, severe work, strict diet, and much compulsory restraint, are better and more properly deferred till regular training commences. Men who have been living steadily and taking plenty of strong exercise, especially during the winter, will not require any preliminary attention, as they are ready to commence practice at once. The case is different with others whose nervous systems are debilitated by over-study and incessant mental labour. and whose muscles are probably at the same time weak, flabby, and unfit for violent physical work: these will

require careful handling. Their studious habits, as well as all undue stimulants, must be given up, and they must begin by taking gentle but regular exercise, coupled with plenty of amusement; and as their bodily powers improve, so will their mental faculties recover tone. Again, men who have lived a luxurious or, more properly speaking, a "fast" life, without much exercise, will be the most difficult to treat; their whole systems will be so utterly out of order that any attempt to undergo violent work would be certain to knock them up on the spot. All their old customs of excess and self-indulgence must be discontinued instanter, and a dose or two of mild aperient medicine-such as castor oil, senna and salts, or rhubarb and magnesia-will be beneficial. Far be it from my intention to suggest a severe and violent physicking, which is so often considered the correct mode of commencing to train, but which is the very worst and most irrational course that can be pursued: it would be better that no medicine whatever were swallowed during the whole preparation, from first to last. We do not administer physic to a person in sound health, but to one manifestly out of sorts; and therefore the use of doctor's stuff, except in very particular and urgent cases, is entirely to be deprecated. Steady walking for a few days will do to commence with, before taking an oar. It is, however, desirable to have as few fast men as possible in a boat, because the work and regimen of training, when undertaken afresh, will, if the constitution has been tried by rackety or intemperate living, tell in a marked manner on the system, and, in nine cases out of ten, produce staleness. Care should always be taken not to introduce a violent change too suddenly into existing customs, but to vary them according to the habits of each individual.

Everyone must of course wear appropriate clothing. It should consist of merino jerseys of a moderately thin texture; one or two thick knitted woollen jerseys to wear over the thinner ones when practising in cold weather, or to put on when getting out of the boat; a flannel or pilot-cloth boating-coat warmly lined (according to the season), in which it is as well to have a band of elastic round the wrists to prevent the wind blowing up the arms in cold, windy weather; flannel caps, woollen comforters, straw hats, flannel trousers, and thin white shoes-which are perhaps best made of canvas, and which can be pipe-clayed when dirty-worn over ordinary woollen socks. The inside of the seat of the trousers may be lined with a large soft skin of washleather to prevent the fibres of the material irritating the cuticle; but it is of course entirely optional. the disadvantage, if much worn, of getting hard after becoming wet from perspiration, or from water coming in over the side of the boat. A good oar ought certainly never to move about on his seat so as to rub the skin: in fact, soreness is a pretty sure sign of some fault in rowing, unless, perhaps, a man has not pulled for some time. Nevertheless, for my own part, I should as soon think of rowing without the washleather, as without the trousers themselves. Great care should be exercised in getting the boating jacket or overjersey properly made; tailors, it should be remembered, seldom or never build a good one. It ought to be lined with flannel, as it is often put on immediately over the rowing jersey.

As already mentioned, the main point is to improve the general state of health. For this purpose the men should rise at a moderately early hour—though it is by no means advisable to insist upon their getting up too

long before their accustomed time-and then turn out for an agreeable walk of a mile or two at a steady pace, so as to inhale the invigorating morning air, and whet the appetite. On coming in they should take a cold bath, well rubbing themselves afterwards with rough towels or horse-hair gloves. If the weather is sufficiently mild, a bathe in fresh water, or salt if attainable, will be productive of immense benefit, but stopping in too long should be strictly guarded against: on enterging and being well rubbed, an exhibarating glow should supervene. The bath should be succeeded by breakfast. After the meal there will most likely be study or business to attend to, but at present our concern is not with any fixed routine; that will come by and by.

If the dinner hour is late in the day, lunch will be absolutely necessary; still, it ought to be light, and should consist of a glass of sherry and a couple of biscuits, or of beer with a sandwich. A small mutton chop, or even a slice of cold meat, might without impropriety be given to men who need frequent and plentiful nourishment. Tea is admissible after a late dinner; but if the latter is taken early, a substantial but not too heavy supper, instead of tea, will be required about two or three hours before retiring to rest. The diet may be as varied as possible, so long as it is wholesome and nutritive. No particular restrictions are necessary, yet it is as well to avoid white meats, cheese, and all raw indigestible vegetables, with the exception of lettuce, and an occasional watercress.

As to the proper hours, a few general hints will prove sufficient; they are merely intended to act as fingerposts, and are not laid down as absolute law. For rising, say from seven to eight, or perhaps a little earlier in summer; walk for half an hour; breakfast from eight to nine; study till half-past twelve or one, which is lunch time; exercise, both rowing and otherwise, till half-past five or six; then dinner; read and rest till nine, when take tea; retire between ten and eleven, not later, for there is an old rowing maxim that every quarter of an hour in bed before twelve o'clock, is equal to an inch of water before the rowlock. It may happen that rowing cannot be practised until five or six o'clock, in which case a substantial latch or dinner between one and two p.m. should be taken. In the good and sufficient supper about half-past severage at.

As little mental and sedentary work as possible should be undertaken; and, where practicable, as much spare time as can be allowed should be devoted to the annusement of the mind, by walks and horse exercise, witnessing cricket and other out-door sports—but standing about too long is to be avoided—and by occasional participation in a game of billiards, or other in-door diversions.

With respect to exercise, a reasonable amount of walking should be taken daily, especially on a Sunday, as it will prove highly beneficial; it brings all the muscles and powers of the body into play, and more than anything else produces that elasticity of spirits and buoyant crisp feeling so characteristic of health. The rowing work, too, which is done during this stage, and which should consist of regular steady pulling—the further the better, so long as the men are not in the least distressed—is important in more than one sense; it not only strengthens the muscles and tends to reduce weight and improve wind, but it is the sole means whereby men of all varieties and styles of rowing can be slowly and step by step ground down to uniformity.

Very long rows once or twice in the course of training are in fashion at both Universities; they thoroughly tire men down, and oblige them to pull in such a manner as to do the greatest amount of work with the least possible exertion to themselves—the great secret in rowing; but a tyro in the art of training is recommended not to make use of them unadvisedly. during this period that long, steady work is enforced, faults pointed out and remedied, and the men all moulded carefully on one model, by long distances, and by the same lessons repeated day by day. It is not until after some weeks of constant attention that the simultaneous dip, the equal pull of the oars through the water fore and aft, the uniform swing of the men and the exact finish of the stroke, which constitute a perfect crew, are attained.

CHAPTER V.

STRICT TRAINING.

THE preliminary course having lasted until within four or five weeks of the day appointed for the match, the men having during that time physically improved and fallen well together — doing their work with that machine-like regularity which is so essential to well-doing—choppings and changings having almost entirely ceased, and everything being in proper trim, the second and all-important stage of strict training must be commenced. It is the most momentous period of the oarsman's preparation—a period during which a crew is either made or marred. Such being the case, it is imperative that none but the soundest advice be tendered, and that the trainer be thoroughly qualified.

The present stage is not so dissimilar to its predecessor as might at first be supposed; the broad principles are, to a certain extent, the same, but the minutize differ in many respects very materially, although, after all, it is possible that strict rules, whatever they may be, are of more importance than anything else. The hours and rules of rising, bathing, meals, exercise, recreation, &c., will be nearly identical; not so the ingredients of the various repasts, or the actual work to be done. To begin: The crew will rise, in spring, between seven and eight o'clock, in summer from half-past six to half-past seven; but they should have at least

eight hours' sleep clear, or perhaps even more in some cases. The bath may follow immediately, if taken indoors, or even if bathing in the open air is resorted to; still, it is optional, and perhaps better to get through the morning walk of a mile or two first, and to bathe afterwards, though not until perspiration has ceased, if it takes place at all. It usually happens that the bathing-place is some little way off the crew's headquarters, and therefore the walk home is sufficient to produce a comfortable glow; if it is close at hand, a brisk walk of half a mile should intervene between that process and the morning meal. There should be no running before breakfast. I repeat, no running before breakfast! The author of the "Principles of Rowing and Steering" writes as follows: "A crew, having entered upon its month's training, meets about seven a.m. to run two miles or so;" and again, "This morning run is less for the sake of exercise than for perfecting soundness of wind. It ought, therefore, to be quick." Still, I venture most emphatically to dissent from this opinion, because men rowing in light boats with a quick stroke require to be as fresh and lively as possible, and nothing takes away the freshness of the muscles of the legs so much as running. Who does not remember the stiffness, sometimes amounting to lameness, produced by the first few runs before breakfast under the old system of training? In some cases no running at all is necessary—in fact, it is positively injurious; and I cannot help thinking that all the work that should be required of a man, unless extraordinarily otese, ought to be done in the boat, and that if he is really kept up to his rowing work well, it is as much as can be demanded from him. A few days before the race, a little-but a very little-sharp running is

perhaps advisable, but those days are always exceptional; and it is just in those days that Oxford has made and Cambridge has marred her 'Varsity crews. I have very little doubt but that overtraining, and many of its concomitant evils, are caused by too much running rather than rowing.

The time of breaking fast should be an hour or an hour and a half after getting out of bed, though there can be no objection to the consumption of a piece of stale bread or a hard biscuit, with a glass of water or milk, the first thing after rising. From breakfast to half-past twelve or one o'clock is the period for study, work, or recreation, as before mentioned, and a smart walk or a run of a mile will not be improper if particularly required to reduce fat. The mid-day meal will either be a moderately light dinner, or generally speaking, lunch. Digestion having properly taken place, the crew will at half-past two or three get into their boat for a hard row, which will vary from five to ten miles, as explained in the first part of this book. After returning from the row, and on getting out of the boat, some pedestrianism may be had recourse to; and here the trainer will, according to his judgment, require some to run, others perhaps to walk only. Having arrived at home, the hot and wet flannels should be taken off, and the skin rubbed dry with a rough towelletting this be a thoroughly brisk rub, and not merely a formal wipe-down. After rowing, men, as a rule, are so long in turning the boat, getting out of her, going indoors and stripping, that perspiration is quite checked. They may then wash as much as they like, in tepid or even in cold water, at their option, and don a fresh change of clothing; but on this point I must refer them to Dr. Smith's advice in Chapter II. This

will bring them up to dinner time, say about half-past five or six; it is as well not to make it any later, if the adjournment for the night is early. After dinner the spare hours may be passed in light reading and rest, even in a semi-recumbent posture, but sleep is forbidden. At nine o'clock a slight refection, and to bed by half-past ten.

The diet employed next demands attention. Breakfast should consist of broiled meat, such as mutton chops, rumpsteaks (if tender), or occasionally cold meat, tea, and bread, or toast and butter. To these may be added some cold chicken, or hot grilled fowl-not too highly seasoned-an egg or two, if it agrees with the individual taking it, and lettuce or watercress. Brown bread is useful as a change, but it cannot be perpetually eaten, as it becomes unpalatable. The meat should be well cooked-just done to a turn, as it is commonly called, not blue or half raw-bat yet full of gravy and the natural juices. The bread, it is perhaps unnecessary to say, should invariably be stale. Two cups of tea will be admissible, but one is better; it should not be drunk too hot, or too strong. Salt, and a small quantity of pepper, may be used to make things tasty. Porridge need not be discontinued if it has been the custom to take it, but it is not an article that should be specially introduced upon the training table. For lunch, a slice or two of bread and butter and a glass of beer or sherry, but for a man in strong work such food is, in my opinion, insufficient; it will be better to take a slice of cold meat, or a chop, and bread, together with half a pint of good sound ale.

Dinner is the most important meal in the day. Its chief foundations are beef and mutton, either in the form of roast sirloins and ribs of beef or rumpsteaks, or

of roast legs, loins, haunches, or saddles of mutton, and mutton chops, with here and there a boiled leg for the sake of variety. To these may be added roasted or boiled fowls, game, venison, &c., but no duck or goose. There is no objection to the use of lamb occasionally, but salted meats are forbidden, and veal and pork are better eschewed. It may appear strange, but the ancient Greek athletes were accustomed to live a great deal on pork, which seems to have been to them what beef and mutton are to us. Veal was also used by the great prize-fighters fifty years ago, for they were continually having small meals of stewed veal, boiled chickens, and sherry. Though not advocating their use, all this tends to confirm the idea that temperance, soberness, and chastity are the main points, and that little rules, such as whether watercresses are good or bad, are unimportant. Now and then a bit of fish may be given, such as cod, turbot, brill, or sole, but it should be boiled. Plenty of stale bread, as well as a moderate allowance of vegetables, is indispensable. The latter include potatoes, cauliflower, brocoli, young greens, spinach, and French beans. A pint of sound beer will be the proper quantity, though it may now and then be increased to a pint and a half in summer, but not if the dinner precedes the rowing. A light pudding may sometimes be eaten, but it must be plain: it may be varied by an occasional dish of plain-cooked fruit. The great thing is to give the men sufficient solid food; but as the most vigorous appetite cannot be always enjoying simple meat and bread, it is proper to vary the dinner, day after day, with other dishes. The circle from which to select is limited, but should be stretched as much as possible. Bread and butter, with watercresses or a lettuce, may conclude the meal, but pulled bread crisply baked is far more

palatable than the crumb of an ordinary loaf. After dinner a couple of glasses of claret, sherry, or port wine. may be given to each man, accompanied by some hard dry biscuits, and perhaps a jelly, or an orange or two. About nine o'clock the last meal-which is truly only an apology for one-should be ready. It may consist of a cup of tea and a slice of bread, but a pint of watergruel with some dry toast is far better, though all men cannot stand it, as, if insisted on, it is prone to lead to sleeplessness: by gruel is meant grit gruel, not oatmeal porridge. Where nourishment is much needed a glass of warm liquid jelly may be substituted. Strictness will apply to regular hours and careful ways more than to the exact articles of food set before the crew, as has already been said. Indeed, I am not sure that it would not be preferable to vary the diet still more until a few days before the race, say a week. The tendency of men in training is to suffer periodical returns of weakness about every seven or ten days, principally because they are kept in too high condition, and are worked too A moderate amount of exercise, combined with a strictly regular life, ought to be sufficient to keep men in good health without an extraordinary amount of running, and without turning them into beef and mutton eating animals. Every possible variety in the way of fish, fowl, and pudding ought to be allowed them. they do look rather fat a week before the race, it ought to be a subject of congratulation, as the trainer can easily bring them down, and has all the more chance of putting finish on them, because he can make them work more at the critical period-in short, he has his crew better in Again, on a long course it is usually strength, not the perfection of wind, that decides the race, for the stroke is slower than on a short one, so that it is

better to be a little undertrained, with strength, than overtrained, with wind.

Appetite will fix the limit of food at the various meals, and therefore it is as well to allow everyone to suit his own inclination. If thirst is frequent, the best remedy is a small draught of cold spring water, though it should not be drunk by anyone in a state of perspiration; but dipping the hands and washing in cold water help almost as effectually as anything to quench it. An occasional and gentle stroll during the spare time in the day will not fail to be of advantage; but men must not be suffered to lounge about, as it takes a great deal out of them. Standing about looking at games and sports generally results in staleness in the back and loins next day.

It has been stated in a previous chapter that oarsmen may be divided into two classes, which were then and there specified. To the first the rules just laid down will apply in their entirety; to the second they will also apply, but not without slight modifications. modifications will consist of an alteration in the hours of work, and of some of the meals. With respect to the former, a pull before breakfast is often considered necessary, but, as before stated, I strongly object to any violent exercise at such an early hour, as it is about as safe a way to ruin a young crew as can well be imagined: more good may be done by walking. The mid-day meal should take the form of a dinner, and should be succeeded by a substantial supper after the regular row. This row will take place in the evening, seldom earlier than half-past five or six, instead of in the afternoon; the last meal will consequently be needed between half-past seven and half-past eight.

The final week of practice is generally spent on the course on which the boat-race is to be rowed, the crew

removing thither from their ordinary locale; but no alteration in work, of any consequence, will be advisable until the last day or two, as the crew will require sending along on their new arena, as much to put the finishing touches on their rowing as to accustom them to the strange water. One good hard row a day is ample, but if it is deferred till the evening, a steady paddle for a mile and a half out and back, or three miles in all, in the forenoon, will not be improper if not too hot. No severe work should be done during the last two days, as the strength should be allowed, as it were, to gather itself up for the final effort: this time will be far more profitably spent in practising rapid starts, as in the actual race itself-starts, say, from a dozen strokes to a couple of hundred yards. This point should be sedulously attended to, because a coxswain who thoroughly understands his business can sometimes make a great deal of a good start by clever jockeyship.

On the day of the match an ample meal of roast mutton, with bread and half a pint of beer, should be set before the men two or three hours previously to starting, unless the race comes off within a reasonable time after any regular repast-say three hours. If too long a period intervenes, and yet not sufficient for a full meal, a crust of stale bread or a hard biscuit may be eaten, accompanied by a little pale brandy and cold water. The quantity may be a wineglassful, of one third or one half brandy, filled up with water. Some men cannot avoid becoming nervous—to a greater or less extent—as the eventful moment approaches, and I know of nothing that acts more suitably than the above, although Dutch courage is highly objectionable. race is rowed in heats, with only a brief interval between them, a glass of warm port-wine negus and a morsel of

dry biscuit, or a cup of tea without milk or sugar, but with a teaspoonful of brandy in it, will be beneficially partaken of.

Hitherto I have omitted to mention that the men should be weighed at the commencement of training, and subsequently not less often than once a week during practice.

At this period it may not be uninteresting to give the courses of training pursued at Oxford and Cambridge by the 'Varsity boats when getting ready for the Easter match, as well as that which obtains in the London Rowing Club during the preparation for the Henley Regatta; the former, it should be remembered, being in the spring of the year, and the latter at midsummer. For kindly furnishing the information I am much indebted to members of the clubs.

At Oxford, the crew turn out of bed at half-past seven, take a short walk, and then meet for breakfast at The meal consists of chops, steaks, sometimes an egg, bread and butter, and two cups of tea. at one o'clock, consisting of a bit of bread and butter, and, towards the end of training, a slice of cold meat, with occasionally watercresses and a glass of beer. The crew go over the long course, as a rule, three times a week, rowing down to Abingdon-about eight miles -without getting out of the boat. They then walk back as far as Nuneham Bridge—about two miles—and have the boat rowed for them. On re-embarking, they pull up against stream to Sandford, which is between three and four miles from Oxford, leave the boat there. and return home on foot, running less than one mile of the distance. When not over the long course they row twice over the Oxford course-that is, between Oxford and Iffley lock. At half-past six they dine upon roast beef and roast mutton, chops or steaks, and fowls and fish, with potatoes and greens, or a light pudding occasionally, as well as two glasses of beer, winding up with bread and butter, and cress. After dinner two glasses of port wine, with hard biscuits and one orange, are allowed. At nine o'clock they generally have a cup of tea, chocolate, or gruel, and retire for the night at half-past ten. The time between ten and one in the forenoon, and occasionally between eight and ten in the evening, is spent in reading or other duties.

The Cambridge plan is much the same. It is as follows: The crew enter into training about four weeks before the match. They rise at seven o'clock, one or two, perhaps, eating a piece of biscuit, and go out for a run of about a mile at top speed-although some of the men occasionally walk their mile. After washing and changing clothes, they commence breakfast at half-past eight. This meal consists of cold or hot meat, i.e., beef, mutton, or chicken, boiled eggs, watercress, and bread and butter; two cups of tea, with milk and sugar if required, are allowed, but as the raceday draws near, the quantity is reduced to one. No stipulation as to the amount of food is imposed. Between breakfast time and one o'clock they have usually college work to attend to. At one o'clock a slight lunch is taken, viz., meat and bread and butter, with a glass of sound beer; some men, however, go in for a heavy meal. They assume their rowing clothes at half-past two, and row from eight to fourteen miles at a slow stroke. This practice is continued, in a tubeight, until two or three weeks from the race-day, when a single-straike outrigger is substituted, and the racing distance rowed at top speed daily. The row being over, flannels are changed for ordinary attire, and the men,

having performed the necessary ablutions, dine at half-past five or six. The articles set before them are beef, mutton, and fowls, on alternate days, roasted; also potatoes and greens, with one pint of ale—generally Magdalene ale. Of late years a very plain rice pudding has followed. On Sunday, hare sometimes takes the place of meat, but without stuffing. The dinner is wound up with bread, or crusts, and butter, and watercress ad libitum. Best and conversation follow until seven o'clock, when two glasses of port or claret, with one orange, and hard biscuits in any quantity, are provided. At half-past nine, a cup of tea and a slice of bread and butter, or porridge if preferred, succeed; and at ten o'clock to bed. If any of the men seem ailing, three glasses of port are given instead of two.

The mode pursued by the London Rowing Club is somewhat different. Seven or eight weeks before a race the men row about three times during the first six days. Daily rowing then commences—though not too hard at first-and by degrees they become accustomed to plain diet. At six weeks from the day more active training is resorted to-i.e., rowing every evening, and three times a week in the morning-or sometimes, in lieu of the latter, taking a run of a mile or two. During the last month the crew rise at six o'clock, so as to row or run easily not later than seven. After this they have a good rub-down, and follow that process up by a spongebath or by a plunge in the river when practicable. This over, they sit down to breakfast, which consists of chops, steaks, or roast meat, stale bread, very little butter, green food -such as lettuces or watercress-in moderation, and a pint of tea. A boiled egg is now and then added to the meal. They dine as near the middle of the day as business will allow, off a plain roast joint, boiled

vegetables, stale bread, and a pint of ale or stout. 6.30 p.m. they row, but harder than in the morning, and as the match-day approaches they "take the time" over a distance equivalent to the course. A smart rubdown, and sponging with cold water, follow upon getting out of the boat: after this comes supper, of which a cut from the joint forms the nucleus, together with plain boiled vegetables, such as cabbage or cauliflower, stale bread, and a pint of good ale or stout. Now and then a little plain rice or other farinaceous pudding is set on the table, and a glass of port wine is occasionally given to such as need it. Half an hour after supper the men take a stroll, and, on returning, rest for another halfhour, and then betake themselves to bed at ten o'clock. The Londoners, like everyone else, look upon beef and mutton as the most wholesome meats, and forbid veal and pork. During the last week they do not drink more than is absolutely necessary, and the majority of them find half a pint of fluid at each meal sufficient. They then commence rowing as nearly as possible at the same time of day at which their race is likely to come off.

CHAPTER VI.

What to Avoid, and Common Errors.

Dubing the preparatory stage a wide latitude is permitted in respect of most things; the one point chiefly to be attended to being steady rowing—but this subject has already been fully gone into. In actual training, however, the case is different. Certain definite laws are laid down as to forbidden fruits and forbidden pleasures, and compliance with them cannot be too strict or too ready.

In the first place, absorbing intellectual labour and sedentary occupation should as much as possible be laid aside, and all mental excitement or anxiety should be avoided. The hour of rising should not be too early or unreasonable, and no violent exercise which will cause profuse perspiration should be taken before breakfast, as the system is thereby weakened. Hard rows and long runs at an early hour are especially to be deprecated; 'they cause lassitude, loss of appetite, and a feeling of general debility and staleness throughout the day. The writer of this treatise was once trained by a waterman, and among other things he was always ordered to rise at five o'clock and to do a tremendously hard row (before breakfast) at about half-past six, in the waterman's company. This killing process he underwent for some time, but he was ultimately compelled to give it up. It is true that, after taking his bath on

his return home, he had a good appetite for breakfast, but his general sensations during the day were those of extreme fatigue, and of being perfectly done up; indeed, so tired and weary did he become as to be quite unable to prevent himself falling asleep daily in the afternoon: as the evening approached he was obliged to take another row as hard as, or even harder than, the morning pull. The only wonder is that he ever survived such a trying and erroneous course of treatment.

As another instance, it may be mentioned that a well-known gladiator, previously alluded to, once asked the writer, in conversation on the subject of training, whether rowing men did strong work early in the morning before breakfast, and upon receiving the reply that such was often the case, he remarked that he himself, when preparing for some of his former battles, had been similarly treated, and that his feelings were always those above-mentioned; that he had from practical experience come to the conclusion that any labour beyond a smart walk before breaking fast was a mistake, and that after adopting the new course he felt twice the man he originally was, and was never troubled with any feelings of weakness whatever.

In bathing, caution is very necessary, for serious consequences are often produced by suddenly entering the water in a state of profuse perspiration. At the same time, the body should be quite warm; therefore, a brisk walk to the bathing-place is highly desirable. Of course, it is prejudicial to stop in the water too long; a couple of plunges and a short swim intervening between them will be the correct thing. After rowing hard, great circumspection is requisite to prevent a cold being caught; men, therefore, should never stand about after getting out of their boat, but should put on warm coats,

tie up their throats, and, unless they run, go indoors as quickly as possible, to have a rub-down and to change clothes. Draughts of cold water or of other cold liquids should never be taken while in a heated state. Before sitting down to meals the men should always rest for a short space, also for some time after them. No sleep is permitted after dinner or tea, until the proper hour of bedtime arrives. Violent exercise should on no account be taken immediately after a heavy meal, for to this cause may to a great extent be attributed the premature decease of a celebrated sculler not many years since. Fresh air in the sleeping apartments is essential, as illventilated rooms are unhealthy; and if the men can bear their windows partially opened (weather, of course, permitting) without catching cold or sore-throats, so much the better, supposing their rooms are not sufficiently ventilated otherwise. Standing about on wet ground or on dewy evenings should be guarded against, and so should lying down on the grass in warm weather, because the more powerful the sun, the greater the evaporation, and the more chance of an attack of Exposure to the rays of the sun in rheumatism. summer is injurious, and particularly so on the day of the race-hence the immense folly of regatta committees fixing an early hour for the start. No racing ought to take place until the greatest heat in the day is over-say four o'clock: it is sacrificing the men who row, to the spectators. Much harm is thus done-far more than could happen from rowing two or three races towards evening. If under these circumstances it is absolutely necessary to go about much out of doors it is a good plan to carry an umbrella to protect the head and neck. The rowing clothes, as well as the mats on the thwarts of the boat, should always be well dried

after being used, before they are again called into requisition.

Numerous articles are inadmissible in training diet, but much depends upon the constitution of individuals. However, all things which bear the ordinary reputation of being indigestible should be eschewed-such as the majority of raw vegetables, and, in some cases, eggs, if they prove constipating, which they frequently do. The same may be said of much toasted bread, and for the same reason: no green tea should be drunk-black tea, not too strongly infused, is the best. It should, however, never be taken very hot. Coffee is best avoided. Cocoa is not so objectionable, but it does not agree equally well with everyone. White butchers' meat. such as veal and pork, all salted flesk, and highly seasoned dishes, are better untouched. As previously mentioned, there is no harm in a moderate use of the ordinary condiments—such as pepper, salt, and mustard. or even ginger—as they promote digestion; they should not, of course, be taken to excess. Radishes, cucumber. celery, horseradish, onions, pickles, &c., must be shunned; so likewise must pastry, jams, and such-like rubbish. Fried fish is objectionable; so also is salmon, which requires unwholesome concomitants to make it acceptable. Soups are not allowed, neither is cheese, nor much raw fruit, although a little of the more wholesome kind of fruit is not disadvantageous. At dinner, and sometimes at lunch, beer of some sort is the ruleindeed, some men do better with beer than with sherry at lunch. The chief kinds to be guarded against are those that are bottled, also washy bitter beer, which is in general use on ordinary occasions, and very old ale. The last-mentioned is, however, a great favourite with many trainers, and especially with those of the old school, but it is apt to make men slightly inebriated. Nothing can be better for our purpose than the magnificent ales which are drawn in some of the colleges at our Universities—if not too strong—or the best Burton. When wine is given after dinner, it should not be mixed. The crew should confine themselves to one description, and it should never be succeeded, in the same evening, by gruel made with milk. Dried fruits after dinner are best dispensed with, if I except figs. No nuts, ices, creams, or confectioners' messes are for a moment to be thought of: neither is wine, beer, or spirits allowed late at night.

The last and the most important thing to be forbidden is tobacco. Practice has proved that it is better to prohibit smoking during training than to permit it; it is consequently condemned. Still, it is perhaps an open question whether in very exceptional cases it may not be allowed—say, for instance, when a man has been in the habit of smoking a great deal, and has to work hard with his brain in the evening. One smoke before going to bed would not do much harm, and might conduce to sleep, sometimes difficult to get under the circumstances.

Amongst the most common errors which occur during the preparation for a race is a too free use of physic. At the commencement of training a little may be all very well, but should a man become indisposed, instant recourse to the medicine-bottle, as frequently happens, must not be sanctioned; at the same time, a trainer should always be ready to apply to a medical man when he feels the least difficulty in dealing with the case himself. Another mistake often committed is that of taking violent exercise early in the morning, as above mentioned. Some trainers are in the habit of putting their men through too much work in the day. Net

-content with one long row in the course of the twentyfour hours, they set them to hard work in the morning, and then to run one or two miles. In the evening, after returning from their customary practice afloat, they are sometimes sent out again on a second trying cruise, e.g., taken out of their eight and set to row two or three miles at their best speed in a four, till nature is quite exhausted. No wonder if, after two or three weeks of such handling, they come to the post pallid, overtrained, and weak. Monotony of diet is another source of evil. The fact of sitting down to the same articles of food, meal after meal, and day after day, will upset the appetite of the most voracious. This also should be carefully provided against, especially as the list from which to make a selection is in itself at best excessively limited. So, also, the prevalent custom of withholding a proper proportion of vegetable diet during the day cannot be too strongly condemned. Too great a severity likewise is sometimes exercised in restricting drink, and in preventing the relief of parching thirst.

CHAPTER VIL

Going Amiss, Accidents, &c.

Various unforeseen evils frequently occur during practice, and though many of them are beyond measure trivial in themselves, yet they cause much discomfort and annoyance. They comprise training off, blisters, raws, boils, &c., &c. When they appear, the only thing is to cure them; but it is far wiser to guard against them by taking thought beforehand than to treat with indifference what may possibly lead to defeat.

The chief and most important is training off, or going amiss. It cannot always be prevented, but by care and vigilance on the part of the trainer it may be checked on the first symptom. It generally makes its unwelcome appearance in consequence of too hard work, more particularly if the weather is hot and oppressive. Sometimes it may be caused by too constant a repetition of the same diet. In the first case. a rest from work for a day or two will set matters right, but occasionally it should be accompanied by a change of air for the same period-such as a removal to the seaboard—an alteration to a more generous diet not being omitted. In the second case the variation of food just mentioned will usually suffice, but a slight relaxation of work as well will produce the desired result more speedily.

Blisters are of universal occurrence, especially at the commencement of the season, when the hands are soft from their long rest during the winter: but with a man accustomed to rowing they are usually a sign that he does not hold his oar tight—a bad fault, as it leads to many others. The feet are also sometimes troubled with blisters, but in this case they arise from walking, not from rowing, and are comparatively speaking Nevertheless, after a little practice and judicious treatment, the hands soon become hard and callous, and their worst feature is their somewhat unsightly appear-Some men find a rough oar suit them best, and they consequently take care to rasp the handle well; others, on the contrary, prefer it smooth, and scrape it with glass, rubbing it smooth with sand-paper The best course to take when about to commence racing practice, is to prepare the hands gradually for the work they have to undergo. this purpose some steady paddling will prove most serviceable; the palms of the hands may also be rubbed with salt and water, or with brandy, to harden them. If, nevertheless, blisters arise, they must be done away with as quickly as possible. To effect this, some people pursue one plan, some another. If the little bladders have not burst, they are not much trouble; a needle with a piece of worsted may be run through them, and the worsted be left in; or they can be pricked with a clean needle, and the water squeezed out carefully, the aperture being made as small as possible, and in an oblique direction, where there is likely to be least pressure or friction. Notwithstanding this, the outer skin will often peel off, and the inner and tender cuticle be exposed. There are many opponents of this plan, and possibly they are right, for the reason

just given. It is far better to dissipate the water, and then the skin reassumes its former position, but by that time it has become hardened and callous, and ceases any longer to be troublesome. To effect this, after washing, when the row is completed, take spirit of camphor and rub over the bladders, letting the spirit evaporate by waving the hand in the air; this process should be repeated frequently, and they will disappear. But when the blister unfortunately bursts during a pull, and the contact of the air and the friction of the oar aggravate the inflammation, a very sore place is sometimes created, and is proportionately difficult to heal. Care should be taken to prevent grit or dirt getting into the wound, and cotton wool may be applied under an old kid glove. The gloves should not be white kids, as they often cause great irritation, being, I believe, dressed with poison. Entire rest from taking an oar will soon be followed by a rapid cure, but it usually happens that this is impossible, and that the oarsman's services cannot be spared for a single day. Under these circumstances, after every particle of dirt has been removed, the wound should be dressed either with plain greasesuch as pure tallow-spermaceti ointment, or zinc ointment. Glycerine is sometimes recommended, but, though very healing, it causes excessive pain when applied. The zinc and other ointment mentioned may be obtained from any chemist on demand. Over the grease some finely carded wool, or a piece of soft washleather, may be placed—the former is best -and then an old and easy glove should be put on over all.

By the term "raws" are meant raw places which occur on the seat of honour, from the friction or galling of the trousers, or from creases in the mats on the

thwarts, and usually come from not sitting still on the seat—a bad fault. The best thing to obviate this most uncomfortable ill is to have the rowing trousers lined with a large soft skin of washleather, as already recommended in Chapter IV., and the mats securely tied. Care should at the same time be taken that the leather does not become hardened. Many men rub the inside of their boating trousers with soap before putting them on, and swear by the process as preventing excoriation: oiling them with neatsfoot oil has a similar effect. But the great secret is to sit firmly and fixedly on the thwart, at once taking up a position and keeping it; for nothing will produce raw places so rapidly or so surely as shifting about on the seat whilst pulling. Should raws unfortunately occur, notwithstanding these precautions, they must be treated in a similar manner to those on the hands. A day's rest and bathing in cold water will also be most advantageous.

Boils are by no means rare, but they afflict some individuals more than others. They appear singly or in groups, generally the latter; and I have known as many as thirty or forty of varying sizes upon the same person. They commonly select for their whereabouts the same place as raws, and are exceedingly troublesome and painful, causing also great irritability of temper. The smaller boils may be dissipated, but the larger require the lancet, and usually cause a stoppage of work for a week, or at any rate several days. On their first appearance, it is as well to substitute brandy and water for beer, and to give a little more wine than usual. In every case the sufferer should be sent to a doctor, as boils are often a sign of some evil which may lead to serious consequences. At any rate, they should never be neglected

by the trainer; there is no fear of the men affected forgetting them, though they sometimes conceal them. Sameness of diet will very often produce them; but if a due proportion of vegetables be daily administered, and the food be varied as much as possible, there is not so much chance of their supervening. A tablespoonful of ordinary beer yeast in a tumbler of cold water twice a day, after meals, is as good and effectual a remedy as any, although exceedingly simple—I speak from practical experience on the point. Benefit may likewise result from bathing the part with bay-salt and water, or with a weak solution of nitrate of silver (say fifteen grains to the ounce) as a preventive.

Corns on the feet are not caused by rowing, but result from the pressure of boot or shoe. There are many plans of curing them, but the majority are ineffectual after a certain lapse of time. A removal of the cause of pressure will alone obviate the evil: the shoes should therefore be cut according to the shape of the foot.

Hæmorrhoids, hernia, strains in the groin, colds, sore-throats, and other ailments, occasionally obtrude their unwelcome presence, but they should always be submitted to a properly qualified medical man.

It may not be out of place, perhaps, here to allude to a very common but yet very unwise course of procedure pursued by many men when, their race being over, they are out of the hands of their trainer. The gun which proclaims the winning boat frequently appears the signal to break loose and run riot in every conceivable manner; and crews which have for weeks exhibited the most exemplary patience, and have scrupulously adhered and submitted to the rules and regimen laid down for them, indulge in every possible excess. This is the way the constitution is injured, and the opponents of the sport attribute it to that "horrid training and rowing"—not to that which is the real cause of the evil.

CHAPTER VIII.

SCULLING.

HERETOFORE attention has been exclusively directed to the preparation of crews for races with the oar, but these chapters would be incomplete without some observations upon training with the sculls.

A sculling race is the most trying of all, and requires plenty of pluck as well as first-rate condition; and it is harder work then a race with an oar, because it entirely depends upon one's own capabilities. There is no opportunity of coaxing oneself, be it ever so little, at the expense of other men; and although it is quite possible to ease oneself if too hard pressed, no one with an Englishman's pluck would give in if he could possibly avoid it: I think, therefore, it is more telling on the bodily powers. Again, there is an absence of that feeling of mutual and united aid to make one bear up under difficulties, as in a crew. Such being the case, it is above all things necessary to be in the height of condition in order to compete, with a reasonable prospect of success. To attain this fitness, the hints already given should be followed, that is to say, as regards hours and diet. Practice for long distances, and plenty of it, is of the very greatest importance, but the work should at first be steady, and should be gradually increased and quickened. From four to six weeks will not be too long a preparation, and the first fortnight may be well spent

in long rows of eight, ten, or a dozen miles. After this the pace may be quickened, and the distance to be raced over should be traversed at full speed once a day, that is, provided the course is not longer than two miles. Should it extend further, two miles or two miles and a half at racing pace, straight on end, will be ample; but the whole distance ought to be gone over once or twice during training. When a sculler commences to take his rows at his best pace he should avoid going off too fast at the start, as he only buckets himself at first, and pulls out of form for three-fourths of his row. It is preferable to start steadily, and to put on extra speed and strength afterwards, and thereby to maintain form and pace together.

It is of great benefit to have an accompanying sculler (trainer or quasi-trainer) alongside, as it enables the pupil to learn his pace, and to gain confidence from constantly racing, as it were; at the same time, it enables his faults to be easily detected, and as easily remedied. The best time of the day for a hard row is quite late in the evening, after the body has received, and benefited by, the nourishment of the day. There can be no possible harm in a steady pull for two or three miles in the forenoon, when breakfast is well digested, if there is no business or other engagement to interfere; but it will be found on trial that the hardest work can be done with the greatest comfort, and consequently with the least distress, in the cool of the evening. This, of course, is conditional upon summer weather, but in early spring and late autumn it will be found necessary to make the hour of practice much earlier-though the later the better, provided it is not deferred till the darkness or chilliness of evening has made its appearance. The same clothes advised in Chapter IV. are

proper, and the same care should be taken in avoiding draughts or chills, as with the oar, and more so. For a race with stream or tide, practice should be taken with the current; but in preparing for Henley it is far wiser to train against it, and it will be found that in doing work against a powerful tide, such as prevails at Putney, a mile, or a mile and a furlong, will be quite sufficient. The same precautions which have previously been mentioned, as to rubbing down and changing flannels, apply in their entirety.

Three or four days before the race a sculler may ease up, supposing he has done good, honest work daily; and even if he gains two or three pounds in weight during that period, so much the better, provided he has a sufficiently long and hard row to keep his wind free and sound. It is a common practice with watermen, when training for a match, to adjourn to the sea-side for a day or two after their hard work is all done, and when it wants but four or five days to their race, and great benefit has in almost every instance been derived therefrom. Such a plan will be found very beneficial, but change of air from one inland place to another, supposing the locality selected is not positively unhealthy, is almost as serviceable: take, for instance, a week's practice at Henley before the regatta. Having had a gentle paddle the day before the match, the sculler is fit to go to the post.

APPENDIX.

THE LAWS OF BOAT-RACING.

THE following are the Laws of Boat-racing settled and approved by the Universities of Oxford and Cambridge, and the principal Boat Clubs in London:

I.—All boat races shall be started in the following manner: The starter, on being satisfied that the competitors are ready, shall give the signal to start (1).

II.—If the starter considers the start false, he shall at once recall the boats to their stations, and any boat refusing to start again shall be distanced (2).

III.—No fouling whatever shall be allowed.

IV.—It is the province of the umpire when appealed to, but not before, to decide a foul, and the boat decided by him to have fouled, shall be distanced (3).

(1) The most satisfactory mode of starting boats has already been described in Part I., Chap. XII. It is the practice for competitors, when expecting the signal, to lie at the post with their oars or soulls reached out at full length over the stretcher, and there is no objection to their doing so.

(2) This law gives an umpire power to recall competitors eager to steal a march on him, and get the best of the start. It frequently happens that as soon as the words "Are you ready?" are uttered by him, one or more bolt off, in the hope that the word "Go" will follow almost immediately. To avoid unfairness, it is proper to wait long enough to see whether anyone attempts to move before giving the final signal.

(2) An appeal to the umpire can be made either by word of mouth or signal. It is usual, when a foul takes place, for a competitor to hold up his hand, as this action is generally accepted to signify that a foul is claimed. After passing the winning-post, the competitor before leaving his boat should formally make his claim to the umpire by word of mouth. It should here be noted that the person who has the sole power to

V.—In case of a foul, the umpire, if appealed to during the race, shall direct the non-fouling boat to row on, which shall in every case row over the remainder of the course in order to claim the race (4).

VI.—It shall be considered a foul when, after a race has commenced, any competitor, by his oar, boat, or person, comes in contact with the oar, boat, or person of another competitor; and nothing else shall be considered

VII.—Any competitor who comes into contact with another competitor, as defined in Rule VI., by crossing into his competitor's water, commits a foul; but when a boat has once fairly taken another boat's water by a clear lead, it has a right to keep the water so taken (5).

VIII.—A boat shall be held to have a clear lead of another boat when its stern is clearly past the stem of

that other boat (6).

IX.—It shall be held that a boat's own water is the straight or true course from the station assigned to it at starting; but if two boats are racing, and one fairly takes the other's water by a clear lead, it shall be entitled to keep the water so taken to the end of the course; and if the two boats afterwards come into contact while the leading boat remains in the water so taken, the boat whose water has been so taken shall be

decide questions of foul is the umpire, so that the boat decided by him to have fouled shall be distanced. This renders the umpire absolute, and allows a committee no power whatever to

re-open questions of fouling.

(6) The stem is the bow or nose of the boat.

^() When a foul takes place, it is seldom that either the boat fouling or the boat fouled stops to appeal to the umpire otherwise than by signal, and it is just as well that they should not. for if the boat fouled comes in first there is nothing to adjudicate upon. It is the best plan not to give a decision upon a foul until all the competitors have passed the post; and if a competitor who is fouled stops to claim, to order him simply to row on. He may yet come in first, and win on his merits.

⁽⁵⁾ By this rule it is enacted, that if one boat leaving its own water bores another, and a foul results from that boring, the boat which is out of its proper water commits a foul, and is subject to the penalty for so doing: but if the boat boring is so lucky as to take the water of its competitor without coming into collision, it is thereafter entitled to the water and course so taken.

deemed to have committed a foul; but if they come into contact by the leading boats departing from the water so taken, the leading boat shall be deemed to have committed a foul (7).

X.—The umpire shall be sole judge of a boat's straight

or true course during every part of the race.

XI.—If in any race in which more than two boats start a foul takes place, and the boat adjudged by the umpire to have been fouled reaches the winning-post first, the race shall be decided as the boats come in; but if the boat fouled does not come in first, or if the umpire is unable to decide which boat has committed the foul, the race shall be rowed over again, unless the umpire shall decide that the boat which came in first had a sufficient lead at the moment of the foul to warrant its having the race assigned to it (8).

(*) This rule is somewhat obscure, and is the only one of the whole code which requires simplifying or explaining, as it is liable to misconstruction. Its meaning is as follows: First, that if several boats are racing and a foul takes place, and the boat which is fouled comes in first, it is the winner, as against the remainder

⁽⁷⁾ If two boats are racing, and one takes the other's water, when it has a clear lead, it is not only entitled to the water and course so taken, but is morally bound to keep them; and if the hindermost boat rows over and on to the boat which has taken its water while in that water, the hindermost boat commits a foul, because from the moment the leading boat took the hindermost boat's water their courses were exchanged, and the water which previously belonged to the leading boat thenceforth became the proper water of its antagonist; and if the leading boat returns to its previous water, which no longer belongs to it, and the sternmost boat comes up and touches it, the leading and not the sternmost boat is to blame. It often happens that a leading boat which has once taken a competitor's water returns to its original water for the purpose of washing and dodging its competitor; but it does so at its peril, and is in danger of disqualification if touched. Suppose, for instance, that two boats, A. and B., start from Putney Aqueduct—A. from the Surrey and B. from the Fulham station—and that before reaching Craven Cottage A. has obtained a clear lead, and, crossing in, takes B.'s water, the Middlesex side belongs to A. from that time forth, and the Surrey side to B.; and if off the Crab Tree, B., after reducing A.'s lead, endeavours to pass him on the Surrey side, and A.'s boat is in the way and is touched by B., A. is disqualified. The tow-path side is B.'s, and he is entitled to go by on that hand, and A. must give way to him.

XII.—Whenever the umpire shall direct a race to be rowed over again, any boat refusing so to row again shall be distanced.

XIII.—Every boat shall stand by its accidents (9).

of the field; secondly, that if the boat fouled does not come in first, but is left astern by some other boat not concerned in the foul, that then the race shall be rowed over again, unless at the moment of the foul the boat which eventually came in first had such a lead of the two which fouled as to warrant its having the race assigned to it; and, thirdly, that if the umpire is unable to decide which boat has committed the foul, he may send them all back to row the race anew; but it does not mean that if the boat fouled comes in second, and is preceded by the boat committing the foul, the race shall be rowed over afresh and the offender be permitted to start again, because the boat committing the foul has incurred the penalty of fouling, and is no longer in the race, under Rule IV. These points are very clearly defined in the Local Rules of the Thames National Regatta, which will be found at page 149, for they enact as follows: Rule 5-" No fouling whatever shall be allowed. Any boat committing a foul will be considered distanced;" and Rule 6 says, "In the event of a foul between the leading boats, owing to which any boat previously astern may be enabled to obtain the leading place, which in the opinion of the umpire would not have been the case had not the boats been impeded by the collision, the umpire has the power, if appealed to (after disqualifying the boat which committed the foul), of re-starting the other competitors, either from the starting-post or from the place of the foul, as he may determine." So, likewise, if three boats are racing, and a foul occurs between the two leaders, the boat committing the foul is distanced, and the boat hitherto third is entitled to the second place, if it comes in astern of the boat fouled; but if before it. as already explained, the race must be rowed over again-of course to the exclusion of the boat which committed the foul.

(*) This rule refers to accidents occurring after the race has actually commenced.

:

LOCAL RULES.

DIFFERENT regatta committees have different sets of rules, but the foregoing are the only true and general laws of boat-racing sanctioned by competent authority. At the same time, it may, perhaps, not be without advantage to reprint the rules locally in use at the Thames National Regatta, and published in 1863 by the Thames Subscription Club in their report upon the regattas of 1860, 1861, and 1862.

Rules of Boat-racing at the Thames National Regatta.

1. All boats shall be at the starting-post at the time stated on the card. Any crew or competitor not complying with this rule, will be considered distanced.

2. All races shall be started in the following manner: The starter shall ask the question, "Are you ready?" and receiving no reply shall give the signal to start.

3. If the umpire considers the start unsatisfactory, he shall at once recall the boats to their stations, which will be done by ringing a bell; and all boats must return immediately, or be disqualified.

4. No race shall be awarded to any competitor or crew unless he or they shall have rowed over the whole of the course.

5. No fouling whatever shall be allowed. Any boat committing a foul will be considered distanced.

6. In the event of a foul between the leading boats, owing to which any boat previously astern might be enabled to obtain the leading place, which in the opinion of the umpire would not have been the case had not the boats been impeded by the collision, the umpire has the power, if appealed to (after disqualifying the boat which committed the foul), of re-starting the

other competitors, either from the starting-post, or from the place of the foul, as he may determine.

The umpire, when appealed to, and not before, shall decide all questions as to a foul, and any other

disputed point.

- 8. A claim of foul (which must be tendered by the competitor himself, and not by any one on his behalf) must be made to the umpire previously to the man fouled getting out of his boat.
 - 9. The umpire shall be sole judge of a boat's straight

or proper course.

10. Every boat shall stand by its own accidents

occurring during the race.

- 11. In the event of a dead heat taking place, the same crews shall contend again, or the crew or crews refusing shall be adjudged to have lost the heat.
- 12. No boat shall be allowed to accompany a competing boat for the purpose of directing its course, or affording other assistance; and the umpire shall be at liberty to declare any competing boat distanced that may have derived an unfair advantage thereby.

13. The decision of the umpire shall in all cases be

final.

By order,

(Signed) HENRY CLEMENT SMITH,

Hon. Sec.

DEFINITION OF AMATEURS.

THE word "amateur" is intended to signify a gentleman as opposed to a waterman or professional rower, but the term is conventionally held to mean a rower who does not compete for money. It is true that there are tradesmen, as well as gentlemen, amateurs—indeed, it is rather difficult to say where the line of demarcation is to be drawn—but the former are not strictly entitled to the designation. Several so-called gentlemen amateur clubs contain members who are really and truly tradesmen in the literal sense of the term—though perhaps not working mechanics—but who, by reason of belonging to the clubs in question, are rendered eligible to compete with amateurs who are gentlemen by birth, profession, or education. This cannot be avoided in these "liberal" days; but the barriers between clubs of gentlemen on the one hand, and clubs of tradesmen, or watermen and professional rowers on the other hand, should on no account be broken down.

For my own part, I am not disposed to consider that the bare fact of contending for a prize within the United Kingdom, either wholly or in part money, deprives a gentleman of his right to be considered an amateur, if the race in question is not perfectly open to professionals and watermen. In Ireland it is at present the practice to offer money prizes for crews composed of members of the Universities, army and navy, and amateur clubs; and it is, I conceive, immaterial whether the same are offered in plate or cash, provided always the competition is restricted. Of what may occur abroad we can of course take no cognizance. It must be borne in mind that until 1861 the prize for the Amateur Championship consisted of money, to which was added a silver decoration, as well as the right to

hold the Wingfield Sculls for a twelvemonth. The terms were that every challenger should deposit an entrance fee of 51., and that the winner should take the sculls and the sweepstakes, after defraying the expenses of the race out of them: scullers were not then considered to have forfeited their qualification as amateurs because they competed in that race. The case would be very different if watermen and others were allowed to start, and an amateur would, under those circumstances, forfeit his position as much as if he took part in the Thames National Regatta against Kelley or Chambers. However, all difficulty may be avoided by the committee giving the successful competitors an order on a silversmith, jeweller, or other tradesman of their town—at the option of the winners—for articles of the value of the prize won. Many men would prefer this course to being presented with the everlasting pint mug or goblet.

The following definition of amateurs will perhaps

suffice for all ordinary purposes:

"Amateurs must be officers of Her Majesty's Army, Navy, or Civil Service, members of the Clerical, Medical, or Legal professions, of the Universities of Oxford, Cambridge, Dublin, London, Durham, Edinburgh, Glasgow, St. Andrew's, or Aberdeen, and the Queen's Colleges in Ireland, of Eton, Radley, Westminster, and other public schools, or of any established club not composed of tradesmen or working mechanics, which would be allowed by the stewards of the Henley-on-Thames Regatta to compete for their Grand Challenge Cup, Stewards' Cup, Silver Goblets, or Diamond Sculls."

All questions as to the eligibility or qualification of competitors will be referrible to the stewards or committee of the regatta, from whose decision there shall

be no appeal.

DEFINITION OF JUNIOR OARSMEN AND SCULLERS.

- 1. Oarsmen are juniors if they
 - (a) Have never been winners of any race except (1) a private match, (2) or one in which the competition was confined to members of one club only, (3) or a race between college crews, members of the same University, (4) or one in which the construction of the boats was restricted:
 - (b) And have never been competitors in any match between the Universities of Oxford and Cambridge, or at the Henley-on-Thames Regatta.
- 2. Scullers are juniors if they
 - (a) Have never been winners of any race except (1) a private match, (2) or one in which the competition was confined to members of one club only, (3) or one in which the construction of the boats was restricted;
 - (b) And have never been competitors for the Wingfield or Diamond Sculls.
- 3. The qualification of a junior oarsman or sculler shall relate to each time of his coming to the starting-post, whether for a trial or final heat.
- 4. In the event of a competitor winning a trial heat for a junior race, and before rowing for the final heat becoming disqualified by winning another race, he shall be entitled to have his entrance money for such junior race returned.

QUALIFICATION BULES

OF

THE HENLEY-ON-THAMES ROYAL REGATTA

For the Grand Challenge Cup, value one hundred guineas, for Eight-Oars, and the Stewards' Challenge Cup, value eighty guineas, for Four-Oars.

Any crew composed of members of either of the Universities of Oxford, Cambridge, or London, the schools of Eton or Westminster, or the officers of Her Majesty's army and navy, and any amateur club established at least one year previous to the time of entering, shall be eligible to contend.

For the Ladies' Challenge Plate, value sixty guineas, for Eight-Oars, and the Visitors' Challenge Cup, value sixty guineas, for Four-Oars.

The clubs of colleges of the Universities of Oxford and Cambridge, and the schools of Eton, Westminster, and Badley, shall alone be qualified to contend for this prize—and each member of the crews shall at the time of entering be bona fide a resident member of such college or school.

For the Wyfold Challenge Cup, value sixty guineas, for Four-Oars.

Any amateur club or crew shall be qualified to enter for this prize; but no crew, nor individual member of a crew, shall row for this cup and the Stewards' Cup at the same regatta. For the Town Challenge Cup, value thirty guineas, for Four-Oars.

Any amateur club (established at least one year previous to the day of entrance) of any town or place within twenty-five miles of Henley-on-Thames, and whose members reside within five miles of such town or place respectively, shall be eligible to contend—Universities and public schools excepted.

For the Silver Goblets, value fourteen guineas, presentation prize for Pair-Oars.

Open to all amateurs duly entered for the same, according to the subjoined rules.

For the Diamond Challenge Sculls, value twenty guineas, with a presentation prize value twelve guineas, for Scullers.

Open to all amateur scullers duly entered for the same according to the subjoined rules.

For the District Goblets, value ten guineas, presentation prize for Pair-Oars.

Open to amateurs who reside within twenty-five miles of Henley-on-Thames, duly entered for the same.

GENERAL RULES.

1. The captain and secretary of any boat club in either of the Universities of Oxford or Cambridge, or of any boat club qualified to contend for the Grand Challenge Cup, shall be considered members of the regatta committee while they hold their respective offices.

- 2. Notice shall be given on or before the appointed entrance day, to the secretary of the regatta, of any crew, club, or amateur, intending to compete for either of the above prizes, with a list of those members from which the rowing crew is to be selected, and the names of the captain and secretary of any such crew or club. A copy of the entrance list shall be forwarded by the secretary to all parties duly entered (with a copy of the said list of members, if required).
- 3. The secretary of the regatta shall not be permitted to declare any entry, nor to report the state of the entrance list, until such list be closed.
- 4. Objections to any entry shall be made in writing, to the secretary of the regatta, within seven days from the day of entrance, when the acting stewards shall investigate the grounds of objection and decide thereon forthwith.
- 5. Entrance money for each boat shall be paid to the secretary at the time of entering, as follows:

£ d. For the Grand Challenge Cup and Medals... 6 0 Ladies' 0 Stewards' 4 0 Visitors' 0 Wyfold 0 ,, ,, Town 1 0 Silver Goblets... 0 • • • District Goblets 1 0 Diamond Challenge Sculls 1 1 0

- 6. At the meeting of the stewards immediately preceding the regatta, the captain and secretary of each crew or club entered shall deliver to the secretary of the regatta a list containing the names of the actual crew appointed to contend in the ensuing races, to which list the name of one other member may be added, who may be substituted for any one of the crew in the event of illness or accident, but subject nevertheless to Rule 7.
- 7. No member of a club shall be allowed to be substituted for another who has already rowed a heat, nor shall any member of a club be allowed to row with

more than one crew in any of the races for the same cup.

8. In the event of a dead heat taking place, the same crews shall contend again, or the crew refusing shall be

adjudged to have lost the heat.

9. The races shall commence above the island and terminate below the bridge. (Length of the course about

1 m. 2 f. 20 p.)

10. If there should be two or more challengers, they shall row a trial race or races under the management of the stewards, and the winner or the winners of such trial race or races shall contend on the following day with the holder of the cup; but no more than three boats shall be permitted to contend in any heat for either of the above challenge prizes.

11. In the event of there being but one boat entered for either of the above challenge prizes, or if more than one enter, and all withdraw but one, the crew of the remaining boat must row over the course to be entitled

to hold such challenge prize.

12. Stations shall be drawn for by the stewards, on the morning of the race, in the presence of the competitors or their representatives.

13. Coxswains must be amateurs and members of their

respective clubs.

14. An umpire shall be chosen by the stewards.

15. The judges at the winning-post shall be appointed by the umpire,* and declared by the stewards before the race commences.

16. The "Laws of Boat-racing as settled and approved by the Universities of Oxford and Cambridge, and the principal boat clubs in London," shall be observed at

this regatta.

17. The prizes shall be delivered at the conclusion of the regatta to their respective winners, who, on receipt of a challenge prize, shall subscribe a document to the following effect:

"We, A. B., C. D., &c., the captain and crew of the ———— and members of the ———— Club, having

The judges should be appointed by the stewards, in the same manner as the umpire.

been this day declared to be the winners of the Henley Royal Regatta - Challenge Cup, and the same having been delivered to us by E. F., G. H., I. K., &c., the acting stewards of the regatta, do hereby individually and collectively engage to return the same to the stewards on or before the next entrance day, in accordance with the conditions of the annexed rules, to which also we have subscribed our respective names."

18. If either or any of the above challenge prizes shall not be contended for for three successive years, it or they shall then be applied to such other purpose as the stewards may direct, for the benefit of the

regatta.

19. All questions of eligibility, qualification, or interpretation of the rules, shall be referred to the

stewards, whose decision shall be final.

20. The stewards shall have power to alter and add to the above rules, as they from time to time shall deem expedient.

RULES FOR BETTING.

1. In all bets there must be a possibility to win when the bet is made; "you cannot win when you cannot lose."

2. The person who bets the odds has a right to choose a boat or the field; when a boat is chosen, the

field is what starts against it.

3. A bet cannot be off except by mutual consent, but either party may demand stakes to be made on the day of the race—giving reasonable notice thereof—and, on

refusal, may declare such bet off.

4. The interests of the bets are inseparable from the interests of the stakes or prize, or, in other words, bets go with the stakes; but bets specially made "first past the post," or "in their places," are determined by the order of passing the post.

5. Bets on boat-races are not "play or pay," with

the exceptions hereinafter mentioned.

6. Bets are determined when a boat does not start, if the words "absolutely row or pay," or "play or pay," are made use of when making the bet.

7. When boats are ordered to take their places for the start, all bets respecting such boats are "play or

pay."

8. All double-event bets are "play or pay."

- 9. If a match or race be made for any particular day in any week, and the day is changed to any other in the same week, all bets stand; but if the day is changed, or the race postponed to any day in a different week, or if the slightest difference is made in the terms of the engagement, all bets made before the alteration are void.
- 10. If two boats row a dead heat, and agree to divide the stakes or plate, all bets between such boats, or between either of them and the field, must be settled by

the money being put together and divided between the parties concerned, in the same proportion as the stakes or plate; and if a bet be made on one of the boats that rowed the dead heat against a beaten boat, the person who backed the boat that rowed the dead heat wins half his bet if his boat receives half the prize; but if the dead heat be the first event of a double bet, the bet is void unless the boat received above a moiety of the prize, which would constitute it a winner in a double event.

- 11. Bets on boats disqualified before the race are void, under Rule 5.
 - 12. In the event of a draw, all bets are void.
- 13. Bets become void by the death of either party making them.

INDEX.

Backing water	•••	•••	•••	•••	•••	•••	page	34
T		•••	•••	•••	•••	104,	115,	181
Beer	•••	•••		•••	•••	•••	•••	138
D11 .	•••	•••	•••	•••	•••	•••	•••	187
Boils	•••	•••		•••	•••	•••	•••	189
Brandy	•••	•••	•••	•••	•••	•••	•••	125
Breast races	•••	•••	•••	•••	•••	•••	•••	79
Bumping races	•••	•••	•••	•••	•••	•••	•••	79
Challenge prize	86	•••					•••	84
Characteristic			ing	•••	•••	•••	•••	19
Clothes for ro	_			•••		•••	•••	114
Club races		•••		•••	•••	•••	•••	85
Coach, duties					•••	•••	•••	51
Cocoa	•••	•••	•••		•••	•••	104,	133
Coffee	•••	•••	•••	•••	•••	•••	•••	183
Committees, d	uties o	of	•••	•••	•••	•••	•••	82
Condition, esse	entials	of	•••	•••	•••	•••	•••	93
Condition of T	Com K	ing an	1 Неел	an	•••	•••	•••	91
Construction of	of race	-boats	•••	•••	•••	•••	•••	7
Corns	•••	•••	•••	•••	•••	•••	•••	140
Course against	t stream	m.	•••	•••	•••	•••		66
Course with a	tream	•••	•••	•••	•••	•••	•••	66
Course of the	blade	of the	oar		•••	•••	•••	29
Covernain sale	etion o	of					60	62

Dead heats	•••	•••	•••	••	•••	page	85
Definition of training	ıg	•••		·	•••		87
Dimensions of boats	B	•••	•••	•••	•••	12,	13
Drinking cold water	r	•••			•••	97,	103
Dr. Smith on train	ing	•••					100
Dumb-bells			•••				97
Easing		•••					33
Eggs of less value		eat					104
Evils of work befor							111
Errors of position				•••		•••	35
		•		•••		•••	
Faults of labour						•••	36
Final preparation as					•••	55,	124
Finish of the stroke		•••					28
Fish		•••		•••	•••		122
r 1811	•••	•••	•••		•••	•••	122
Green tea							133
	•••	••	•••	•••	•••	•••	
Gruel	•••	•••	•••	•••	• · •	•••	123
Gymnastics	•••	•••	•••	•••	•••	•••	97
TT 11							-00
		•••	•••	•••	•••	•••	80
Heat of the sun, ev			•••	•••	•••	•••	132
History of outrigger		•••	•••	•••	•••	•••	5
Holding water		•••	•••	•••	•••	•••	33
Hours of rising, me		• • • •	•••	•••	•••	114,	115
How to hold an oar		•••	•••	•••	•••	•••	23
How to sit	. 	•••	•••	•••	•••	•••	22
Improvement of hea		•••	•••	•••	•••	•••	94
Improvement of win	ıd	•••	•••	•••	•••	•••	96
	•••	•••	•••	•••	•••	•••	115
Inferiority of moder		ıg	•••	•••	•••	•••	2
Invention of outrigg	ers	•••	•••	•••	•••	•••	4
Judge, duties of	•••	•••	•••	•••	•••	• •••	84
_							
Learning to row	•••	•••	•••	•••	•••	•••	43
Learning to scull	•••		•••	•••	•••	•••	70
Lying on the grass	•••	•••	•••	•••	.:.		132

INDEX.

Mats					page	11
Medical examination of	men	•••	•••	•••	•••	109
Medical treatment of m	nen		•••		•••	140
Medicine			•••		113,	134
Oars	•••	•••	•••			10
Oarsmen, classes of	•••		•••	•••		110
Oarsmen, duties of			•••	•••	53,	109
Old ale				•••		133
Old-fashioned craft			•••		•••	13
Old-fashioned wager-box	ats			•••	•••	14
_						
Paddling				•••	•••	33
Pace				•••		2
Pair-oared rowing	•••	•••		•••	•••	57
Placing the men			•••		•••	50
Pork	•••		•••		•••	122
Porridge			•••			121
Position when rowing			•••	•••		24
Presentation prizes						85
Puddings		•••	•••	•••		122
			•••	•••	•••	
Racecourse at Henley			•••	•••	•••	66
Racecourse at Putney		•••	•••			68
Raw vegetables	•••	•	•••	•••	,	133
Raws		•••		•••	·	138
Recovery of the body	•	•••			•••	28
Reduction of fat					•••	94
Reduction of weight	•••		•••	•••	94.	103
Regatta committees, du			•••	•••	•••	82
Remarkable crews	•••	•••	•••	•••	•••	75
Remarkable scullers		•••			•••	77
Rudders	•••		•••	•••	•••	11
Running		···				119
		•••	•••	•••	•••	
Sculls					•••	10
Shirking	•••	•••	•••	•••	•••	38
Sleep	•••			•••	•••	119
Standing about				•••	116,	124
Steering, directions for	•••	•••	•••	•••	•••	64
Steering in a cross wine		•••	•••		•••	65

Tea		•••	•••				page	104
Thirst	•••	•••				•••	• • • • • • • • • • • • • • • • • • • •	124
Time races	•••	•••			•••			80
Tobacco sm	oking	•••	•••	•••				134
Training at	Cambri	dge	•••	•••	••.			127
Training at		-						126
Training of	London	Row	ing Clu	b	•••			128
Training of			•••					142
Training of	Tom K	ing			•••			101
Training, D		_		•••	•••	•••	•••	100
Training, en			ns of	•••		•••		90
Training-off			•••	•••	,,,	•••	•••	136
Treatment of					•••		•••	125
Turkish bat		-	•••	•••	•••	•••		
Twelve-oare				•••	•••			14
Umpire, du	tion of							83
Umpire, du Umpire sole			•••	•••	•••	•••	•••	
-				•••	•••	•••	•••	88
Umpire in	waterme	я в п	latenes	•••	•••	•••	•••	86
Varieties of	boats		•••		•••	•••	•••	4
Veal	•••	•••	•••	•••	•••	•••	•••	122
Vegetables	•••	•••	•••	•••	•••	•••	•••	122
Walking	•••		•••	•••	•••			116
Watermen's			referee				•••	86
Weighing	-							126
Weights		•••	•••	•••	•••	•••	•••	48
Wine			•••	•••	•••	•••	•••	128
Words of co								63
V4								140

INDEX.

AM

LONDON : PRINTED BY HORACE OUT 246 AMPAND W.O.



•

