Professor Harrison's Book (1868).

Harrison (1868? and 1865) "Indian Clubs, Dumb-Bells, and Sword Exercises" Henry Lea, London. One of "The Champion Handbooks."

There appear to be at least two versions of this book referred to in the catalogue at the British Library one 1865, one 1868(?) and another 1873 as related titles. We looked at the British Library 1868 version (on 22/11/2012). This was a tiny little book we looked at and was an anthology of several smaller books in "The Champion Handbooks" series. The other books referred to all manner of manly activities from Cricket to Fishing and Gymnastics (which had a small section on club swinging).

Professor Harrison was, apparently, widely respected and believed to be the strongest man in the world at that time. We hope to continue our research to find out more about Professor Harrison in the future.

We have made a copy of Professor Harrison's little book and enlarged the copy of this book so that it is easily read and can be made available to all Indian club swingers via the web page (www.indianclubswinging.co.uk) as a free download. This is a rare book and as far as we know no one else has attempted to obtain this book for the benefit of Indian club swingers. We also believe the book to be out of copyright and as such can be openly used for research purposes and for dissemination to the wider club swinging community. The book might also be of interest to those studying Bartitsu.

We hope this will be of benefit and interest to all those in the Indian club swinging community. Please do not hesitate to get in touch with us and let us know what you think of the book or if you have any further information about Professor Harrison.

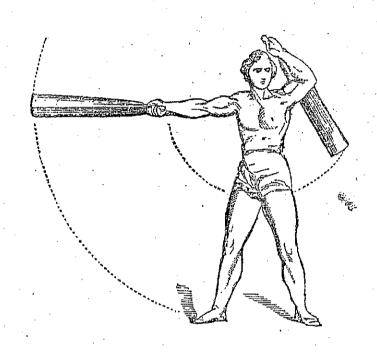
Mike and Elaine 2013

INDIAN CLUBS

DUMB-BELLS,

OMA

SWORD EXERCISES.



By PROFESSOR HARRISON,

LONDÔN:

HENRY LEA, 13, PATERNOSTER ROW.



INDIAN CLUBS.



DUMB BELLS.



LOMDON:

W. W. HEAD, Printer, Victoria Press, 83A, Farringdon Street, E.C.

PUBLISHERS' PREFACE.

PROFESSOR HARRISON, emphatically the strongest man in the world, has had the honour of appearing before her Most Gracious Majesty, and of receiving testimonials from the ex-Queen of Oude and various illustrious personages and foreign notabilities. The Committee of the Scotch Fêtes at Holland Park awarded him the costly belt he wears in his public The Rajah of Coorg also testified to the performances. value of his teachings by the presentation of a handsome silver snuff-box; and among his pupils we may mention the Prince of Oude, the King of Scinde, the Prince Sarat, and numerous scions of the nobility and aristocracy of Great At the Holland Park fêtes and at the gymnasium Britain. at Saville House, Leicester Square, he was universally admitted to be the most able and graceful performer with the Indian Clubs, and as an instructor in the exercises peculiar to this instrument he is unrivalled. This volume, it is hoped, will therefore prove acceptable to all who are desirous of perfecting themselves in the various feats of strength for which he is celebrated.

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INDIAN CLUB EXERCISES.

I .- INTRODUCTORY.

PHYSICAL training has of late years come to be considered, and rightly so, as a necessary adjunct of the education of Various are the means adopted, but one result only is obtained-namely, strength, and the right use of the Whether the means consist of running, walking, climbing, leaping, vaulting, skating, swimming, riding, driving, cricket, rowing, or the feats pertaining to the gymnasium, the object is equally desirable and equally beneficial. But among all the aids to physical education yet patronized by teachers in our higher scholastic establishments, the Mugdah, or Indian Club, is now admitted to be one of the most efficient. By the instructions following, I hope to enable all my readers to practise for themselves, and so obtain the necessary training. It is hardly necessary to say much in favour of bodily strength; for all writers, thinkers, and teachers admit that the cultivation of body and mind should proceed simultaneously. You know the old Latin proverb-mens sana in corpore sano; and few will dispute that to possess a sound mind in a sound body is the greatest of blessings.

II .- PRELIMINARY TRAINING.

It is a matter of common remark that too many persons have, by too precipitately "going in" for hard exercise, seriously injured their health for life. Why is this? The fault, assuredly, is not that of the particular exercise in question, but their own.

I will explain my meaning more fully. Take the case of a somewhat delicate boy, of sedentary habits, we will suppose, who, hearing his friend talking of A's power of swinging from a bar in a gymnasium, or B's great development of muscle, as evinced by his ability to go through the Indian club exercise with the heavier clubs, resolves to emulate such He goes at once to a gymnasium, and supfeats forthwith. posing the gymnastic instructor is injudicious enough to suffer it, injures his constitution by attempting too much before, by a mild course of previous training, he is able to accomplish even a very little properly. The consequence is, his end is not answered; and his relatives say, "Oh, this comes of these violent exercises!" Is this fair? Assuredly it is not.

No boy, save in some exceptional cases of great constitutional powers, should attempt gymnastic feats otherwise than by degrees; and before commencing the exercise of the Indian clubs it is well for amateurs to improve their general health, if at all delicate, and harden their muscles, by walking, running, leaping, swinging by the arms, and lifting mode rate weights. And perhaps, of all exercises fitted for the aforesaid preliminary training, none are better than walk ing; but even that must not be abused by excess.

As bI am not here writing for professionals, but for amateurs,dI will content myself by laying down a few simple rules, hy following which you will soon find yourself in a fit con ition to become an adept at the Mugdah. I will suppose ttat you are not entirely master of your own time, but that a any rate you can go to bed and get up early, without which any really beneficial training is almost next to an impossibility. I will suppose, in summer you can get up, say

at six o'clock-have your cold bath, or, if you have not that convenience, a good sluice all over with cold water, and a hard rub down with a rough towel till your flesh is in a glow, will do nearly as well, and then have your breakfast, which should consist, if you take meat, of good plain roast or boiled beef or mutton, rather under-done, stale bread, and a cup of tea. An egg beat up in tea is a very good thing. As soon as you have given this time to digest, start for a walk, going at a pace which is easy to you. Your speed you can increase day after day as your condition improves, till you will find, in a very few weeks, that walking five miles in one hour is almost as easy as walking four was previously. I am not teaching you how to become a pedestrian, remember: that is no part of my province now. All I want to impress upon you is, that ere you enter upon your Indian club exercise it is well you should get into fair health, and walking will do this for you as soon as anything I know, as a preliminary.

As to diet, your own common sense, and not your inclination, must be consulted. If you cannot make up your mind to deny yourself certain articles of food which experience tells you are unwholesome, you will never become a proficient in the use of the Mugdah. If you can, you will soon reap the inestimable benefits to your mental as well as bodily health. to be derived from it. Avoid stimulating liquors, or use them very sparingly, giving sound malt liquor the preference. Too much liquid of any kind is bad for wind and muscle alike. Against tobacco I need hardly warn any sensible young aspirant to gymnastic honours. No man ever trained on it yet to profit. As far as you are able, avoid spices, salt provisions, and seasonings.

Be regular, in your preliminary training, as to the time at which you take and the duration of your exercise. If at the commencement of your walking you find yourself puffy with too much flabby flesh about you, do not be in too great a hurry violently to get it off by purgatives and too hard exercise on a sudden. The former will, of course, in some cases be, in moderation, of service; and remember this especially, it is always a bad thing to take exercise while medicine is in operation. In fact, the less physic taken the better. A little Epsom salts, a couple of antibilious pills, a dose of castor-oil or of salts and senna, will probably be most suitable.

Do not take this walk before breakfast if you find yourself in any way faint on going out with an empty stomach; and if you would soon get into condition, always after the exercise taken has brought out perspiration on your skin, strip and give yourself a good dry rub, the pleasurable sensation produced thereby will of itself alone reward you for the trouble.

As to the time of feeding, the earlier you have your break-fast the better, and if you can dine at mid-day, do so; if you cannot, take a biscuit for lunch and a glass of good sound ale, and no more. Avoid anything approaching to a heavy supper as carefully as you would taking hard exercise on a full stomach. In the one case you would get the night-mare, in the other you would injure your wind, and in both your digestion.

Attend particularly to the state of your stomach, and accommodate your diet to its circumstances. If you find a small portion of fresh vegetables, such as greens, or mealy potatoes, suit you, do not deny yourself these. If you find when taking really good exercise that an extra pint of ale in the course of the day really improves your condition, by all means drink it. You want to get into good health, not to make a martyr of yourself.

If you feel worried in your mind, exercise will nearly always be found, if not entirely to remove, at any rate to ameliorate your anxiety. Many a man, who otherwise would have sat at home nursing his grief unavailingly, has by a little brisk exercise increased the flow of his spirits, improved the action of his liver—and all people with sluggish livers are prone to melancholy—and caused himself to take a more hopeful and wholesome view of his circumstances.

What can be effected by systematic training is something wonderful. Boys and men, at first puny, delicate, wheezy, pale-faced, feeble mortals enough, have become, merely by attending to a few simple rules, strong, hale, active, ruddy,

and in full enjoyment of all their faculties, half of which, till they discovered that exercise was to them the one thing needful, and as such their best physician, were completely lost to them. I will venture unhesitatingly to say, that hundreds of young people, who in this great city annually die of consumption, could they only have been persuaded to put themselves through a little mild training, and then through a course of Indian club exercises, would have lived to thank him who gave them the advice.

To people of sedentary occupations which necessarily tend to contract the chest, and so to lessen the requisite quantity of air they should get into their lungs, the use of the clubs is invaluable. The clubs can be made at a very low figure, and the doctor's bill would proportionately be decreased.

Having exercised the muscles of your legs by walking, running, &c., lifting light weights is a good beginning ere you "go in" for a course of clubs. Then comes the swing, which you can easily rig for yourselves. This you will find opens the chest, and as you can suit the work taken with it to your strength, there is no risk of doing yourself harm

thereby.

I recommend these things for two reasons: firstly, because, of course, I know that proficiency with the clubs will more readily be obtained by a person who by walking, swinging, lifting light weights, &c., has got himself into fit condition to do really good work with them—and there is a right way and a wrong way of setting to work with the Mugdah as with everything else; and, secondly, because I do not wish anybody who, neglecting my foregone advice, takes up the clubs, uses them clumsily, tires his arms, back, and loins uselessly, and when he puts them down finds himself no better, but, on the contrary, rather the worse for his trouble, to run away with the impression that the Mugdah is only fit for professionals, and better avoided by all who don't want stiff, or possibly strained muscles.

It stands to common sense that if a person who, after sitting all day at a desk, or dissipating half his night in bad atmospheres and bad company, adopts any course of gymnastics without the least attention to previous preparation,

he will suffer for it. If the heart through any unwholesome mode of life is suddenly shocked into a more violent action than its valves can bear, the consequences are obvious. It is like overwinding a watch, or overloading a gun that is made of steel of insufficient temper to bear the extra strain upon it.

No person, be he man or boy, if he has neglected proper attention to regularity of diet, sleep, and exercise, can hope to become a new creature all at once. But perseverance will remedy most evils of this kind, if not of too old a growth. A month's quiet preliminary training, if a man have no organic disease about him, will work marvels. The eye that before was dull, heavy, bilious-looking, weak and watery, will soon grow bright and clear with the keen, confident glance of health. The complexion that before was muddy, spotty, unhealthily red, or pale, or sallow, will assume the clear, fair hue of good condition. The skin will improve in like manner; the quickness with which perspiration dries on rubbing with towels after exercise is a good test of such im-The muscles that before were mere flabby, useless sinews, miserably shrunken from nature's originally fair proportions, will enlarge perceptibly day by day, and the man or boy who but a short while ago slouched along almost as though the least exertion were a dreary trouble to him, will find his chest broader, his respiration more free, his legs, arms, back, and loins stronger, and the mere feeling that he is alive and well, strong and hearty, of itself will be a pleasure such as none but those who have tried it ever knew.

Speaking, in this sense, of the advantages derivable from the use of a swing for the arms, an eminent medical man thus writes:—

"I wish to say a few words to whom it may concern, on the use of the swing, as a preventative and cure of consumption. I mean the suspending of the body by the hands, by means of a rope or chain fastened to a beam at one end, and to the other a stick three feet long, convenient to grasp with the hands. The rope should be fastened to the centre of the stick, which should hang six or eight inches above the head.

"Let a person grasp this stick with the hands about two feet and a half apart, and swing very moderately at first, and gradually increase as the muscles gain strength from the exercise, until it may be freely used three or four times a day.

"The connexion of the arms with the body (with the exception of the clavicle with the shoulder-blade and sternum or breast-bone) being a muscular attachment to the ribs, the effect of this exercise is to elevate the ribs, and enlarge the chest; and as nature allows no vacuum, the lungs expand to fill up the cavity, increasing the volume of air—the natural purifier of the blood—and preventing the deposit of tuber-culous matter. I have prescribed the above for all cases of bleeding from the lungs and threatened consumption, for thirty-five years, and have been able to increase the measure of the chest from two to four inches within a few months, and always with good results.

"Let those who love life cultivate a well-formed, capacious chest. The student, the merchant, the sedentary, the young of both sexes—ay, all, should have a swing upon which to stretch themselves daily, and I am morally certain that if this were to be practised by the rising generation, in a dress allowing a free and full development of the body, thousands, yea, tens of thousands, would be saved from consumption."

If I were asked to answer in what in my humble opinion lies the true secret of health, I should frankly answer in two words—exercise and moderation.

As I don't suppose most of my readers are likely to become professional athletes capable of extraordinary feats to set London staring, after the manner of Leotard, Olmar, &c., I have not thought it necessary to go into more lengthy details on training.

It is not necessary for a young man or a boy to be able to wield dumb-bells of seventy pounds weight each, such as I myself, as a feat merely, have performed with, any more than it is necessary for him to be able to walk twenty-one

miles under the three hours, and seven miles in fifty-two minutes and forty-three seconds, the latter time altogether unprecedented, as was done by Charles Westhall, some years ago; or to run a mile in four minutes, twenty-two and a quarter seconds, as was done by Siah Albison, in 1861.

But it is well that every Englishman, not afflicted with any unavoidable infirmity, should have the use of the muscles God gave him; and to this end I know of few if any better means than the adoption of my system hereafter laid down

for you.

I may, moreover, remark with reference to pedestrianism, that while walking and running undoubtedly strengthen the lower limbs, the clubs not only do this, but do more; they strengthen the legs partially, the loins greatly, and the

muscles of the arms and back enormously.

Again, to look at the matter in a mere business point of view, it is not every one who can afford to give as much time to pedestrianism as a general practice, as may be required. A long walk takes persons engaged in business too far away from their shops or offices. But this will not apply to the clubs; as almost any man who can afford the first outlay, can find time every day at some hour to take a little wholesome exercise with them. If he does so, he will also find after a while, that when he goes to his work again, he is twice as good a man as he was before.

At the risk of being accused of making the observation at a somewhat awkward place in this little treatise, I will here mention that a well-fitting belt round the waist will be found of great assistance in all athletic sports. But you must not wear too wide a belt, or girt it too tightly, or the chest and abdomen will be unduly compressed. It is hardly necessary to say that the figure attained by the acrobat is not desirable for a gentleman. The belt should be placed on the loins so as to support the trousers without braces. An ordinary India-web belt, with straps and buckles, is sufficient for the Indian club and most other athletic exercises.

We see that in regular training the health of the stomach, the limbs, and the skin are all attended to. Two or three months of training may be followed by such sports as cricket, golf, quoits, or bowls; the occasional indulgence in which, combined with regular walking and running, will be found sufficient to keep the body in good condition—the muscles hard and firm, the limbs supple, the chest expanded, the head erect, and all the faculties clear and well balanced. food here recommended, and the regimen proposed, are, in fact, the grand secrets of the training system. Avoid drugs, than which nothing is so injurious to the really healthy man while undergoing a regular system of training. I, for one, do not believe in the efficacy of Epsom salts and other drastics, though I know that they are largely used by jockeys, pedestrians, and others, who find it necessary to reduce themselves to a given weight in a short space of time. efforts of the trainer are directed to the reduction of fat and the hardening of the muscular fibre; but for gentlemen there is no necessity for the use of blankets and the coriander-seed All that is really required is exercise systematically liquor. After a few weeks it will be found that the skin becomes soft, smooth, and elastic; the flesh firm, and the spirits light and cheerful.

III.-THE OLD AND NEW SYSTEM OF TRAINING.

In the good old times—which often strike me as having been very bad old times—when a man had to walk a match or run a race, his trainers physicked him, and sweated him, till the poor fellow was worn to mere skin and bone, and had no elasticity of limb or spirit left in him. This plan was all very well, perhaps, for attaining endurance, but it was destructive to health in the long run, and certainly not the sort of thing to recommend to parents and guardians. The new system has, however, almost abolished physic. Training, considered as a means of getting the body into a condition to perform certain feats of activity and strength, somewhat out of the usual and ordinary course of most men's lives, is now-a-days a much more simple and sensible matter.

It may possibly, though it hardly comes within the scope of this publication, interest some of our young readers, if Charles Westhall tells them how pedestrians get themselves into condition. His notions, as will be seen, are much the same as my own; and although I am not addressing my friends as professional walking men in futuro, I am glad he and I agree in many things, and I may here observe, that though it will not be necessary for them to go through as much work as he suggests, they nevertheless will do well to follow him.

The first and primary aim ought to be the endeavour to prepare the body by gentle purgative medicines, so as to cleanse the stomach, bowels, and tissues from all extraneous matter, which might interfere with his ability to undergo the extra exertion it is his lot to take before he is in a fit state to struggle through any arduous task with a good chance of success.

"The number of purgatives recommended by trainers are legion, but the simpler will always be found the best. The writer, in all instances, found that a couple of antibilious pills at night, and salts and senna in the morning, has answered every purpose. It is reasonable, however, to suppose that any one who has arrived at sufficient years to compete in a pedestrian contest has found out the proper remedies for his particular internal complaints. The internal portion of the man's frame, therefore, being in a healthy condition, the time has arrived when the athlete may commence his training in proper earnest, and if he be bulky, or of obese habit, he has no light task before him. If he has to train for a long distance match, the preparation will be almost similar, whether for walking or running.

"The work to be done depends very much on the time of year. In the summer the man should rise at six in the morning, so that after having taken his bath, either shower or otherwise, there will have been time for a slow walk of an hour's duration to have been taken before sitting down to breakfast, that is, if the weather be favourable; but if otherwise, a bout at the dumb-bells, or half an hour with a skipping-rope, swinging trapèze, or vaulting-bar, will be found

not unfavourable as a good substitute. Many men can do without having any nourishment whatever before going for the morning's walk, but these are exceptions to the rule. men who take the hour's walk before breaking the fast feel faint and weak in their work after breakfast, at the commencement of their training, and the blame is laid on the matutinal walk; when, if a new-laid egg had been beaten in a good cup of tea, and taken previous to going out, no symptom of faintness would have been felt, although it is expected some fatigue would be felt from the unwented exertion. The walk should be taken at such a pace that the skin does not become moist, but have a good healthy glow on the surface, and the man be at once ready for his breakfast at eight o'clock. The breakfast should consist of a good mutton-chop or cutlet, from half a pound upwards, according to appetite, with dry bread at least two days old, or dry toast, washed down with a cup or two of good tea (about half a pint in all), but with little and if possible no milk. Some give a glass of old ale with breakfast, but it is at this time of the day too early to introduce any such stimulant. After having rested for a sufficient time to have allowed the process of digestion to have taken place, the time will have arrived for the work to commence which is to reduce the mass of fat which at this time impedes every hurried action of the muscle and blood-vessel. This portion of the training requires great care and thought, for the weight of clothing, and distance accomplished at speed, must be commensurate with the strength of the pedestrian. At the commencement of the work a sharp walk of a couple of miles out, and a smart run home, is as much as will be advisable to risk. On the safe arrival at the training quarters, no time must be lost in getting rid of the wet clothes, when a thorough rubbing should be administered, after which he should lie between blankets, and be rubbed from time to time, until the skin is thoroughly dry. Most of the leading pedestrians of the day now, when they come in from their run, divest themselves of their reeking flannels, and jump under a cold shower-bath, on emerging from which they are thoroughly rubbed down, which at once

destroys all feeling of fatigue or lassitude. In a few days the pedestrian will be able to increase his distance to nearly double the first few attempts, at a greater pace, and with greater ease to himself. After again dressing, he must always be on the move, and as the feeling of fatigue passes away, he will be anxiously waiting for the summons to dinner, which should come about one o'clock, and which should consist of a good plain joint of the best beef or mutton, with stale bread or toast, accompanied by a draught of good sound old ale, the quantity of which, however, must be regulated by the judgment of the trainer. been found of late years, that extreme strictness in all cases should be put on one side, and a small portion of fresh vegetables allowed, such as fresh greens or potatoes; and, in some instances, good light puddings have been found necessary to be added to the bill of fare, when the appetite, from severe work or other causes, has been rendered more delicate than usual.

"The continued use of meat and bread, unless the man has a wonderful appetite and constitution, will once, if not more, in almost every man's training, pall upon his palate, when the trainer should at once try the effect of poultry or game, if possible; but, at any rate, not give the trained man an opportunity of strengthening his partial dislike to his previous fare. In cases like these, the only wrong thing is to persevere in the previous diet; for if a man cannot tackle his food with a healthy appetite, how is it possible that he can take his proper share of work? The quantity of ale should not exceed a pint, unless there has been a greater amount of work accomplished in the morning than usual, when a small drink of old ale at noon would be far from wrong policy, and a good refresher to the imbiber. Wine in small quantities is sometimes beneficial, but should not be taken at all when malt liquors are the standard drink. is possible to do without wine the better. The chief thing in diet is to find out what best agrees with the man, and which in most instances will be found to be what he has been most used to previously.

"After a thorough rest of an hour's duration, the pedes-

trian should stroll about for an hour or two, and then divesting himself of his ordinary attire, don his racing gear and shoes, and practise his distance, or, at any rate, some portion of the same, whether he is training either for running or walking. This portion of the day's work must be regulated by the judgment and advice of the trainer, who of course is the holder of the watch by which the athlete is timed, and is the only person capable of knowing how far towards success the trained man has progressed in his preparation. is impossible for the pedestrian to judge by his own feelings how he is performing or has performed, in consequence of, perhaps, being stiff from his work, weak from reducing, or jaded from want of rest. The trainer should encourage his man when going through his trial successfully, but stop him when making bad time, if he is assured the tried man is using the proper exertion. The rule of always stopping him when the pedestrian has all his power out, and yet the watch shows the pace is not 'up to the mark,' should never be broken, for the man who so struggles, however game he may be, or however well in health, takes more of the steel out of himself than days of careful nursing will restore. If stopped in time, another trial may be attempted on the following day, or at any rate the next but one."

Combined with walking, a bout with the Dumb-bells,

Indian clubs, or the Ranelagh, will be highly useful.

And now let me say a word or two about the latter instrument.

The importance and usefulness of gymnastic exercises as an adjunct to training, and as a means for preserving health and vigour, cannot be too highly estimated or too frequently enforced. But as every one has not ready access to a gymnasium, some system that is within the reach of all, and that may be practised at home in all seasons, is very desirable. Such a system is presented by Mr. Frank Milnes, of Gloucester, who in his Ranelagh or Dotosthéne, presents us with a pocket gymnasium and training apparatus of great value and portability.

This mechanical invention consists of a new adaptation of vulcanized india-rubber, by the elasticity and resisting power

of which the necessary exercise of the muscles is obtained. The construction of the instrument is very simple. Several cylindrical bands of india-rubber (four, five, or six, as the case may be), of equal length, are fastened together at the ends to strong steel rings. One of the rings is joined by a spring snap to a wheel pulley, on the bevilled edge of which a finely twisted rope plays, and at each end of this rope is a stirrup handle, with a wooden roller moving freely at the flat end for the grasp. This is the whole machine. When not in use it may be carried in the pocket or laid in a drawer. When you are about to use it, you hang the ring at the top end upon a strong hook, driven in the wall or into the lintel of a door, about six or seven feet from the ground. You then take the handles, and standing with your back to the apparatus, with your front toe about seven feet from the vertical line of the hook, so that the hands are about level with the shoulders, you must now press the chest forward, so as to cause a slight strain on the india-rubber bands, at the same time maintaining the equipoise of the body. Turn the feet a little outwards, and project the body forward, at the same time advancing the left foot. The hands are then to be extended straight forward from the shoulders. Then open them slowly, and let them go backward with the impulse of the elastic bands, till you bring yourself into the first position. Repeat this exercise for a few minutes, and you will find that your chest is opened and your respiration easy.

It will be seen that the use of the Ranelagh—which is so called from Lord Ranelagh, who is a great advocate of all gymnastic exercises—gives freedom to the muscles of the chest, arms, loins, and legs, and, in fact, brings all the muscles and tendons of the body into free action. Of course, the exercise may be varied considerably. There is the rowing action, the swimming action, the fencing action, the pugilistic action, the archery action, and a vast number of other motions, all of which have a direct tendency to give freedom to the flexors, extensors, pectorals, and shoulders. But I must explain that all jerking motions are to be carefully avoided, as they have a tenderay to injure the muscles. But from

this action the Ranelagh, properly used, is entirely free. A few minutes' practice daily will be found equally beneficial to the strong man, the delicate woman, or the young child, who may equally enjoy the exercise afforded by this novel and valuable instrument without experiencing any sense of fatigue; and as a relief from lassitude, we know of no contrivance so easily adopted, and so entirely free from all objection, and so well adapted to the purposes for which it is designed.

It is almost impossible to over-estimate the great service rendered to training by the use of the Indian clubs. In fact, in the entire round of gymnastic exercises, no such efficient instruments as these have been discovered for bringing into action the muscles and tendons of the arms and trunk, which are generally less used than those of the legs. In the army the Indian clubs are constantly in requisition, and no gymnasium can be considered complete without them.

IV. THE CLUBS.

As I have already said, Indian clubs are not easily made by an ordinary turner, in consequence of the great nicety required in balancing, and apportioning the weight in the right direction. They are constructed of various woods, and cost about a guinea a pair for the smaller sizes, gradually increasing in price according to weight.

If you carefully follow my directions, you will soon be in a condition to undertake the exercise of the trapeze and other athletic amusements. None of these are dangerous or harmful, if kept within proper limits; for it must be remembered that their office is the right ordering and education of the limbs and muscles, and not the exhibition of startling feats or wonderful performances. These may be well left to the Léotards, Olmars, and other public exhibitors of gymnastic surprises.

V .- THE FIRST EXERCISES.

It has been said that practice with the dumb-bells and cricket-bat brings all the muscles of the body into action -- Cobbett recommends the spade and Captain Crawley the billiard cue-but as instruments for exercising the limbs, they are all vastly inferior to the Mugdah, or Indian club. Contributing to the full development of every muscle of the trunk, arms, and legs, they are more graceful and showy in practice than Dumb-bells. I must, however, warn you not to begin with too heavy a club; but rather to practise with a light instrument, and go gradually on till you can take the regular eleven-pounder club, or even the heavy ones, such as those which I have exhibited at Holland Park and elsewhere. Milo of Crotona commenced by carrying a calf, till at last, by practice and perseverance, he could run away with a bull on his shoulders. But you recollect that even he suffered by trying to do too much; for when—as Ovid tells us—he was an old man, he endeavoured to rend an oak, and caught his fingers in the cleft of the tree; and being unable to extricate them, was devoured by wild beasts!

Ease and grace must not be neglected; for without these, the Club Exercises win little applause from spectators. Even with inferior strength, he who studies position, upright carriage, and elegance of action, will command admiration. In swinging the clubs, let them make a full free circuit, without jerk or loss of balance. The greatest difficulty I have experienced with pupils has been to break them of that ugly jerk which amateurs are so apt to contract in their first exercises with the clubs.

Exercise 1.—Choose your clubs weighted according to your strength—neither too light nor too heavy. Advance; bring your heels well together, and place your clubs on the floor. It should be explained, that each club has a flat bottom, and rests on the ground without liability to topple over. Stand perfectly erect, with your chest well forward, and over your toes; your arms straight, and hands to the front and your little fingers close to your sides. Retire one

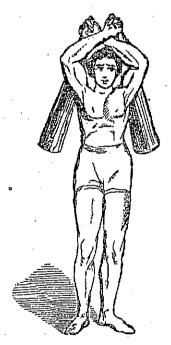
step, left foot first; and then again advance between the clubs, right foot first, bringing the left forward, with heels

together as before.

This method of advancing to the clubs is common to all the exercises. It has this advantage—that it steadies the body, and prevents that swaying about on taking up the clubs, to which all novices are liable. Moreover, being re-

gular, it is also graceful.

Now lay well hold of the clubs by the handles, with the palms of the hands towards your body; raise them, and cross them over your head, bringing your arms in a perpendicular line with your body, as in the illustration. Then let them slowly drop in a horizontal line with your shoulders, gradually sinking them till your little fingers touch the seam of your trousers, with the palms well to the front. Very good. Now drop the clubs, and stand erect as before, and retire a step, ready for the next exercise. You must not imagine, however, that you have learned all you have to learn, by



4.—EXERCISE 1.

merely reading these instructions. Each step in the first exercise must be conquered before you commence the second; for upon your thorough comprehension of the preliminary

proceedings, and your capability of performing this initiative exercise, depends much of your subsequent success. first blow often decides the fray, so the first exercise in Mugdah very commonly determines the distinction between a graceful performer and a bungler. Recollect that the method of taking up the club is always with the palms inwards. If you attempt any of the preliminary exercises with the palms turned from your body, you will assuredly fail to accomplish them with ease and dexterity-if, indeed, you can perform some of them at all. All the movements must be performed slowly and regularly, without hurry or undue exertion. The form of the club, with the weight farthest from the hand, causes it to swing in a circular direction when raised above the hip. This tendency opens the chest, and brings all the muscles of the arms and the upper part of the body into free action, while the trunk and legs partake of the general movement without much physical exertion. But of course I do not mean that you are to go tamely to work. amount of real exertion is necessary; and, as you advance in the different exercises, you will find many opportunities for throwing in plenty of vigour and dexterity. Always stand firmly, with the weight of the body resting rather on the ball of the foot than on the heel. The muscles of the legs will thus acquire the rigidity necessary to give a counterpoise to the weights carried by the hands in any direction.

Exercise 2.—Advance as before, with one foot between the clubs. Then lay hold of them, and bring them back to

the rear toot.

Raise the clubs perpendicularly, with your hands close to your sides, and in a line with your elbows. At the moment you raise them, advance with the rear foot to within half a yard of the other, with the heels in a line. You will thus have a firm broad foundation, the feet well apart, and the body having a tendency to incline very slightly forward. Now throw one club round your head, by bringing it over the other club, sinking your hand well down the back of your neck; and, at the same time bringing your elbow well up to the side of your head, you make a circle, returning the club to your side, whence it started; and vice versa

with the other club, and you again bring the clubs into an upright position. Bear in mind that you commence making

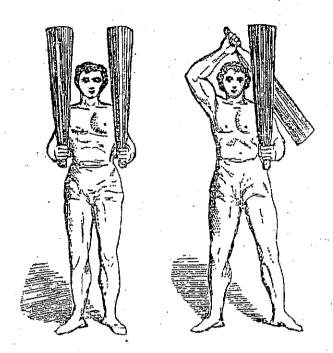


FIG. 5. -EXERCISES 2 AND 3.

a circle the moment you start the club or clubs, as in some exercises you will have to swing two clubs at one and the same moment.

A few minutes' rest, and then commence

Exercise 3.—Advance as before. Raise the clubs into position as in fig. 2. Bend the wrists outwards, then throw the club round the head in a reverse position to that shown in Exercise 2. Bring your right wrist well round the left ear, extending the left-hand club horizontally, and vice versâ. This exercise developes the biceps, and acts immensely on the pectoral muscles.

Exercise 4 is also shown in the engraving which forms the frontispiece. Advance as before, and take both clubs and raise them perpendicularly; then throw the two alternately from right to left and from left to right, at the same time carrying the right hand round the left ear, and the left hand round the right ear; both elbows well up to the head, sinking the hands at the back of the neck. Apparently, both hands pass round in precisely the same circles; but

this is not actually the case, for the one hand makes a smaller circle than the other; and so on, alternately. You will comprehend this immediately you begin to practise. This ex-



FIG. 6.—EXERCISE 4.

ercise operates equally on the muscles on either side of the body, every one of which is brought into free and powerful action.

Exercise 5.—Begin from the first position, the body being turned laterally, either to the right or the left. Raise the clubs perpendicularly as before; then, with well-extended arms, pass the clubs round the head in circles—the one club making a smaller circle than the other—alternately with right and left hand. The club in the right hand is thrown upwards to the left, at the full extent of the arm, and makes a large circle in front, and a smaller curve behind; while the club in the left hand makes, at the same time, a smaller circle in front of the head, behind the shoulders, until crossing each other before the head, rather on the right hand performing the small circle round the head, while that in the left performs the larger one. These movements you can alternate so long as the exercise is continued.

Exercise 6.—Standing in first position, take the clubs, bring both arms well round in front of the body, and swing

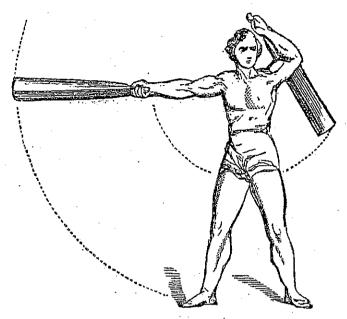


FIG. 7.—EXERCISE 5.

them round the back of the head, sinking both hands, and throwing the clubs freely in circles; then bring the clubs to



Fig. 8.—EXERCISE 6.

the front, and holding them perpendicularly, reverse the circle.

Each of these movements should be practised separately, but not sufficiently long to cause any great fatigue, or you will defeat the end in view, which is to exercise, not to tire the muscles.

The great thing is to attain ease and confidence in swinging the clubs-elegance and grace will follow, or rather, accompany the exercises; for it is almost impossible to throw the Mugdah round and round the head in an awkward or ungraceful manner. Stand firmly, with your feet well apart, and your body upright; but, at the same time, hold your head easily and allow the muscles of the arms and chest to have full play. These directions, indeed, apply to all kinds of athletic sports, but especially are they important to observe in the Mugdah. Walking, running, leaping, pole-balancing, rowing, skating, swimming and climbing, are all good in their way as gymnastic exercises; and for their full, free, and healthful enjoyment, a regular process of training is absolutely necessary. Strength alone will accomplish little, unless it be so husbanded and brought into subjection as to be capable of being employed advantageously, and put forth at the moment when it is most required. Now it is well known that the body and limbs may be so trained as to be made subservient to the will, and capable of enduring an almost incredible amount of exertion without afterwards experiencing any very sensible degree of lassitude or fatigue. Thus, with professional runners, athletes, and gymnasts, the constitution is hardened to feats of endurance and strength which, to the untrained man, although in perfect health and vigour, are simply impossible. The instruments formerly employed in nearly all stages of training, were the Dumb-bells; but the Indian Clubs are best, as they give more amusement This fact is acknowledged by all the during the exercise. noblemen and gentlemen I have had the honour of teaching, and their use in the army is evidence of their superiority. Do not imagine, however, that the Indian Clubs are mere toys, or that they can be taken up and put down as you would take up a cricket-bat. What is necessary is, that you should accustom yourselves to their use, and thus you will acquire real strength, and power to join with pleasure in

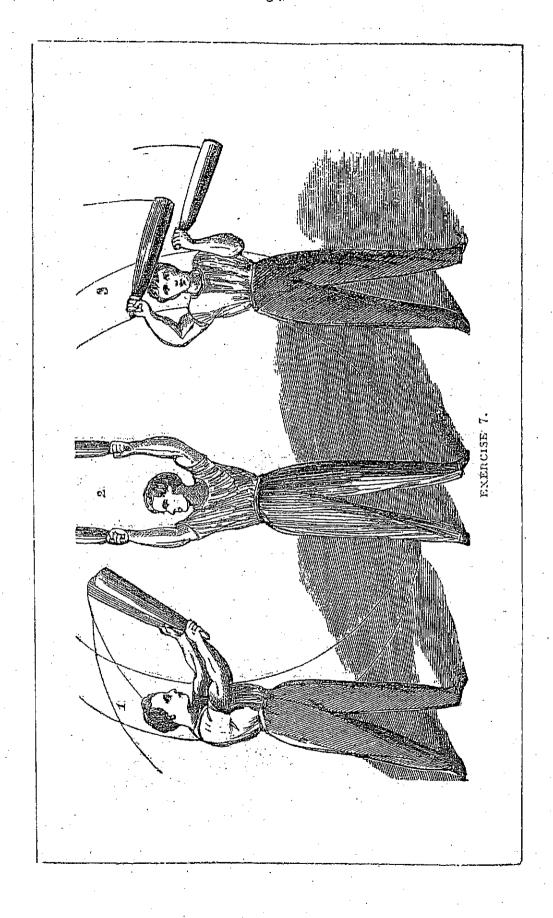
any of the field sports in which English boys delight, and which are the great characteristics of English men all over the world.

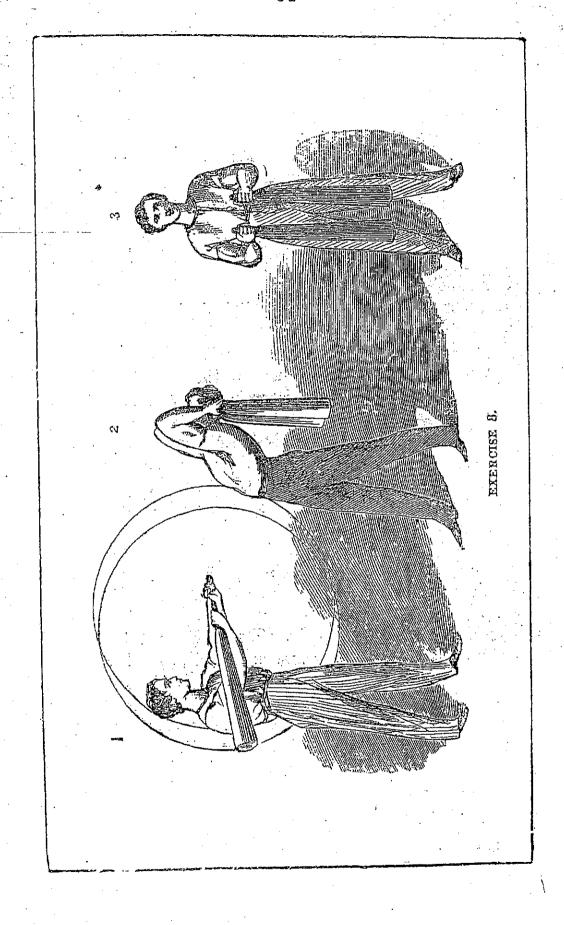
VI.—FURTHER INSTRUCTIONS IN THE USE OF THE INDIAN CLUB.

We have now crossed the *pons asinorum*, and the exercises that follow may be looked upon as the natural and regular result of a familiarity with the Indian clubs.

Exercise 7.—Stand in the first position and take the clubs in the usual way, palms inward. Turn the body a little to the right, the feet remaining firm on the ground. about a foot apart, so as to form a good firm base. Swing the clubs upward, as in the first figure (1), and make, at the extent of the arms, and in front of the body, the circle in the direction shown, downward by the feet and upward over the head, so that the clubs fall in a somewhat lesser circle towards the side from which they started (2). The centre figure in the illustration shows you the position of the body and arms during the first part of this exercise, and the third figure represents the reverse of the position shown in Exercise 4. The Indians are particularly clever in this exercise, whereby the clubs are thrown in circles round the head and shoulders; the one forming rather a smaller circle than the other, till the position at starting is again attained. Practise this, first on one side and then on the other alternately, till you have thoroughly acquired the necessary ease and ability in handling the Mugdah.

Exercise 8.—This is a still further modification of the preceding exercises, and requires to be performed with steady exactness. Bring the clubs into the first position and incline the body slightly to either one or the other side. Then turn the wrists so as to bring the clubs into the position shown in the first figure, and swing the clubs in a circle three or four times at the extent of the outstretched arms, in



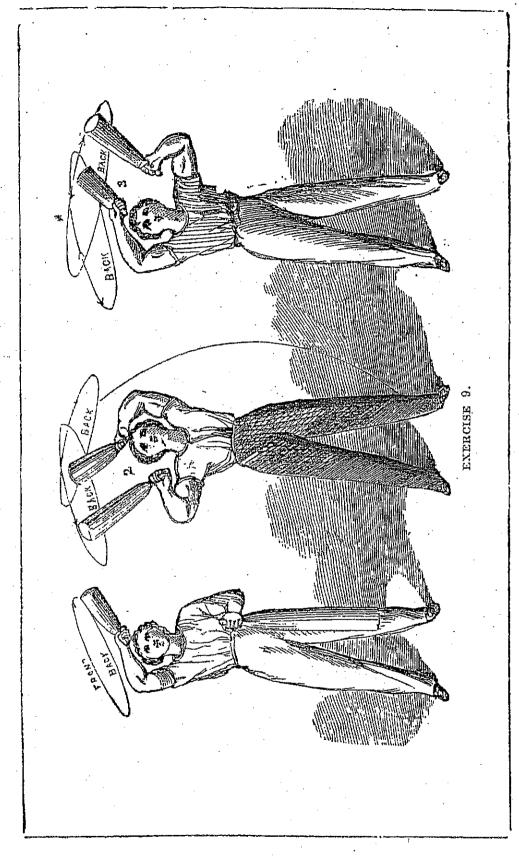


the direction seen by the lines in the engraving. When completing the final circle, the arms are to be thrown higher up, so as to describe a larger sweep, the body being turned a little to the left. But, instead of forming the smaller curve behind, as in the next exercise, both the clubs are thrown over the back, sinking the hands well down the back of the neck. (2.) From this position the clubs are to be projected towards the front, and so you may vary the exercise alternately on either side. Now reverse the clubs, and let them drop in front as shown in the engraving. (3.) Swing them to and fro, right and left, upward, in front, and behind, till you have familiarized yourself with this kind of movement,

and so on alternately.

Exercise 9.—This is the most difficult, but at the same time most graceful, way of using the Mugdah. . The Indians have a clever way of throwing the clubs from the hand and catching them as they descend; but this manner of using them is rather fitted for a public display of agility than useful as an athletic exercise. Of course, many modifications of the way in which the clubs are manipulated are introduced by various performers, but they all depend on a full and perfect acquaintance with the previous exercises. In the exercise now under consideration the hands are reversed, and the clubs at starting are held pendent in front, with the palms inward. exercise consists principally in the describing of two circles obliquely round the head, one to the right, and the other to the left. A careful examination of the diagram will render The club in the right hand must be swept this apparent. upwards on the right side behind the head (2), and passing to the left, the front, the right, and behind, completes the circle. In the meantime, the club in the left hand is swung at the moment following the movement of the right hand, and describes the opposite circle. (3.) These movements are very exactly shown by the circles in the diagram. Continue this exercise alternately; first right then left, and so on at pleasure.

Great muscular exertion is not necessary, but you will find that, as you proceed, you will be able to handle a heavier



and longer club than was at first possible; and your body and limbs cannot but attain a hardness, strength and adaptability necessary for the complete enjoyment of the usual out-door sport.

More exercises might be shown, but enough has been said to enable the amateur to develop all the muscular power of which he is capable, by the use of the Mugdah or Indian Clubs.

DUMB-BELLS.

I.-THE PROPER USE OF DUMB-BELLS.

DUMB-BELLS are very good things for exercising the muscles of the arms and upper part of the body. Their general utility is undeniable, though as I have already said, they are inferior to the Indian Clubs in giving that full play to all the muscles of the body which active exercise requires. When particular muscles only are brought into play, the other muscles are weakened; therefore, it is important, that any athletic exercise should bear equally on all parts of the body. It is well known that active oarsmen have great strength in their arms and chest, and but little power in their legs; while, on the contrary, professional pedestrians acquire immense power in the lower limbs to the depreciation of the upper parts of the body. Various instances of great strength are recorded. Marshal Saxe is said to have been able to stop a charlot at full speed, by seizing and holding the wheel; and it is recorded of Count Orloff, the Russian general, that he broke a horse-shoe between his These, however, are extreme instances. we want is, to train the whole body to endurance; and for this purpose all kinds of athletic exercises are to be commended.

If the fatigue is too great after playing with the bells or the clabs, refrain for a while, and only practise with the lighter kinds, and be careful to use them without a jerk, as the chest is not so strong in youth as in the adult, and is very

likely to be accidentally injured. The violent throwing out of the bells and clubs tends to weaken the joints of the arms; it must never be forgotten that the purpose of training is not to fatigue, but to strengthen. Health, vigour, and activity depend much more upon regular living and careful diet, than upon the occasional fatigue induced by violent exercises. Home training is therefore to be pursued in conjunction with that of the gymnasium; and thus will you acquire that first of blessings—a blessing without which all pleasures, mental and physical, are but feebly and insufficiently enjoyed—a sound mind in a sound body.

In order to give the proper degree of exercise to the various muscles, in the trunk and limbs, it is necessary not only that you lift and throw about the Dumb-bells, but that you should so lift and move them as to accomplish the purpose sought by their use, in the most complete and advantageous manner. You will easily understand that a lad may be able to strike a ball to a considerable distance with a cricket-bat, and yet be no cricketer; or that he may be able to throw in a fourteen pound skittle ball, and still be a very indifferent player at ninepins. In like manner, Dumbbells may be used in such a way as to afford little or no benefit to the user in the strengthening and hardening of his There is much in the "way of doing things"-a "knack," as it is called. You know, for instance, how much more easily and handily a carpenter uses his tools than an amateur. That arises not merely from long practice, but also from the fact that he was properly taught in the earliest days of his apprenticeship. I am aware that it is very difficult to teach mechanical arts by mere description, however plain and graphic; but where actual practical teaching is not attainable, a hint, a caution, or a bit of sound advice, often proves of immense utility: in the use of the dumbbells, then, I wish to do for my pupil what the master does for his apprentice, just show him how to rightly handle the instrument with which he practises.

Well, in the first place, as to the weight of the dumbbells, I think the best plan is to begin with a light pair, say three pounds each; and then, as you find yourself improving in strength, you can gradually increase their size and weight to any extent you choose. You can then proceed till you can lift, hold out at arm's length, and throw backwards and forwards and round the head a pair of bells fourteen pounds' weight, or even more. I habitually use the Indian club, but I can perform with a pair of dumb-bells weighing seventy pounds each. This is, however, rather a feat of strength than of utility. It is not necessary that gentlemen

should attempt these extreme tours de force.

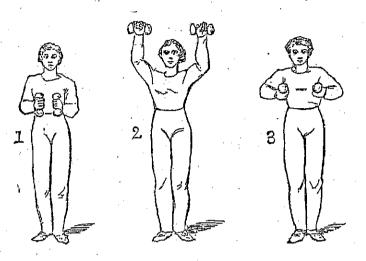
Next as to position: stand firmly, with the chest well out, the head erect, the feet apart, and endeavour to do all the exercises in as graceful a manner as possible. There is much in this matter of grace. The purpose of all physical education is to teach us how we may employ our limbs in the best and most effective manner; and I am sorry to say that in the majority of the middle class schools mental and bodily training are not, as they should be, made to go hand in Again, in training, as in food for infants, "little and often" should be the rule. Never persevere in any bodily exercise till you are thoroughly exhausted; if you do, you defeat the object of, and become disgusted with, the amusement; and, lastly, try various kinds and descriptions of exercise. At one time the Dumb-bells, at another the Indian Clubs; now the foil and now the cricket bat; one day a run and another a ride; sometimes leaping and then vaulting, with the parallel bars and the rope; at other times throwing the discus, rowing, boating, diving, or even dancing. these are good as exercises; but the dumb-bells may be taken for, say, half an hour every morning and evening as fit preparation for any kind of mental or bodily labour or pleasure.

II. THE ENGLISH METHOD OF USING THE DUMB-BELLS.

Position I.—Hands to front, chest well out, elbows back, body perfectly erect, and heels together. Take the dumbbells, bring them to the front of the chest, as in the diagram, then raise them above your head, as far as your arms will extend—first one and then the other—see diagrams 1 and 2.

Repeat, always resuming the original position in an easy and graceful manner.

Position II.—From the first position raise both hands together, and then bring them back as before, the chest well



POSITIONS 1, 2, 3.

forward, and the head erect. Then bring the hands to the hips. Repeat.

Position III.—Now take the bells and bring them under the arm-pits, as in the engraving. Alternately raise and depress the hands. As the flexors and extensors of the upper arm are brought into play by the former exercises, so in this the muscles of the wrist and fore-arm are exercised. Repeat as often as necessary to perfect, but not to tire yourself.

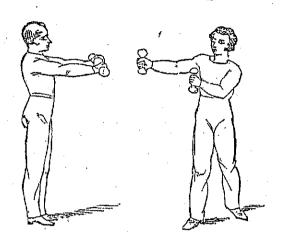
SECOND EXERCISE.

Position IV.—From Position III. assume the motions of a boxer, and pass the hands one over the other in front, striking out and drawing back alternately without jerk or violent movement.

THIRD EXERCISE.

Position V.—From Position IV. pass to Position V., as shown in the engraving. Let the feet be half a yard apart, and throw the arms and elbows well back, then reverse the motion, by turning right and left, head well over the chest

and your weight on the big toe. This movement is done with a spring; and as you throw out your left arm, turn on the left toe, and vice versa. Repeat. Bear in mind



POSITION 4.

Position 5.

that as you come round in this position, you carry the right arm straight round to the left breast, well extending the ight arm as before. Repeat this exercise till perfect. Here not only are the muscles of the arms and legs brought into activity, but the whole trunk partakes of the motion, and, as in boxing, limbs, body, and brain, are all employed.

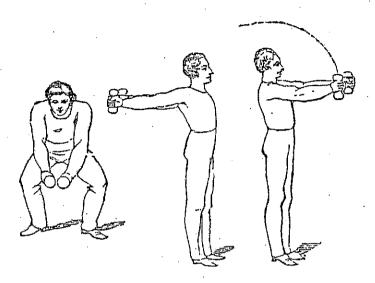
FOURTH EXERCISE.

Position VI.—Place the bells on the ground between the feet, which must be well apart. Now bend forward as in the illustration, take up the bells, and carry them upward, with well-extended arm, till you again assume the First Position. Now throw the bells up and down, as in Position II., extending the arms, and finally bringing the bells between the feet, as at first. This is a good exercise, to be practised first with one bell and one arm, and then the other: lastly, try the exercise with both bells.

FIFTH EXERCISE.

Position VII.—From Position I. extend the arms, and swing them well back from the chest, keeping the hands parallel with the shoulders. Many adepts are able to swing

the bells at the back as well as at the front, but it requires great practice to do this, and also great care. You can only perform this feat by dint of continual trials. The bells



Position 6.

Position 7.

Position 8.

should be carried round, as shown in the engraving; when, after a while, you can make them touch behind, as well as in front.

SIXTH EXERCISE.

Position VIII.—This exercise is the reverse of the last—the main object being to swing the bells as far back and forward as the length of the arm will permit, keeping the hands as close together behind as possible.

These are the usual exercises taught by the English method; but several other ways of throwing the arms will suggest themselves—as over and around the head, &c.; but enough has been shown to enable any amateur to practise with the dumb-bells so as to insure a large amount of actual benefit. For weak and invalid constitutions, dumb-bells provide sufficient exercise without any great labour or fatigue.

FRENCH DUMB-BELLS.

THE French have a far more elegant and amusing style of playing with Dumb-bells, known as Trelar's method. It is taught in the French army, and generally in the higher class of schools.

In these exercises the dumb-bells are fixed to the ends of a wooden or iron bar, so that the instrument presents the appearance of a pole, weighted at the ends with round knobs. The bar should be proportioned in length to the stretch of the performer's arms. From five to six feet is the usual length, but they should be rather longer than shorter than the person using them. The chief utility of this exercise is to promote ease of limb and grace of figure. In fact, it is far superior, though not, perhaps, quite so accessible and available as the ordinary dumb-bells. In the lately-introduced German school of gymnastics the use of the French dumbbells is very frequent. They are employed in connexion with the well-known "extension motions"-body erect, hands to the front, hand extended above the head and then brought down to the toes; arms thrown outwards, upwards, forwards, backwards; palms to the front, palms to the back, and so on, ad infinitum. The "extension motions" are very useful; but as they are best practised in classes, I do not here The Indian clubs and dumb-bells, on enlarge upon them. the contrary, may, with the aid of this handbook, be used to great advantage by a single person in a small chamber or other convenient place. Increase of muscular strength is, of course, the object of all exercises of this description, whether practised solus or in classes. There is, however, a regular plan to pursue in order that the exercise should proceed progressively. The amateur cannot do better than follow the exercises in the order here laid down.

FIRST EXERCISE

With the bar on the ground before you, stand upright as in the diagram (1). Then advance the right foot, as in fig

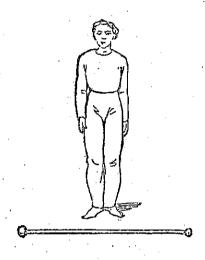


FIG. 1.

2, bend downwards without bending the knees, and with the right hand seize the bar, bringing it up horizontally across

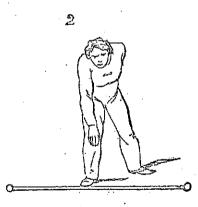


FIG. 2.

the chest, as shown in fig. 3. Now carry the arm downwards, turn the wrist with the palm up, and from this position swing the bar and replace it on the ground. Reverse the exercise by advancing left foot and seizing the bar with the left hand. Then use both hands, instead of one, stretch-

ing the hands as far as you can, and repeat. This is a

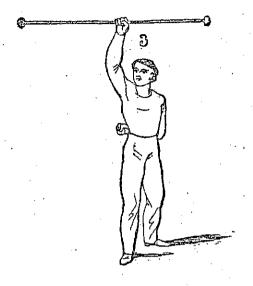
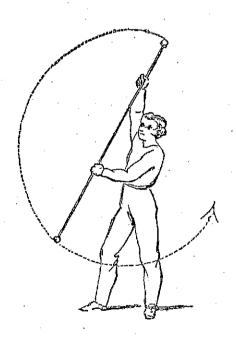


FIG. 3.

capital exercise, as it brings all the muscles of the trunk and limbs into play.



FEC. 4.

SECOND EXERCISE.

From the first position, with the body erect, seize the bar with both hands, and by the same movement extend the arms so as to hold the bar as near to its extremities as you can. Carry the bar round, with an easy movement, to your back, and vice versa.

THIRD EXERCISE.

Now advance with right foot, take the bar as in the second position, with both hands pretty close together—length, the stretch of your hands—and pass the bar over your head, as shown in the illustration, and afterwards reverse it in the direction of the dotted line and arrow. The same movement is then to be repeated with the left foot forward. Remember that when the right foot is advanced the

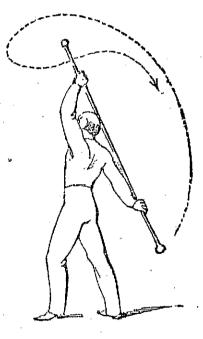


FIG. 5.

right hand goes up, and when the left foot is advanced the left hand is raised; and so on alternately.

An examination of the diagrams (figs. 4 and 5), will explain more readily than any description, the manner in which

the bar is to be swung; but you must remember that all violent and jerking action is to be avoided, and that all the motions are to be carried on with the ease that is, in fact, elegance in gymnastics.

FOURTH EXERCISE.

From Position I., advance with the right foot, and bring the left up to it. Then, turning to the left, advance left



FIG. 6.

foot, stoop, seize the bar by the end, near to the knob, with left hand, raise the bar with the left hand, and at the same moment take it with the right hand above the centre, as in the illustration. The next movement is to bring the bar to the position shown in the following engraving, whence it may be swung forwards and backwards. These movements are to be repeated, first with one hand and then with the other.

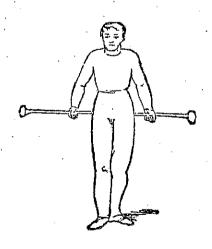


FIG 7,

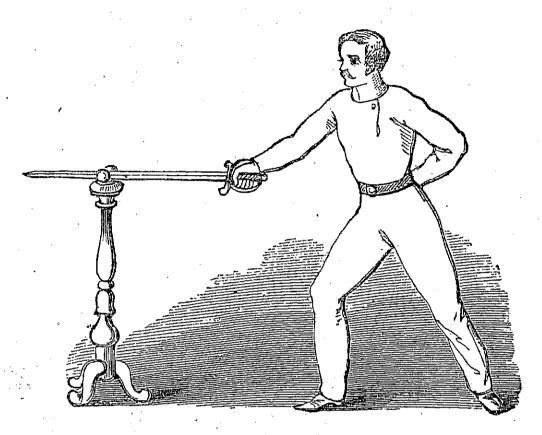
All these exercises, both in the English and French methods, appear very simple when described on paper; but when you come to try them, you will discover that they are difficult enough to give you no little practice before you can accomplish them with ease and dexterity. As aids to indoor training, they are very useful; and when combined with the Indian clubs, they will be found to possess all the requisites of a portable Gymnasium. The French bar, as well as the English Dumb-bells, are comparatively inexpensive. Both should be found—and used—in every school, and every family.

EXPERT FEATS WITH THE SWORD.

Few public exhibitions are so popular as feats of strength and agility, skill, and expert manliness. Without attempting to teach the use of the sword, which would require far more space than I can here command, I may show how some of the most celebrated sword-feats are performed. All my readers remember Sir Walter Scott's famous description of the feat said to have been performed by Saladin, the Moor, of cutting a piece of silk in twain, as it floated in the air, with a sharp sabre. Many feats of similar character may be performed with a well-tempered and tolerably sharp sword; and in the hands of a skilful operator, they are really wonderful. I have introduced and accomplished many expert feats with the sword, and with a little practice you may do so too. Dividing the bar of lead, cutting the leg of mutton, or the sheep, in halves with a single stroke, and many other similar exercises, depend rather upon knowledge and knack than upon actual strength. A moderate degree of strength, and great precision of eye and hand, are requisite for the successful accomplishment of all feats with the sword; and constant practice is, of course, necessary before the performer can thoroughly master any of the exercises, which I shall now endeavour to explain.

SEVERING THE LEMON ON THE NAMED HAND.

This feat is a very remarkable one. A lemon is held in the open palm of an assistant, and the performer, with a single cut, divides it fairly in halves, without injuring or so much as scratching the hand of the person who holds it.



SEVERING THE LEMON.

I believe I had the honour of first introducing this feat to an English public. I call it "Sir Charles Napier's Feat," as the following anecdote will explain:—When, on a certain occasion, the general was reviewing the troops in India, a company of native jugglers, on the conclusion of the business of the day, came forward to exhibit their tricks before the soldiery. Among other clever feats, was the severing a lemon on the hand of a bystander. The general expressed his astonishment at this performance, but could not believe but that there was some collusion between the jugglers. He therefore asked them whether they would cut the lemon on his own hand. On replying in the affirmative, the general held out one of his hands; but the performer, perceiving that it was contracted through an old wound, chose the other hand. "Ah," said the general, "I thought there was some trick

between you!" But the juggler placed the lemon in the general's other hand, raised his sharp sword in the air, and in an instant the two halves of the fruit fell to the ground. Sir Charles admitted afterwards that, had he not challenged the daring performance, he would have withdrawn his hand; and he described the feeling of the sharp edge coming down upon his palm, as that of a cold, wet thread passing across it.

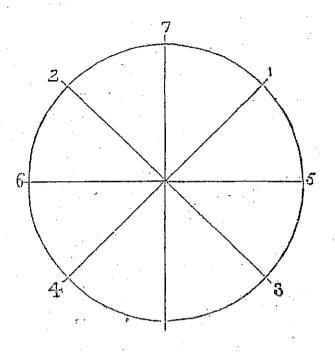
This feeling I attribute rather to mental impression than to the sword's edge touching the general's hand; and in my performance of this feat, I have accomplished it a dozen times on my own hand in a single evening, without the slightest touch of the sword.

I remember one occasion especially, when the fear of the audience was entirely dispelled. The room was full, and I called one of my own sons, and asked him to hold the lemon. He immediately consented, and I performed the feat. The company, seeing the lemon cut quite through, and the lad's hand uninjured, immediately became candidates for the honour, and even disputed among themselves as to which of them should be first.

First, I must tell you that there is not the least danger, provided the holder of the lemon has entire confidence in the ability of the performer. I start in this way: placing the lemon in the hand of a lady or gentleman, I instruct her or him to keep the palm quite open, with the fingers close together, but not stiff, and the thumb spread back as far from the forefinger as possible. Then I stand at the side of the person holding the lemon; and, passing the sword over his head, bring it down under his hand, then up again, and so on several times, in order to test the nerve of the holder, and inspire him with confidence. When I find he does not flinch, I suddenly make the proper cut, and the lemon falls in twain, without hurting the hand that held it.

Well: what is the proper cut? Here is a diagram of the old-fashioned sword-cuts. By studying and practising these cuts, you may soon perform all the feats here described. The proper cut for the lemon feat is No. 7, or the down-cut. The point and hilt of the sword must be perfectly horizontal, so that the edge does not touch one part of the hand more

than another, and the stroke of the sword must be a downward cut, not hard, but proportioned to the size of the lemon. Be sure that in this cut there is not the slightest drawing



THE SWORD CUTS.

motion, or you will infallibly wound the hand. In order, however, that my readers may get accustomed to this feat, and others of a similar character, I have devised a substitute for the hand, which is shown in the first illustration. On the top of it is a small pad of horsehair, covered with leather, so that the performer can see the force of his cut by the indentations he makes. The top of the stand may be arranged with a hole, or socket, so as to hold an egg, a cucumber, or anything else that it may be desirable to cut.

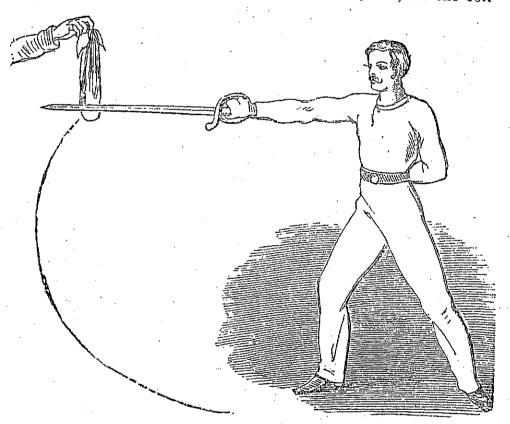
PEELING THE APPLE IN THE HANDKERCHIEF.

This is a feat similar to No. iii.; only, instead of the cut towards the centre, you must make Cut 4 at the edge of the apple, which must hang well down in the handkerchief. As each piece of the skin is cut off, it must be taken out of the handkerchief. The real secret of this feat is the directness

of the cut. In practising it, you had better begin with a blunt sword, with which there is less chance of cutting the silk than with a sharp-edged one.

CUTTING AN APPLE INSIDE A SILK HANDKERCHIEF, WITHOUT INJURING THE LATTER.

This feat is known as Omar Pasha's feat, from the fact that he is said to have first practised it, never failing to sever the apple without cutting the handkerchief, but, on the con-



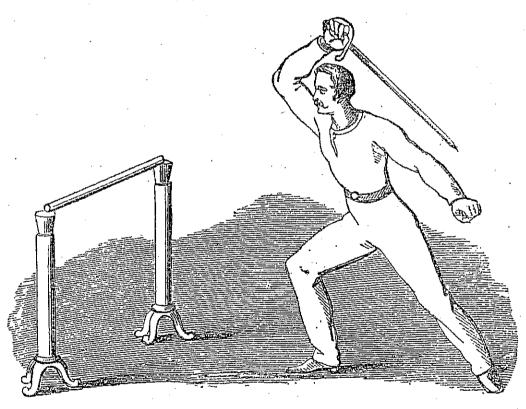
CUTTING THE APPLE INSIDE THE HANDKERCHIEF.

trary, carrying the silk on the edge of the sword nearly through the apple. There is no conjuring in this feat, which is performed with a sharp sword or scimitar, by Cut 4. The secret is that the sudden cut is unaccompanied by the slightest drawing action whatever; for if you make the least drawback with your sword, you will inevitably cut the silk.

Choose a good codlin, or any ripe eating apple that is not too brittle. Place the apple sideways in the centre of the handkerchief, and gather the four corners together. Then, when the handkerchief is held up by the corners, make the cut without bending the elbow. It will then be seen that the apple will be divided fairly in the centre, and the silk forced through the fruit.

TO CUT A BROOMSTICK PLACED ON THE EDGES OF TWO TUMBLERS OF WATER.

Dr. Bachoffner introduced this feat in his lecture at the Polytechnic to show the force of concussion. He had a broomstick balanced nicely between the inner edges of two tum-



CUTTING THE BROOMSTICK.

blers filled with water, and, with a powerful stroke of a sharp sword, divided the stick without either injuring the tumblers or spilling the water. The philosophy of this feat is correctly described by the doctor as due to the concussion between the sword and the stick; but it requires to be very nicely performed. The stick must be accurately placed upon the tumblers, each end of the stick resting about three-eighths of an inch over the edge of the tumblers; then, with Cut 7, strike the stick directly in the centre, being careful not to draw back the sword, or to allow the hilt and the point to diverge from the horizontal. The glasses must be placed on strong steady tressels, or on two tables, flat, and firmly resting on the ground.

A more difficult modification of this feat is that of placing the broomstick on two very thin stemmed wine-glasses, the stick being suspended on the latter by means of pins stuck into the end of the broomstick. In this feat, care must be taken that the stick actually touches the glasses. About three-eighths of an inch of each pin must project from the ends of the stick, and the cut made by one direct impulse,

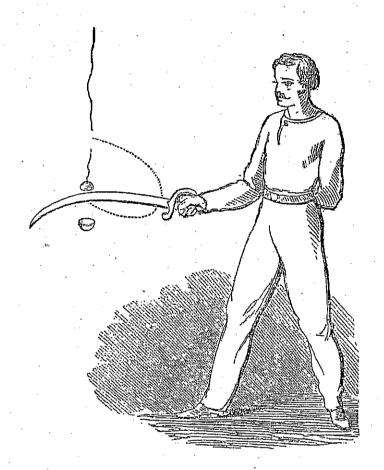
without draw or hesitation.

The great secret of this, and other like feats with the sword, is to be found in the exactitude with which the stroke is made. Of course considerable practice is necessary before you succeed sufficiently well to be able to perform them in public. But there is really no great art in them, providing you conquer the first difficulties. Some feats require a very sharp, thin sword; others a strong, stout sabre; but as you proceed you will find out for yourself what sort of a weapon is best adapted for the particular feat to be performed.

DIVIDING A SUSPENDED ORANGE.

A very pretty and graceful feat this, which requires considerable practice, and nice calculation of time and distance, to accomplish properly; for you must remember that failure in a single feat is loss of credit for the remainder of the performances. You must pass a thread through an orange with a needle, and make a knot at the other end to prevent the

thread slipping through. Leave about a yard or so of the thread above the orange, which may be suspended from the ceiling, or from the end of a stick which is held in the hand of a bystander. Then take a sharp scimitar, and with a well directed Cut 5 divide the thread about midway; and, as the orange falls, make Cut 6, as shown in the diagram, and you

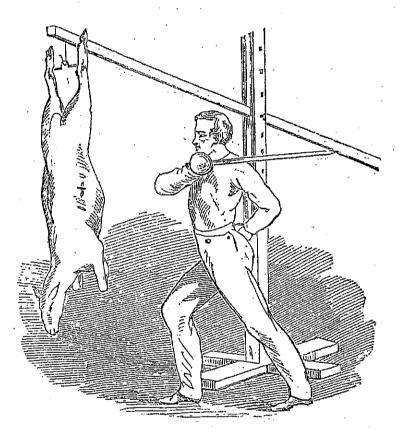


DIVIDING THE SUSPENDED ORANGE.

will cleave the orange fairly in halves. This feat is best perormed by placing yourself in such a position as will give you uncontrolled command of the room. Make the first cut just above your own chest, and the last a few inches below it, calculating the time the orange takes to fall, just as you would calculate on hitting a ball with a rounder stick. The adroit performance of this feat is always received with applause. It can be equally well done with a sharp carvingknife, but it is best to practise with the sword with which you mean to show the trick. Quickness of eye and dexterity of hand are the grand assistants in this, as well as all sword-feats.

DIVIDING THE CARCASE OF A WHOLE SHEEP.

Among the most popular of the sports at Saville House, Leicester Square, was the dividing of the carcase of an entire sheep with a single cut of the sword, the cutting of a leg of mutton in two halves, and the dividing of bars of lead, pillows



DIVIDING THE SHEEP.

of down, silk handkerchiefs, &c., as well as various other feats with the sabre. These performances were introduced in the grand assault of arms which I originated at Saville House some ten years since, and which have been frequently imitated elsewhere.

In the sheep feat, the carcase is fairly suspended, head

downwards, and the performer should stand so as to take a three-quarter view of the animal, neither too much on one side nor too much at the back. The sword should be grasped tightly, close to the hilt, with the second joints of the fingers in a line with the edge, so that you may make a perfectly horizontal cut. Should the sword be held differently, the cut will be sure to be either up or down, thereby making a larger cut, with the chance of failure. the sheep is generally performed by Cut 6, although I have done it with Cut 5: but this last cut I do not recommend, as it is less powerful than Cut 6. The sheep should be struck with the sword about ten or eleven inches from its point, which will be found the cutting part of it. If the sheep be a very large one, the blow of the sword should be given so that, with the cut, you can at the same time thrust. But this cut and thrust is not necessary with a small sheep. The sword generally used for the sheep, leg of mutton, and bar of lead feats, is a ship's cutlass, some inches longer and stronger, and made of superior metal to that of the ordinary cutlass. The price of such a sword is about £1 1s.

CUTTING THE LEG OF MUTTON.

This feat is performed in the same manner as cutting the sheep, with a steady, horizontal Cut 6.

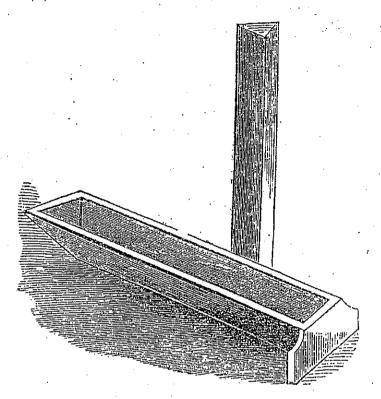
For both feats, the sword should be ground to a razer edge. Of course, frequent practice is necessary before success can be attained. The leg of mutton should be suspended by the shank from a beam in the ceiling, or a tripod of timber, or other convenient stand. The mutton should not be too newly killed.

CUTTING THE BAR OF LEAD.

This is a very pretty, but not very difficult feat. It is performed with a heavy ship's cutlass, ground sharp. The bar may either be placed on a stand or suspended, and in performing this feat a direct, decisive cut is necessary.

Begin with a thin, narrow bar, and increase the thickness as you become proficient.

You will find it better to cast your own bars than to buy them, as any admixture of solder or other metal will be fatal



THE BAR OF LEAD AND THE MOULD.

to your success. Any blacksmith can make you the iron mould for a few shillings, or the bar may be cast in sand; but you must be particularly careful that the sand is perfectly dry, or the hot lead will fly and become dangerous. In melting the lead, remember that it should not be made too hot, as if it burns, the bar is hard, and very difficult to cut. Allow the lead to cool gradually; not to plunge it into water, or take any other means of getting rid of the caloric, for if you do, you will make the bar so hard as to render it nearly impossible to cut. The lead when cast is triangular in shape. This is an end view of the bar, and in cutting it you must strike the thin edge first.

SLICING VEGETABLE MARROWS, CUCUMBERS, EGGS, ETC.

The Indians pride themselves very much on these feats which Lord Hardwicke fully described to me. They practise them under the shade of the Kaila, or Plantain-tree, and the sword they use is called the Khándâtroú. They commence cutting at the tree, sometimes from as high as they can reach, and sometimes close to the butt; and then, cutting as thin slices as possible, they gradually ascend, slicing it up as we do a cucumber, the thinner the slices the more admirable the performance. After they have cut or made as many slices as they can, they shake the tree, and it tumbles into pieces! As this tree does not grow in our own country, I have substituted the vegetable marrow or cucumber in this The way I do it is to place the butt of the cucumber or marrow firmly into a piece of clay, and standing it on the table, commence cutting from the bottom end, into as many thin slices as possible, all the way up, without disturbing the perpendicular position of the cucumber. similar feat has been performed with a boiled egg placed in the clay. But you commence at the top of the egg, taking off as many slices as possible, without breaking the bottom These feats require to be performed very dexterously, with a sharp thin sword.

There are other feats performed by the Indians, of a very clever, but rather dangerous character; such, for instance, as cutting a clove in halves on the nose of a brother performer. One Indian lies on the ground, and the clove is placed perpendicularly on his nose, and the swordsman, after making some of the most extraordinary twinings and twistings, brings his sword down on the clove, and severs it in halves, to the intense astonishment of the beholders.

CUTTING THE ORANGE UNDER THE NAKED HEEL.

The assistant stands on a chair, and places his right heel on the orange. He stands with his feet well apart, the toes and heels in a horizontal line. The swordsman then advances, right foot first, and when he has taken a step on to the left, he immediately turns, and cuts the orange in two in turning. This is done with Cut 6, and is a highly difficult feat, even to the most accomplished swordsman. I believe I am the only man in England who has accomplished it in public.

CUTTING PILLOWS OF DOWN, SILK HANDKERCHIEFS, RIBBONS, ETC.

These feats can only be performed with a razor-edged scimitar of excellent temper; a soft blade will not take a sufficiently fine edge. The scimitar should be kept in a wooden sheath, when not in use, and should be rubbed on a strop like a razor, both before and after use. The pillow is usually thrown up in the air, and the swordsman makes a circular drawing cut from 6 to 5 as the pillow falls. The handkerchief, ribbons, &c., are usually placed to the edge of the sword, close to the hilt, and with a very swift drawing cut they are severed in two. The ability of the swordsman is shown by his cutting them into the greatest possible number of pieces.

It may be asked of what use are these feats with the sword. In answer, I will tell you an anecdote that I have heard or read somewhere.

An officer in one of Her Majesty's light cavalry regiments, now serving with honour in India,—a man of slight but wiry frame, and certainly under the middle stature—is in the habit of performing the several feats here described. On one occasion, after he had cut through a stout bar of

lead, a dandified Frenchman present endeavoured to poohpooh the whole performance. Such skill, he said, smilingly,
was of no use whatever on the field of battle, and that the
possessor of such skill would stand but a poor chance
against ordinary soldiers. Upon this, the officer, looking
very pointedly at the lower button-hole of the Gaul's waistcoat, replied coolly, that he would undertake, at a blow
a-piece, to cut through any number of small-waisted men
that might be brought before him!

Sword-play is of very ancient origin, as we find it mentioned frequently in the Saxon chronicles, and in the pages of Froissart, Stow, and others; but the feats here mentioned are comparatively of modern introduction. The athletes among the Romans were all used to the sword, and doubtless performed with it many wonderful and daring feats; but they are vastly exceeded by the native tribes in India, to whom the razor-edged sabre is perfectly familiar.

The strong, long, tremendous sword of the ancients, in time gave place to the rapier, and the sabre. On the continent especially, the rapier was regularly employed in duels. "The masters of the noble science," says Sir Walter Scott, "were chiefly Italians. They made great mystery of their art and mode of instruction; never suffered any person to be present but the scholar who was to be taught, and even closely examined beds and other places of possible concealment. These lessons often gave the most treacherous advantages; for the challenger, having the right to choose his weapons, frequently selected some strange, unusual, or inconvenient description of arms, the use of which he practised under these instructors, and thus killed at his ease, his antagonist, to whom it was for the first time presented." Broadswords and targets were used by the Highlanders till about the year 1745.

A Highlander once fought a Frenchman at Margate, Their weapons a rapier, backsword and target; Brisk monsieur advanced as fast as he could, But all his fine pushes were caught on the wood; And Sawney with backsword did slash him and nick him, While t'other, enraged that he could not once prick him, Cried, "Sirrah, you rascal, you great big black boar, Me fight you, begar! if you'll come from your door!"

The thorough use of the sword as a weapon of offence was not completely understood, however, till bucklers or shields were abolished; but even lately, in some parts of India, the shield was used in conjunction with the sabre; but to show with what cleverness the native tribes of India use their weapons, we may take an extract from Captain Nolan's popular work:—

"When I was in India," he says, "an engagement took place between the Nizam's Irregular Horse, and some rebels. My attention was particularly drawn to the doctor's report of his killed and wounded, most of whom suffered by the sword. In the column of remarks, such entries as the following were numerous!—'Arm cut from the shoulder'—'Head severed'—'Both hands cut off (apparently at one blow) above the wrists, in holding up the arms to protect the head'—'Leg cut off above knee,' and so on."

Captain Nolan afterwards visited the scene of action, "and" says he, "fancy my astonishment! The swords they had used were chiefly old Dragoon blades that had been The men had remounted them after cast from our service. their own fashion. The hilt and handle, both of metal, were small in the grip, rather flat, not round like ours, where the edge seldom falls true. They had an edge like a razor, from hilt to point, and were worn in wooden scabbards. An old trooper of the Nizam's told me that old English sword blades were in great favour with them, remounted and ground I asked 'How do you strike with your swords to cut off men's limbs?' 'Strike hard, sir,' replied the old 'Yes, of course; but how do you teach them to use their swords in that particular way?' (drawing it.) 'We never teach them any way. A sharp sword will cut in any one's hand.'"

Now here the old trooper was wrong; or perhaps he did not care to explain his entire secret. The real reason of his dexterity lay in the oblique drawing motion common to the warriors of Eastern nations, who are generally famous as swordsmen. The chopping and driving method formerly taught in European armies is not nearly so effective as the oblique drawing cut I have so frequently mentioned.

In all exercises with the sword, coolness and dexterity are paramount; but, as I have merely introduced a few of the more prominent experiments, I must refrain from further remark. The use of the sword in fencing is a study altogether too important to be discussed in a few pages.

So much for expert feats with the sword. But you must not suppose that any one of them can be performed without considerable practice. Failure, no less than perseverance, is the parent of success: therefore do not be discouraged if, in your first attempts, you do not succeed so well as you could wish. Try, and try, and try again. Some of my best pupils began in the most awkward fashion; but by dint of patience and perseverance they have become expert swordsmen.

And now, farewell! I might go on for a dozen or two pages, and dilate on the value and importance of all kinds of gymnastic exercises, but that sort of thing has been done to It is the usual resource of writers who have no special knowledge of the subjects on which they write, to descend to generalities. Nothing is easier than to flirt and pirouette about the confines of a subject. When you know little or nothing about a thing, says Smellfungus, talk about something that is akin to it, and people will give you credit for knowing a great deal. But that is not my fashion. I am not what is called a "practised writer." Having simply endeavoured to tell what I know in as plain and easy a way as I could, it is hardly worth my while, now that I come to the end of my teaching, to make an attempt at fine writing. In fact, my hand is much more at home with the mugdah and the broadsword than it is with the pen; and, therefore, having said my say, I will go back to my pupils, merely

observing, as the last word, however, that if any of my readers want further details with regard to the matters here discussed, "I am to be heard of," as the pugilists say, at my publishers.

PROFESSOR HARRISON.