

ESTD. IN 1922

Employed by the Mysore State  
Forces in Training Physical  
Culture Instructors

Recognised by the Department  
of Education in Mysore



Under the distinguished patronage of



His Highness the Maharaja of Mysore

**K. V. IYER, D.PH.E.**

**VYAYAMASHALA AND PHYSICAL CULTURE  
CORRESPONDENCE SCHOOL**

**BANGALORE CITY (INDIA)**

## PHYSICAL TRAINING THROUGH CORRESPONDENCE.

### LESSON 5.

Here is another important lesson. If you have worked regularly till now, you must have made some progress. If you have not, there must be something wrong somewhere. The fault may be mine. But have you worked honestly and assiduously?

You have paid for this course, but that is no consolation to me, if you have not been amply repaid with recuperated health, or rectified disorder, or with a remoulded physique. No pains are spared to make these lessons lucid, interesting and instructive. And you must have noticed how each lesson has grown in importance and informativeness.

If you have not gained in health, in the correct functioning of all the internal organs and in muscular development, you had better rekindle your enthusiasm, renew your hopes and recommence the training with a determination that you will succeed this time. With a strong will you can achieve your aim. I should not have succeeded in the building up of my physique had I not started with a strong determination. I worked hard... very hard indeed. I want you too, to do the same. If you have not progressed, ask yourself, "Why haven't I progressed?" Dive deep for the answer. Analyse carefully and impartially. Scrutinise all your irregularity, your want of persistence, your wrong habits, your weaknesses and your excesses;—each one of them a barrier to success—. Unless you rectify them all, success is a delusion. So you had better collect yourself and plan for future progress.

## A FEW HINTS ON EXERCISING.

These are of great importance for a beginner, who perhaps in his enthusiasm may rush headlong into over-exercising, incorrect movements, irregular breathing, etc.

I am incessantly being questioned by enthusiasts as to how many hours they have to exercise daily to build up a good physique in the shortest possible time. A few more super-enthusiasts have even asked me: How many times a day they have to exercise? With due admiration for their ardour, I shudder at its consequences if they are not safely guided.

Physical Culture is a science for those who will take it that way. It exacts a considerable amount of concentration, perseverance, physical effort, assiduous practice, normal habits, proper amount of nutritious diet and reasonable rest.

## BEFORE EXERCISING.

1. A thorough understanding is necessary of every phase of the exercise one is going through; with all its Anatomical, Physiological and Therapeutical importance, its correct application, movement and finish.

2. One should never forget that correct and organised functioning of all the internal organs—Respirative, Circulatory, Digestive and Eliminative—constitutes the basis of perfect health and the preponderant factors for the maintenance and continuity of this health and development of the physique.

3. Over-exercising leads to nervous exhaustion and physical deterioration; hence, the beginner should convoke all care and consideration as to the right kind and amount of exercise he needs. Excess is invariably harmful.

4. Exercising when one is fagged, sleepy, hungry or thirsty is harmful; neither should it be done on a heavy stomach.

5. Weak people should start exercising 30 to 40 minutes after a light breakfast in case they prefer mornings for their exercises, or half an hour after a small glass of milk if they prefer the evenings. Normal people may also follow the same course, or take exercise on an empty stomach. Those that want to cut down their body-weight and reduce their hip and waist line, must exercise on empty stomachs and with a woollen sweater on, to help profuse perspiration.

6. Do not put off exercises for to-morrow if you merely feel you are not well to-day; these 'blues' are sure to wear off soon after you warm yourself up after a few numbers; but if you are really indisposed, you had better take full rest till complete recovery.

7. If the weather is warm and bright, it is advantageous to exercise in the open; else the privacy of one's own well-ventilated room will serve.

8. With regard to the right hour for exercise there are various factors to be considered. Business people may find mornings convenient; a few may prefer early morning hours; the majority find evenings suitable. Some wake up from their beds fresh and well-rested. A few wake up dull and lethargic. A few cannot stand straight unless they breakfast in bed. Hence a hard and fast rule cannot be laid down regarding this point. The student must choose the part of the day when he feels most energetic. Personally, I should prescribe mornings for curative exercises and evenings for muscular exercises.

9. The duration of daily exercise depends upon the condition of one's health and energy. For a weak person 10 to 15 minutes a day will do. For a normal person 30 to 35 minutes may be needed. For a muscle and strength-enthusiast 40 minutes to one hour is the maximum.

10. Before exercising, a little oil (gingelly, cocoanut or olive) may be rubbed over all the parts of the body and the muscles may be massaged during the short intervals between the exercises, while recovering breath.

#### DURING EXERCISES.

1. Wear as little clothing as possible during exercise. 'Shorts' and a sleeveless 'V' neck underwear will do. (Persons who desire to reduce their body-weight should exercise with a thick woollen sweater on.) It gives ample scope for one to study his own physique in the reflection of two large size mirrors, one in front and one at the back. It also helps one to correct the movements during the exercises and this will interest the enthusiast more in his work and also helps him to concentrate.

2. One should guard against developing Narcissism, i.e., falling in love with one's own body. This bars progress.

3. It does good to work with one or two enthusiasts, but in case these are mere admirers, it is better to avoid them, for they will only be a hindrance to your concentration.

4. Immediate attention must be paid to the undeveloped and under-developed parts of one's physique, and bring it up to harmonize with the other parts of the body.

5. While exercising, one must always begin with organs such as are functioning low or are weak.

6. One must never hurry through exercises. He should keep the hour of exercise free from every other engagement.

7. Even the easiest exercise must be done with all possible care, and correctness. An exercise which seemed difficult at first gradually grows easier if one persists in practice. But it pays to enhance effort at the exercise. This maintains the level of interest in the particular exercise and also works that muscle or limb, to the required extent and effort.

8. After a sufficient number of repetitions of movements, relaxation of the muscle or group of muscles involved is of the utmost importance to allow the arterial blood to course through freely, to replenish fresh material and to drain away the deleterious products; the off-shoot of vigorous exercising.

9. DO NOT HOLD YOUR BREATH while exercising. DO NOT MAKE WEIRD AND STRAINED CONTORTIONS OF YOUR FACE AND BODY. Understand that you are undergoing this course of training not merely to insure your health and physical development, but also to ensure grace and elegance in your figure, face and body.

10. Each correct repetition takes you nearer to the perfectness of that exercise; with each movement you will be adding more energy, strength and size to the muscle.

11. Do not take more than just the needed amount of rest between the finish of one exercise and the beginning of another. Never take rest between half finished movements, unless you feel very tired. Taking too much rest between exercises cools down the temperature in the muscle, and slows down the effect of exercises.

12. Keep all other muscles in a state of rest and relaxation while you are exercising any one particular muscle.

13. Exercises must be done until you fairly get tired and should never be carried to the pitch of exhaustion. By over-exercising you will be subjecting your heart to strain. There will also be more tissue wastage in the body than you will be able to build up before your next exercising time. It is not possible to draw a general line of limit. For, the limit depends upon the individual's present state of health, age and vitality.

#### AFTER EXERCISING.

1. Eight or ten minutes after the completion of exercise, when the heart has come back to its normality, you should take a tepid or warm-bath. Do not venture into a cold bath unless you are used to that from a long time. You can use a good soap to cleanse the perspiration and salty encrustation on the skin.

2. You must take a large glass of warm milk, (you may add 8 to 12 almonds ground into a paste), Cocoa, Fry's four-in-one or ovaltine, 15 or 20 minutes after your exercise in case you have to wait some two hours before your next meal. Those that want to reduce in weight should not take anything.

3. Replenish your system with plenty of water (by allaying your thirst, the result of exercising) to balance the same lost by exercising; lest an unhealthy dryness should follow, resulting in excessive heat, constipation and piles.

4. You must use plenty of lemons, oranges, butter, milk and other cooling foods. A glass or two of barley-water every day is highly commendable. Greens should be liberally used with the meals. This helps much in overcoming constipation.

5. You must take wholesome and nutritious diet. The quantity is left to your intelligent decision as this depends more upon the demand you have created. A safe way is to fill half the stomach with solids, a quarter with liquids and leave the other quarter ALWAYS EMPTY.

6. Observe a day as the rest day in a week and refrain from all physical work that day.

7. After acquiring a moderately good physique, do not think that you have got nothing more to do with the exercises. You have to maintain that health and development by devoting some time every day for exercise. This should form a daily habit. Your physique will then grow more big, more and more

symmetrical and more and more graceful. Neglect leads to deterioration.

#### SYMMETRY IN PHYSIQUE BUILDING.

Physical exercises must be done with the intention of becoming first healthy, and then strong and muscular. The development of the physique must be symmetrical. Desire for thick and bulging muscles mars the symmetry of the body. Bulging biceps and ponderous pectorals make one look uncouth and abnormal. This is due to lack of sense for proportion and beauty.

You must have seen classical Grecian and Roman statues. If you have not, I would sincerely advise—a physical culture enthusiast as you are—to hunt for them in museums, in art galleries, and study them limb by limb, the symmetry, the poise, grace, movement and the total composition. They are perfect in sinew, shape and symmetry. They do not have or hide any flaws. There is poetry in those limbs which blend perfect grace and harmony. There is that slimness and elegance in those bodies which bear no trace of contortion either of face or body. Their pose is repose itself. Their bodies are remarkable for their fidelity to nature in displaying the perfect anatomy of the limbs, and present nothing painful for the eyes or mind. They tell us that clothes veil the beauty of the human form within.

While at your exercises bear in mind that you are doing them to acquire a good build and a sound and healthy body. ANY 'SYSTEM' OF PHYSICAL CULTURE CANNOT BE GOOD UNLESS EXERCISES ARE LAID OUT TO DEVELOP EVERY PART OF THE BODY PROPORTIONATELY.

Bad health and under-nourished limbs cannot help a man to perfect poise....neither will thick pectorals and powerful deltoids help him look symmetrical. One should be well and evenly developed head to foot to ensure such symmetry. The physically perfect are they, whose bodies are built with all the harmony of grace, ease and poise; and who have not developed any one part unduly or abnormally to the neglect or expense of the other parts of their body.

The build and stature of the body vary just as the physical features of different countries vary. Different nations have different features with which they are recognisable. But the limbs and organs of the body do not vary much. Some

nationalities are endowed with huge frames and high stature, while some are the very opposite. Whatever be the physical build of any nationality, as civilization has advanced, tailors have become the creators of the Modern Adam and Eve.

Men hide flat and rickety chests and stooped shoulders with starched shirts and thickly padded coats; and their scrawny necks with mufflers, collars and ties. Strip a dandy of his clothes; and he looks miserable. He prefers his tailor to his creator, camouflages with clothes, though he realises the bare truth about his body. It is only the tailor's genius that has made him look a man.

I am giving you a table from which you can calculate what your limbs should measure when fully developed while yet symmetrical with the other parts of the body.

Normal Chest ..	..	60 to 65 percent of one's height.
Waist ..	..	9 to 12 inches less than the chest.
Hips ..	..	4 to 6 inches less than the chest.
Fore-arm ..	..	1 5/8 to 1 7/8 as much as the wrist.
Upper-arm (Biceps) ..	..	22 to 24 percent of one's height.
Thigh ..	..	32 to 34 percent of one's height.
Calf ..	..	7 or 8 inches less than the thigh.
Neck ..	..	6 to 7 inches less than the thigh.

UDDIYANA AND NAULI or the abdominal controls.

'UDDIYANA'. EX. 23. Study Fig. No. 21.

In this control the diaphragm is drawn up and held high in the thoracic cavity. This is done as follows...First of all exhale ALL THE AIR from the lungs (the exhalation must be thorough to get at this control) and then slightly leaning forward, lift up your chest (rib-box) forwards and upwards and you may press your palms against the thighs as this will help you to get the correct control. If the exhalation is thorough and you lift up your chest well forwards and upwards, your abdomen will be a deep hollow. You must keep your abdominal muscles in a completely relaxed condition, as otherwise the 'UDDIYANA' will not be perfect. Retain the Uddiyana as long as you can. Hold yourself from breathing in. Relax into your normal position by inhaling slowly. Pause till you recover your normal breath. Repeat the control again some 2 or 3 times. Gradually increase the duration of the 'UDDIYANA'.

The effect of 'UDDIYANA':-

This control effects a sort of massage for all the digestive organs. It is almost impossible for a man with a fatty abdomen to get this control. One of the important benefits which you derive from this exercise is that you will stir up the 'Lazy Colon' to activity. 'Uddiyana' stimulates the natural peristalsis.

The Colon (large intestines) commences in the abdomen just next to the right hip-bone and proceeds straight upwards (Ascending Colon) into the right wing of the ribs underneath the liver. Then it takes a curve to the right (this curve or bend is known as the hepatic flexure) and proceeds straight into the left wing of the rib-box (Transverse Colon) beneath the stomach and then takes a bend downwards (Splenic flexure). The colon now proceeds straight downwards (Descending Colon) towards the left hip-bone, and then forms a semi-loop called the Sigmoid-Loop and ends in the rectum.

When 'UDDIYANA' is performed, both the bends (angles) in the colon (Hepatic flexure on the right side and the Splenic flexure on the left side) are pulled up into an arch and immediately sets in a strong peristaltic movement in the entire colon, which hastens the removal of the faecal matter.

If Uddiyana be performed while lying on an inclined plank (head lower than the level of hips) it is a sure cure for 'Ptosis' (drooping condition of the colon mainly due to the weakness of its muscular tone or due to the distention by gases), in the colon. Lying in the inclined position, a light massage of the abdomen will be very beneficial for those that are suffering from 'Vicero Ptosis' (a drooped condition of all the digestive organs owing to lack of muscular tone and general weakness). Usually thin people (specially the Asthenic type) suffer from this malady. The massage is done as follows:-

Lying in an inclined position, head 8 to 10 inches lower than the level of the hips, draw your knees up. This relaxes the abdominal muscles, which is the first helpful factor for an effective massage. Apply a few drops of oil or vaseline over the abdomen and spread it over the entire abdomen lightly. Now place your right palm flat over the lowest portion of your abdomen, next to the pubic bone, and your left palm over the right, exerting a tolerably firm pressure. Be sure to relax the abdominal muscles thoroughly or else, the entire effect of the



massage is lost. With your palms exerting a comfortable pressure over your lower abdomen draw them up straight towards the chest (your abdomen completely relaxed; your pressure of the palms not relaxed). While thus stroking upwards, you had better exhale. This further helps you relax the abdomen. The pressure of the palms as they are drawn upwards must be felt (not harshly, but gently and soothingly) over the small intestines (entrails) towards the pit of the stomach. Take the pressure of the palm well into the abdominal cavity. When your palms cannot go any further up take them off your abdomen, inhale deeply once, and, again bring the palms to starting position and commence again stroking upwards, exhaling well, and keeping the abdominal muscles relaxed and limp. Repeat the strokes gently 20 to 30 times. This tones up the intestines, the intestinal digestion and food absorption improve vastly, due to the renewed muscular tone and better secretion of the intestines. The heaviness in the abdomen and production of wind in the intestines will stop. When your digestion and absorption improves, you assimilate more food and become more strong and energetic.

People who are pronounced to be suffering from Entero-Ptoxis (drooping of the intestines) and Vicero-Ptoxis (drooping of the entire abdominal sack with all the digestive organs within) had better start with the massage, twice or thrice a day and continue it for a fortnight and then take to light abdominal exercises and spinal movements (Yoga Asanas).

#### COLON MASSAGE.

Colon massage is an excellent remedy, when one is suffering from chronic constipation, due to weakened muscular activity (Peristalsis) of the Colon. While following this massage, the person should use plenty of liquids or liquid diet, as well as plenty of roughage in his food, such as vegetables, greens, whole-wheat products, etc. People who suffer from constipation due to the inactivity of their liver will do well to start their day with some citrus-fruit drink, such as, a glass of orange or lemon squash or grape-fruit, and before going to bed, just take three tea-spoonfuls of olive-oil. They should continue doing so for about a month or more, till the liver and intestines begin to behave. The massage is done as follows:-

Lie flat on your back (no inclined angle), draw your knees up together, feet resting flat against ground. Relax

the abdomen thoroughly. Smear a few drops of oil or vaseline over the entire abdomen. Now place the fingers of your right palm together and flat just next to the right hip-bone over the right side of the abdomen. Exerting a moderate pressure with the fingers (applied flat over the abdomen) draw your palms straight up along the ascending Colon till you cannot take your palms any further up. (To ensure proper pressure, you may apply the pressure of your left palm over the back of the right.) Take your palms off and start stroking it again from the spot of starting, exerting a moderately firm pressure. Repeat ten strokes, and then start massaging along the transverse Colon in the same manner as before. Lastly start massaging the descending colon down to the side of the left-hip-bone and then further across to the pubic centre (10 times).

Please understand that unless you relax the abdomen well and make the pressure of fingers feel against the colon inside, this massage has no value at all. Having done the massage of the Ascending Colon, Transverse Colon and Descending Colon each separately, start massaging again the entire colon continuously, beginning with the commencement of the Colon, up the ascending colon, then across the transverse and then down the descending colon right up to the pubic-centre beneath which the colon ends in the rectum. Continue such full movements ten times. After this is over, place your palm right over the navel and then left palm over the right to exert a good pressure. Relax the abdomen thoroughly and then start moving the palm in a clock-wise direction slowly first in small circles around the navel, the circle then becoming wider and wider, until it cannot be any more widened. Mind, while rolling the abdomen thus, your palms should be sticking on to the centre of the navel throughout. In other words this is called the NAVEL ROLLING. After you have come to the extent of the broadest circles, go on making them smaller and smaller again till once again you perform the tiniest circles around the navel until at last you come to a stand still, i.e., where you began at first. Once again let me SAY that all this while, your palm has not moved away leaving the centre of the navel. For the final time, let me repeat that unless one has learnt to relax the abdomen thoroughly, all this massage is useless. This navel rolling may be repeated twice or thrice. It rejuvenates the small intestines. Digestion and assimilation become very much better.

These massages not only help to tone up the digestive organs, but also help quick elimination of faecal matter from the system. They also do one more thing, i.e., reduce the fat over the abdomen, thinning out the hip and waist line and strengthening the sagging muscles.

The following exercise is helpful for those who are suffering from seminal-weakness, prostate-weakness and night pollutions, quick ejaculation of semen and poor retention due to weakened seminal sphincters and weakened prostates brought about by excessive sexual indulgence and excessive masturbation. Lying in the inclined position, one has to tightly contract his anus (Sphincter-ani) and at the same time depressing the abdomen and drawing his testes up by sheer muscular control. (The depression—drawing in—or the retraction of the abdomen, which is a voluntary muscular action, does at the same time pull the hanging margos (testes) up in the Scrotum towards the pubic bone, thus strengthening the spermatic cord (ductus deferens) while the combined tightening of the anus automatically contracts the ejaculatory muscles of the seminal vesicles and strengthens the prostate and cowper's glands). He has to relax and repeat this control every 5 seconds, breathing normally. It is better to start with 15 repetitions and go up to 30 repetitions. He has to practise this exercise both in the mornings and every night before going to bed. Those that are suffering from seminal-weakness and night-pollutions should practise this exercise very regularly for 2 or 3 months. It is highly beneficial to practise it daily on bed, before going to sleep.

The YOGIS of Ancient INDIA had a queer method of washing their colon. Enemas, J.B.L. Cascades were not known then. All they used was only a thin (less than 1/4 inch diameter 4 to 5 inches long) bamboo-tube which they used to insert into their rectum and stand in waist-deep water, performing 'UDDI-YANA' several times, while relaxing the sphincter-ani. The water would rush in into the colon through the tube. Then they performed the 'Nauli' in its various forms, thus flushing every part of the colon.

The above statement may sound like a fiction to you; but do let me explain it to you. Prof. Gune, the founder of YOGA MIMAMSA, Offices, P.O. Lonavla, G.I.P. Rly. (India), to whom India owes gratitude for having revived the 'HATA-YOGA',

explained it to the modern world with the help of 'X' rays that the suction of water through the anus was accomplished by a partial vacuum created in the colon while performing 'Uddiyana', which accounted for the rushing-in of the water into the colon due to outward atmospheric pressure.

This explanation was not readily accepted by many Sceptic modern men and they said it was due to induced 'Anti-peristalsis' that the water was drawn in into the colon and 'Anti-peristalsis' was unnatural, hence, dangerous.

Prof. Gune then made an ingenious experiment. He took a mercury-barometer, the rubber end of which was introduced into the rectum of a person who was an adept at 'UDDIYANA'. The man performed a perfect 'UDDIYANA' and there was a sudden fall of mercury in the tube, which clearly indicated the formation of a partial vacuum in the colon. The experiment was tried on several other subjects who were experts in performing 'UDDIYANA', and each time the level of the mercury in the barometer fell down according to the power of suction exerted by the person.

I should now think that you have understood this process of flushing the colon as practised by the YOGIS and RISHIS of Ancient INDIA. The water rushes into the colon owing to the formation of a partial vacuum in there and the external atmospheric-pressure. The 'Sphincter-ani' (muscles of the anus) must be in the state of absolute relaxation throughout. This experiment cited here is only to show to you, how the Rishis of India have perfected a system of culture and training to maintain the human body in a healthy and vigorous condition throughout the life.

ONE OR TWO ROUNDS OF THIS 'UDDIYANA' WHILE YOU SIT AT STOOLS WILL HELP THE COMPLETE EVACUATION OF THE BOWELS. 'UDDIYANA' stimulates a vigorous 'Peristaltic action' in the colon. We shall now proceed to know what 'NAULI' is.

'NAULI' OR THE CENTRAL ISOLATION OF 'RECTUS-ABDOMINIS':—

EX. 24. Study Fig. No. 22.

Maintaining the control of 'UDDIYANA' now press your palms firmly against the corresponding thighs, making an effort at the same time to isolate the abdominal muscles as shown in the illustration. This is a control which a few can get at very easily. For some it takes a lot of patient practice and

perseverance. I hope you do remember that old poem, "If at first you don't succeed, try, try again".



Fig. 21



Fig. 22

Unless you are perfect at 'Uddiyana' you will not get at 'Nauli'. So, perfect 'UDDIYANA', before trying 'NAULI'.

When you can perform 'NAULI' central (MADYAMA-NAULI) as shown in the illustration, it is easy to roll the controlled Rectus-abdominis either to the left or right (VAMA-NAULI) and (DAKSHINA-NAULI) by exerting more pressure upon the thigh on the particular side and relaxing the pressure of the other palm over the other thigh.

To display the right and left control of the Rectus-abdominis, you must quickly pass and repass the pressure of the palms from one thigh to the other, thus making the abdomen roll quickly from side to side. With a little more effort, you can make it into a continuous motion. This has a very good massaging effect upon the intestines.

#### THE EFFECT OF 'NAULI'

When an 'Enema' is taken with two pints of water (that being the usual maximum) the water fills up the ' Sigmoid loop'

near the rectum and the 'Descending Colon'. Perhaps it might reach up to the 'transverse-colon' too; but the water can never get into the Ascending colon and the 'Caecum' (the starting part of the large intestines). This is the main seat of trouble in the colon and sometimes there can be found in this place old deposits of faecal matter, if the colon has gone weak or lazy, or has poor peristalsis. (This is the usual cause of chronic Caecal Constipation and Appendicitis.)

The Yogi after having drawn the water into the colon through the anus, performs 'NAULI' in its various forms, thus flushing every part of the colon.

This method of flushing the colon requires a lot of practice, patience and perseverance. It is not difficult for a person to practise 'NAULI-KRIYA' (the churning process) after taking an enema in the usual way. I advocate the following method of washing the colon for those who cannot learn 'NAULI'.

#### THE PROPER WAY OF TAKING A BOWEL-WASH (ENEMA)

The usual way of taking the enema is not effective. I have a method, which I have put into practice for a number of years and found to be very efficacious.

As stated before, in the usual way of taking the bowel-wash, the water will not get into the 'Ascending colon' (the beginning of the large intestines). To make the water flush every part of the colon and specially the caecal pouch in its entirety the following method must be adopted. The person lies on a slightly inclined bed, (Head on a lower level than the hips) or on a flat bed. He either lies on his left side or goes into a knee-chest position and takes in through the rectum some two pints of tepid or warm water. Then he lies on his back with knees drawn up, thus relaxing his abdomen well. Now he puts the fingers of his left palm together and flat, pressing firmly on the left side of the lowest portion of his abdomen (over the sigmoid loop of the colon). Over the left palm, he places his right palm also to impart more pressure. While maintaining a uniform pressure, he massages the abdomen straight up the 'Descending colon' and then across to the right side over the transverse colon to the liver, and then straight down the ascending colon to the Caecum. Now the palms are lifted off the abdomen and placed again on the left side (the starting position) and the same movement is gone through again and is to be repeated 8 to 12 times. This massage differs

from the massage taken for the removal of constipation in that, this is done exactly in the opposite direction, with the intention of sending the water to flush the entire colon and specially the caecal region, where the water, in the usual method of taking the enema does not reach at all. (THE ABDOMEN SHOULD BE THOROUGHLY RELAXED WHILE THIS MASSAGE IS TAKEN.) After this massage is over, the person places his right palm on the right side of his abdomen and gives a vigorous shaking. If the abdomen is well relaxed and if the massage is done well he should feel the gurgling of the water inside the caecum, the beginning of the colon. The water flushes and cleans the caecal region well. If the water has not entered into that portion of the colon, the massage must be carried out again until the person can hear the splashes of the water in the caecal region. After this is done, he lies on his left side until he gets an urgent call to answer. He has to sit at the stool till all the water from the bowels come out. While sitting at the stool he can perform a round or two of 'UDDIYANA'. This helps to throw out all the water from the bowels. Else, the person has to sit sufficiently for a long time at the stools to completely evacuate his bowels. Once again I feel I should remind the beginner, that unless and until he thoroughly relaxes his abdomen, massaging cannot be done and water cannot be brought in into the caecal region. Without this massage, the colon-wash is useless.

#### ARM STRENGTH

To the physique enthusiast, well-developed arms have ever been the proudest 'Show-asset' of his anatomy. No pains are spared, no methods left untried and no amount of strain is considered much in building biceps to bursting bulk. This is misguided enthusiasm. (This enthusiast if only pays an equal attention to the development of his deltoids, triceps, and muscles of his fore-arm, will soon be within range of the realisation of his dreams.) Yet among muscle-culturists, worship of the biceps has come to stay. I fear it will remain the craze even of to-morrow.

#### MUSCLES OF THE UPPER-ARM

In the upper-arm there are three important muscles—the biceps, the triceps, and the brachialis. The brachialis muscle is situated on the outer side of the upper-arm below the deltoids.

## MUSCLES OF THE FORE-ARM

Unlike the upper-arm which has only one thick bone known as humerus, the fore-arm has two bones known as the Ulna and the Radius. There are quite a number of muscles in the fore-arm, but for convenience we shall group them into two main groups, viz.: the Flexors and the Extensors. The group of muscles that is brought into action while bringing the clenched fist towards the fore-arm is called the Flexors and the group of muscles that extend the palm or fist away in the opposite direction is called the Extensors.

A pair of well-developed arms is an asset to manly beauty and strength. Personally I have a 'Pendant' for well-developed arms, but I will not admit that arms are the index of STRENGTH. I hold that, the back, the hip-joint and the thigh are the 'pivot' of strength, vitality and endurance; I should also include a capacious chest. In the perfect strong-man the development of the entire muscular system is harmonious and symmetrical.

Between the biceps and the triceps, the latter is a more useful muscle. In pushing or resisting with the arm, the triceps muscle is brought into vigorous action. This muscle is about twice as strong as the biceps. It is worthwhile to devote more time and attention for the development of this muscle. If enough attention is paid to the development of the deltoids, triceps, the flexors and extensors of the fore-arm, the biceps grow almost of its own accord. The fore-arm muscle is very important and extra attention paid to its development is well worthwhile. The strength of one's grip is entirely due to the quality and development of the fore-arm muscles. In handling heavy weight it is the grip-strength that counts. The strength of the wrist is also dependent upon the strength of the fore-arm muscles (Flexors and Extensors).

There are plenty of exercises for developing the arm such as lifting, pulling, picking up, etc. But amongst the many, the 'Push-ups' (Stool-dips), the 'Pull-ups', the 'curls' and the 'presses' are the best known. 'Pull-ups' are very common. It is also known as 'Chinning the bar'.

EX. 25. Study Fig. 23.

The student fixes an iron bar or a sufficiently thick and strong metal pipe or a wooden bar at a height he can reach.



He then catches hold of the bar, shoulder distance apart with his grips, as in the illustration, both arms held straight and the body hanging limp under its own weight—the legs may be kept straight or half flexed at the knees. Then the student pulls himself up by the sheer strength of his arms till his chin is clean well over the bar. (See the illustration.) Then he lets himself down to starting position and repeats the 'Chinning' again. He can also grip the bar by the over-grip (grips turned away from him) and 'Chin' the bar. This is an excellent exercise for the brachialis and the muscles of the fore-arm, while the former exercise gives a sound development to the biceps. In both these exercises, the Latissimus-dorsi Trepizius, Supra-Spinatus and the Deltoid muscles get a large share of the benefit. Breathe in as you pull up, and breathe out as you relax back to position. There is another equally excellent exercise for the development of the biceps known as 'Curls'.

EX. 26. Study carefully Fig. 24.

Usually, this exercise is performed with a bar-bell and the bar-bell is a costly affair to an average man unless one has resolved to go in seriously for bar-bell training in future and specialise in advanced body-building exercises. If you are keen on developing a pair of strong manly arms, devise a small home-made bar-bell for the present. If crude to look at, it still serves the purpose. Persons nearing the age of forty and those with weak hearts should not attempt these exercises.

It is easy to construct a home-made bar-bell. Take a strong straight bamboo-(Lathi) 4½ to 6 ft. in length or any strong metal tubing one inch or so in diameter. Galvanised water-pipe serves the purpose excellently. At either end, tie quite tightly or fix up very firmly two equal sized stones or pieces of metal, wooden or metal wheels, or, anything that is of equal weight and is handy and convenient. An other device for the weights is to get two, thick, long cylindrical canvas bags made and fill them both equally to required quantity with sand—or sand and lead balls—and tie them securely to the ends of the bar. One special advantage in these sand bags is that the weight can be increased by adding more sand or lead-balls as and when required, provided the bags have a provisional extra length. The weight of this home-made bar-bell for this exercise should be what you can easily 'curl' some six to eight times.

'Curling' is good both for the biceps and the flexors of the fore-arm and is done as follows:- Stand, heels together, stoop and pick up the bar-bell with both hands as in the

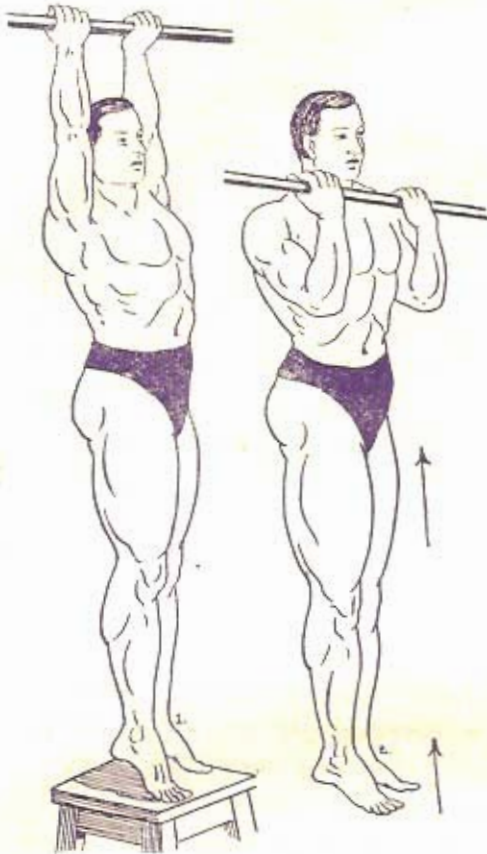


Fig. 23



Fig. 24

illustration (equi-distant from the centre to the breadth of shoulders apart) gripping the bar firmly with the undergrip (palms turned upwards). The bar-bell at the commencement of the 'curl' is held at arm's length down across the thighs. The body is kept perfectly straight. The bar-bell is slowly raised by inward curling of the wrist and by flexing the elbows, until the fore-arms completely fold over the upper-arms as depicted in the finished dotted line position. The bar-bell has now been brought close against the chest. Pause a couple of seconds and slowly relax to starting position and repeat the movements again and again until you feel your arms are not able to perform any more curls. While performing these curls, you must take care that it is done slowly (without taking any swing or jerk in the start or inclining the body

backwards). A perfect 'curl' is performed with the entire body straight, the only moving part being the fore-arm. But see that you do not take the elbow backwards at the finish of the 'curl' (study closely the position of the elbow in the finished dotted line position). Another important point is to curl the wrist well over the fore-arm at the very commencement of the 'curl'. This gives excellent development for the flexors of the fore-arm. Breathe-in deeply as you 'curl' and exhale thoroughly as you relax back to the starting position. Put the bar-bell down and rest a while. And repeat the exercise. Try this exercise in 3 or 4 stretches continuously or alternately with any other bar-bell movement to be detailed to you presently. While performing the 'curls' the heels must be kept together, knees rigid, and back straight. Throughout the movement the upper-arms are close and in line with the body. Only the fore-arms move up and down. While performing the 'curls' the wrist should be turned well against the fore-arm.

#### TWO ARM MILITARY PRESS OVER-HEAD.

EX. 27. Study carefully Fig. 25.

If the bar-bell is quite safe for handling, pick it up to the shoulder height quickly with the over-grip as in the illustration. Pause for a second and then with a deep inhalation press the bar-bell vigorously to arm's length straight over-head as indicated in the dotted lines. This is a very good exercise for the deltoids and the triceps. After the bell has been pressed up and the arms straightened perfectly, pause a couple of seconds and then lower the bell to the chest exhaling deeply, and press again. Repeat until the arms absolutely fail to press any more and then lower the bar-bell to the ground. Take rest and try some 3 or 4 stretches. This exercise can be alternately practised with the 'curls'.

While pressing the bar-bell over-head, if the heels are kept together, the trunk perfectly straight and the eyes looking straight ahead of you, it is termed as the 'Military Press'. In the ordinary 'press' the heels may be kept apart—or one in front of the other—and the trunk allowed to bend backwards while the bell is being pushed up. The 'Military Press' is the more difficult one.

Another form of this exercise, more effective if more difficult, is the Press from behind the neck.

## EX. 28. Study Fig. 26.

This is an excellent exercise for developing the muscles of the back and the shoulders. The bar-bell instead of being pressed up from the chest, is placed across the shoulders over the neck and then slowly pressed up over-head to arm's length with a deep inhalation. It is slowly lowered back to



Fig. 25

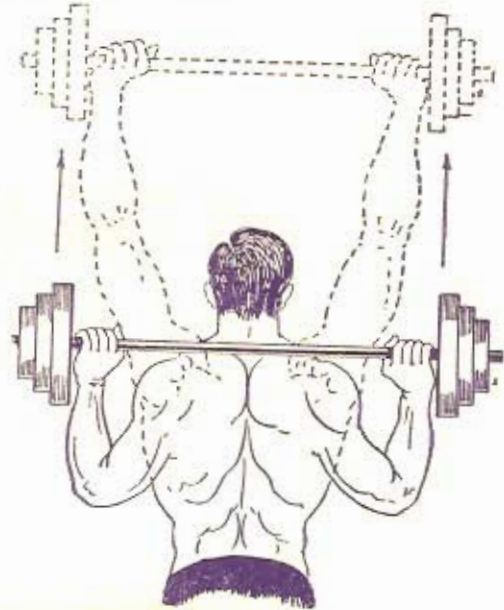


Fig. 26

the neck exhaling deeply. The repetitions and stretches should be done as in the previous exercise. There are still a few other exercises which can be practised with this home-made bar-bell. One such is the 'press'—Lying on the back.

## EX. 29. Study Fig. 27.

Make the bar-bell slightly heavy and place the same on two supports of equal height (nearly 12 inches) at both ends. Lie underneath the bell, (the bell being just over your chest) and grip the bell equi-distant from the centre, to the

width of your shoulders. Now take a deep breath and press the bell straight to arm's length over the chest as indicated by the dotted line. Lower it back to the starting position exhaling deeply, and press it again and again until the arms refuse to respond any more. Rest and repeat a few more

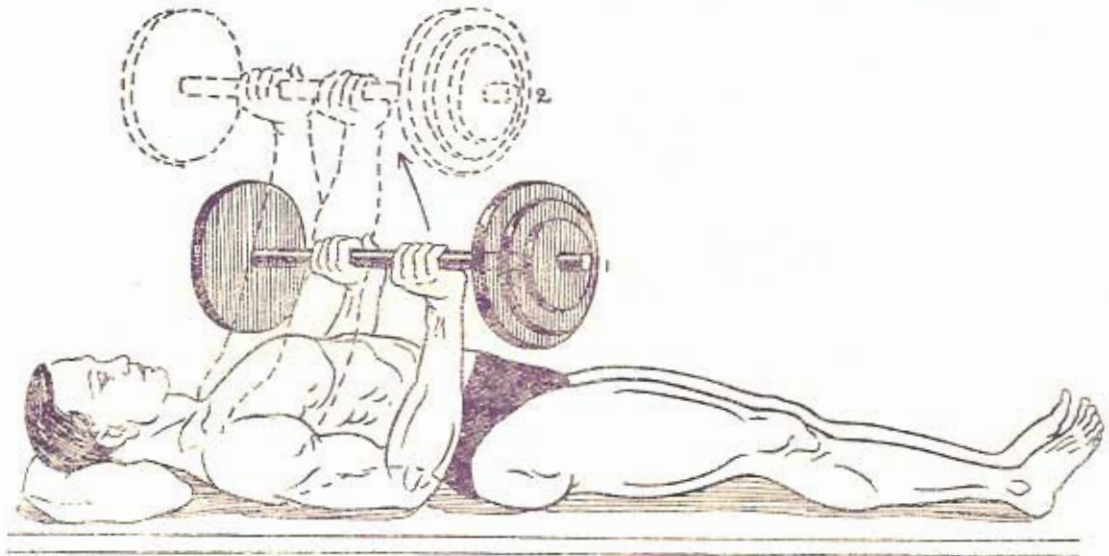


Fig. 27

stretches. This exercise does not strain the heart the least bit and can be practised extensively. The weight of the bar-bell should be such that it can be pressed 10 to 12 times easily in succession. Pay particular attention to breathing.

The next exercise to detail is one of the best exercises for developing the thigh and the calf muscles and increasing the lung capacity. The biggest authorities on physique-building are of one confirmed opinion, that as a means to increase the stamina, strength, and bulk of the man, there is no better exercise than this. This exercise is not for persons with weak hearts and weak constitutions. This exercise is known as 'Leg Squats' or 'Deep knee bends' and is practised as follows.....

EX. 30. Study closely Fig. 28.

The bar-bell is placed on the back of the neck across the shoulders and is being held in that position with both hands as in the illustration. Squat down exhaling slowly, till the knees are fully flexed exactly as shown in the dotted line. Go back to starting position with a straight back inhaling very deeply. (You have to be looking straight ahead throughout

this exercise. Looking down upsets balance. At the start the legs are close together. You rise on your toes, heels pressing strongly against each other and squat on your toes exhaling deeply the heels pressing against each other throughout.) In this exercise the knees are spread wide apart to allow exert a good pressure against the heels as you squat down. The heels never separate but remain pressing against each other throughout. This exercise needs a control of balance (the point is never to look down throughout the movement and never to slacken the resistance against the heels). No other exercise is equal to this to develop the inside part of the thighs, the abductors and vastus-internus. Provided you keep high on your toes, and keep the heels pressing strongly against each other, you will certainly develop your calf and thigh muscles. This exercise can also be performed with heels on the ground and legs placed 6 to 10 inches apart. Maintaining the balance in this exercise is easier than in the former. But if you should care for the development of the muscles of your calf, you must stick to the former. I suggest the following programme of work for the bar-bell enthusiast, who either possesses a bar-bell, or had devised one, for himself so that it serves his purpose.

FIRST:- He has to start with Leg Squats (or deep knee bends) and repeat it as many times as he can. He must pay particular attention to breathing in this exercise.

SECOND:- He has to perform the 'Curls' (maximum number of times correctly).

THIRD:- He should do the 'Two hand military press' (also the maximum number).

FOUR:- He should do the 'Lying on back, press' (until the arms get tired).

Between each of these exercises sufficient rest should be taken, and while taking rest deep breathing must be resorted to, to get out of the fatigue quickly, and to saturate the blood with enough oxygen for the next exercise. This saves the heart and lungs from strain and helps you to quicker development.

Once again, the bar-bell enthusiast must repeat all the four exercises, this time changing the third exercise to 'press from behind neck'. He may repeat these rounds twice or thrice again, and in case he does it, he should refrain from

doing any other exercise that day, except these lifting exercises (three, four or five rounds according to ability).

His programme of work for the week would be as follows:- First and second day's programme of work should be done as scheduled at the end of the 4th lesson. The bar-bell exercises must be taken as the third day's work, and for the fourth, fifth and sixth days he should repeat the first, second and third day's programme respectively.

These bar-bell exercises are foundational, before 'lifting' is practised. It is the ground work and insures the lifter against future sprains and strains, and prepares him for greater lifting. For the body building enthusiast, these

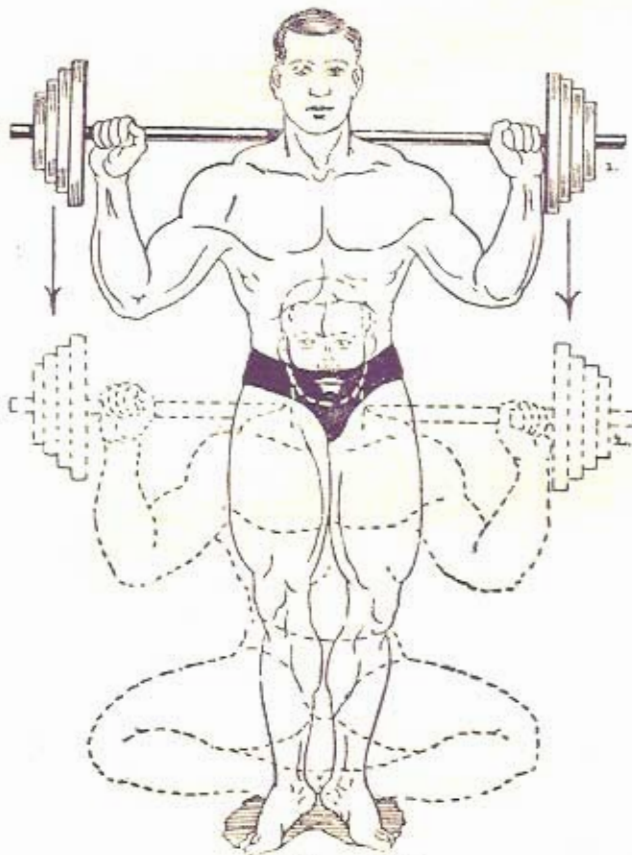


Fig. 28



Fig. 29

lifting exercises are superb. Having gone through this ground work for one or two months, he may go in for actual 'weight-lifting' exercises. (He may follow some good American course in weight-lifting as I have not prepared any such courses as yet.)

For those that cannot devise this home-made bar-bell, I am prescribing a few resistance exercises for the development of the arms.

EX. 31. (For the wrist and fore-arm). Study Fig. 29.

Support the elbow of the right arm firmly on the right hip-bone, the fore-arm making a correct right angle with the upper-arm. Keep your right fist clenched tightly, wrist bent down as in the illustration. Now place the left palm firmly against the right fist exerting enough pressure. Throughout this exercise the right wrist should be strongly resisting against the pressure of the left palm. With the pressure of the left palm upon it, the right wrist should strongly resist its way up till it can be brought no further over the fore-arm. Now push the right wrist back to its starting position. This gives exercise to all the fore-arm muscles and the wrist. Perform 10 such movements continuously and then exercise your left fore-arm. Breathe normally or inhale as the wrist is resisted upwards and exhale as it is pushed back to starting position. Increase 2 movements per week until you reach up to 15 movements and let the resistance increase as the strength of the wrist and fore-arm increases.

EX. 32. (For the Biceps). Study Fig. No. 30.

Clench the right fist tightly and place the left palm firmly over the fist as in the previous exercise. But the

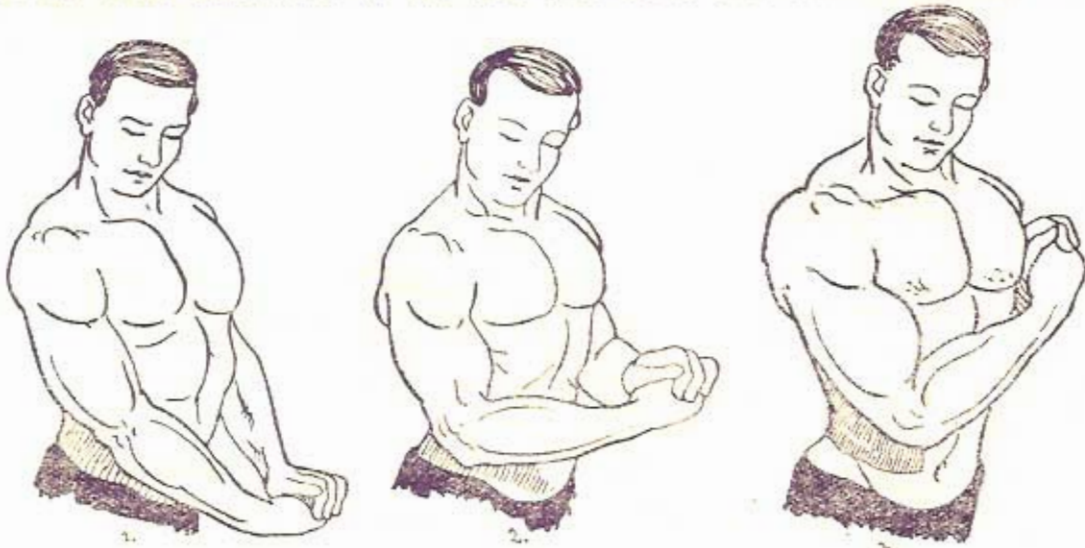


Fig. 30



elbow is free and not resting on the hip-bone. The entire right arm is brought a bit forward and the wrist too is bent slightly upwards (Fig. 30, Stage 1). With the left palm resisting well against the right, (curl) move the right forearm against the corresponding upper-arm (Stage 2) until the biceps muscle contracts strongly (Stage 3). Relax thoroughly to starting position and repeat 10 such movements. Exercise your left biceps too to the same degree. Add two more movements weekly until you reach the number 20 for each arm. Inhale deeply as you flex. Exhale thoroughly as you relax.

It is always beneficial to give 2 or 3 extra movements to the left arm (unless you are a left hander in which case the suggestion is to be vice-versa) to bring that arm to the same level of grace, strength and development as the right.

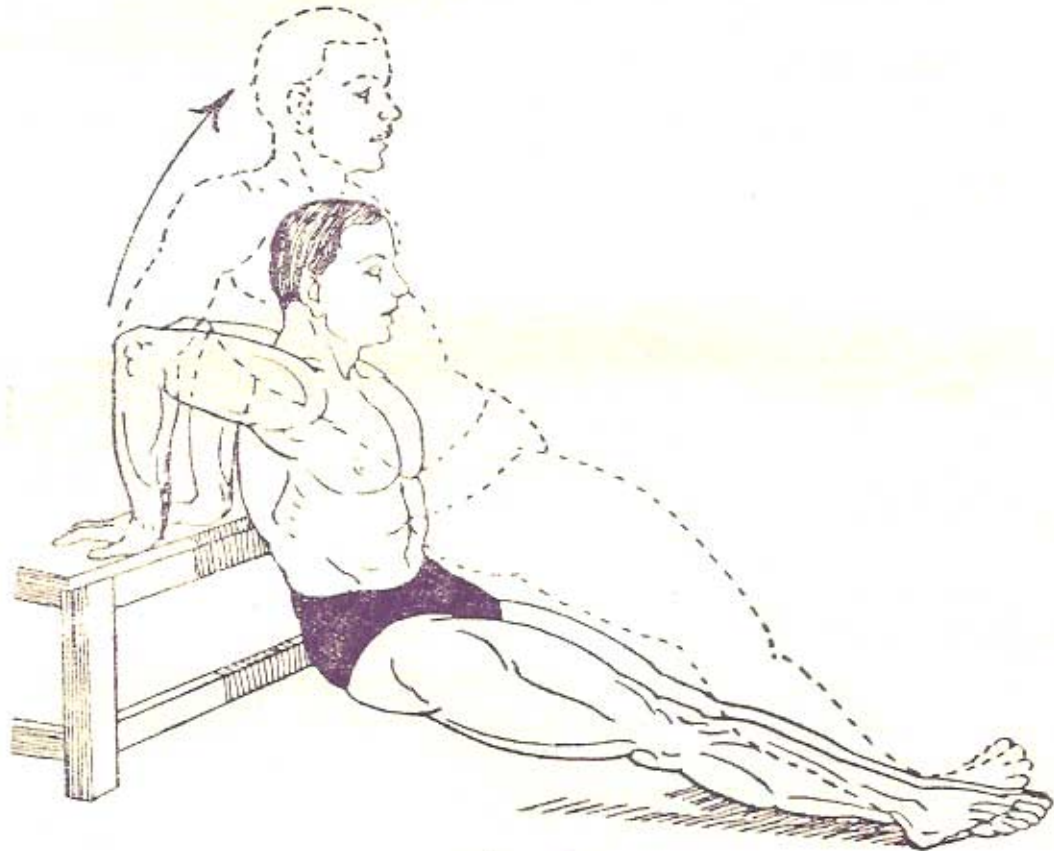


Fig. 31

EX. 33. (For the Triceps). Study Fig. 31.

Place your palms apart to the width of your back on the edge of a bench 12 to 15 inches high, the position of the body being exactly as shown in the illustration and go through the movements in the same manner as you do the 'Stool-dips'.

Flex your elbows as you lower your hips to the ground while exhaling and straighten the same as you push up inhaling deeply and strongly tensing the triceps muscles of both arms. Commence with 15 movements, gradually go up to 25 movements, increasing 2 every third day. Perform 3 or 4 stretches of this exercise taking rests between and alternating it with the (Biceps and the Fore-arm and chinning the bar exercises).

Your triceps must have been already well-developed by the 'Stool-dips' which you have been practising regularly. This exercise besides developing it further, will add to the clear definition and separation of that muscle.

Your 5th lesson ends here. I expect you to work..... and work really hard without which no body has ever achieved anything in this world unless by a fluke or by dishonesty which happily has no place in the physical culture realm. HARD WORK and HARD WORK ALONE is the way—all for building up a good physique and a vigorous constitution. Keep the flame of your enthusiasm ever burning bright. Arrange your programme of work as follows:-

FIRST DAY:- The three Neck exercises, Stool-dips and Baitaks of L. 1.

SECOND DAY:- Ex. 7 and 8 of L. 2. Bhujangasan, Dhanur-rasan and Ex. 14 of L. 3. Ex. 16, 17, 18, 19 and 20 of L. 4. (Obesed persons and those who want to reduce hip and waist-lines should include Ex. 21 and 22 also.)

THIRD DAY:- The three Neck exercises of L. 1, Ex. 26, 31, 32 and 33 of L. 5, to be repeated twice over. Uddiyana and Nauli to be practised now and then.

The bar-bell enthusiast need not go through the third day's programme, but should do the bar-bell exercises as laid out in this lesson.

FOURTH DAY:- Repeat First day's programme.

FIFTH DAY:- Repeat Second day's programme.

SIXTH DAY:- Repeat Third day's programme....Take complete rest on SUNDAYS.

Keep your exercising hour free from visitors, visits and calls. Take care.....a skip of a day or two from the regular exercises might ultimately lead to a break which may become permanent. YOU WILL BE SORRY FOR THIS FOR THE REST OF YOUR LIFE.