PELMANISM

Lesson IV

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LESSON IV
KNOWLEDGE AND THE SENSES

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LESSON IV
KNOWLEDGE AND THE SENSES

FOREWORD

You have already begun the training of your senses, and this lesson is to continue that training by going more deeply into details.

There are two kinds of seeing, with the *eyes* and with the *mind*. Unite both kinds in yourself. It is one thing to see everything in the range of your vision; it is another to interpret, to understand, to digest what you see. *Learn to understand that which enters the mind through the senses.*

Don't depend upon others for your information and your opinions. Decide to see and know for yourself, whenever possible. Such an attitude and procedure will give you more first-hand information and will develop your self-confidence. Also, in this way you will win the confidence of others. Those who make good in any sphere, business, politics, literature, science, or art, are the men who insist upon seeing for themselves and making their own interpretations.

I—KNOWLEDGE AND THE SENSES

What do we mean by Knowledge? We mean all the information that comes to us from various sources either through the senses or by reflection. In this lesson we deal with the Knowledge that comes from sense activity, and at the outset we desire to impress upon the reader the fact that this range of Knowledge is largely determined by the range of his sense impression. If the senses of sight and hearing, for instance, are unresponsive, he will miss half the things in life. A thousand things which ought to appeal to him and evoke intelligent recognition will be passed by. One must *understand* what is seen and heard, otherwise mental life becomes a mere catalog of happenings without meaning. But this *response* to stimuli, from without, must precede the understanding because it is the foundation upon which all understanding is built. The ideal of PELMANISM, in reference to the senses, is to be alive to external appeals so that, whatever the activities we are engaged in, we shall be alert to notice details at the same time that we observe the broader features.

LIFE AND RESPONSE

A football responds to a kick and a wax image will melt before the fire; but these are inanimate substances and their response is due to the action of natural forces. You are different.

You are a living person. You can grow. External facts, like sunsets, lakes seen in the moonlight, the mist in the valley, the perfume of flowers, can change your whole outlook on life, *if you will only see and hear.* A chance word from a wise man has turned many a life.

Response? How are you reacting to events as they come and go? Are you living superficially, just accepting life without so much as a query? If so, this lesson is intended to be an awakener; if not, then it will further quicken your sensibilities. Those who respond to the great number of various stimuli which come to them daily, know much and understand much which is out of reach of the unresponsive person.

In metals, contraction and expansion are states caused by response to the stimuli of cold and heat. It is so in human nature. External stimuli or sensations from the outside world and internal stimuli or sensations resulting from our state of feeling or physical condition affect us, that is, cause changes in us just as heat and cold cause changes, (expansion and contraction) in metals, the difference, however, being that we can, through our power of perception (that is, recognition of the sensation and its meaning), *know* the sensation and select those sensations which we wish to use, forgetting those which are of no value for our immediate purpose. In other words, out of the multitudinous impres-

sions, (sensations), coming to us every minute of our lives, we concentrate on those which serve our immediate needs and disregard or eliminate from our consciousness a great number of others. Therefore, psychologically expressed, response means our reaction to external and internal stimuli.

It is our purpose in this course to train you to accustom yourself to respond to those feelings within you and those objects outside of you, which will give you a broad, all-around development, and make you more alert to the real meaning of life.

An individual who responds actively to life has senses that are trained and alert, which bring in "reports" of the world outside to a mind also trained and wide-awake. This mind is busy selecting what is vital and significant in life, for the accomplishment of its goal.

Are you responding to those things which tend to narrow and deaden your finer interests and sap your energies? Or, are you responding to things which will enable you to advance step by step toward your goal? Are you expanding your whole being with enthusiasm toward life and what it has to offer you?

Do you lack general interests? If so, this lesson will discover them for you. Have you suffered? The common things of life are full of interest which you will value the more as a result of these studies. And, if life is for you a

record of successful endeavor, you will find here new and unsuspected values. Remember, then, the slogan of Lesson IV, BE ALIVE!

KNOWLEDGE THROUGH THE SENSES

Knowledge Through the Senses—To make clear the part played by the senses in mental development, it will be well to begin by supposing that you are almost destitute of sense power, that you cannot see or hear anything, that your senses of taste and touch and smell are only moderately developed. Helen Keller's is a similar case, and Hall Caine has pictured such a possibility in his "Naomi," the heroine of "The Scapegoat."

Not to be able to see or hear at all, and to be able to taste and feel inadequately, would be to have your mind closed to the outside world. You would be dimly conscious of other people and things, but the delight of communion with them would be denied you. One may as well be walled up in a narrow cell in solitary confinement.

Out of a Sense Prison—Let us suppose, however, that the sense of touch has been fully restored to you. You could then learn a great deal more about external things, their shape, their weight, their heat, and their coldness. The mind would have a considerable increase in data about which to exercise its powers, but the complete absence of the powers of sight and

hearing would form an insuperable barrier against any further advance.

Should another sense suddenly come—hearing, for instance—to act in conjunction with the taste, smell and touch already working, the outside world would become more and more real, voices would bring language into being and that would bring communion with others. Add still another sense, the most important of all, and the advent of sight would release you entirely from your "senseless" prison. You would then attain to the normal state of ordinary human beings whose senses are alive to all the joys of complete living.

SENSATION AND PERCEPTION

When we are asked the question, then, "How do we get our knowledge?" the answer is, "By means of the senses, chiefly sight and hearing." As to how the objective realities outside our bodies—the sun, the earth, the cities, our friends, our business concerns, our recreations—become subjective (that is, become part of our consciousness)—nobody knows. It is an interesting subject of philosophic speculation, but of little practical importance. We do know, however, that the first step towards knowledge is through sensation and perception.

The word "sensation" often presents a difficulty on account of its varied associations. A newspaper reporter, describing a scene in court

where a witness makes an extraordinary statement, will say it made a "sensation." But the sensation referred to in this lesson is really the immediate effect of *action of objects on any one of the senses*, sight, hearing, taste, touch, smell, etc. However, in the case of the sensation there is no thought of the object. Warmth is a sensation if we do not refer our experience to any source as fire or sun. We get a sensation if we are aware of an odor without thinking of its origin.

In *perception* the mind goes further. It relates the sensation to the stimulating object outside. It relates the warmth to the sun or fire. It recognizes the odor as coming from a rose. For example, the odor of a lighted cigar is perceived. What, then, is the preceding sensation? It is the effect of the action of smoke particles on the nerves of smell. Without this action there could be no sensation, and without sensation no perception.

We should like to commend to the student who loves to carry his reflections a little deeper than usual the suggestive sentence of a writer on perception. He says, "Matter *is;* the plant *is* and *lives;* the animal *is, lives* and *perceives.*" To this one might well add: "Man *is, lives, perceives and knows;*" the extent of his knowledge being largely determined by the extent and accuracy of his perceptions. We remember well

that which we have "known" well, and we know well that which we have "sensed" well.

Pure Sensations—A sensation with meaning attached is *Perception.* It is possible to have sensations that do not at once become perceptions; or, if they do, the perceptions are so weak that they fail to live beyond the life of the moment. Thus, if we hear a clock striking, the sound acts on the nerves of hearing, which in turn enable us to perceive the fact that the clock is chiming the hour. If, after paying no particular attention to the number of strokes, we ask, "What hour did it strike?" it is sometimes possible to tell exactly the number of strokes by consulting the record in our subconsciousness.

This record of sensations of sound is kept for a few moments, subconsciously, by the registering power of the mind; and although the striking of the clock was immediately perceived, full perception of the number of sounds was not instantaneous. But where attention is paid to a sensation, it may be taken for granted that perception follows upon sensation with a rapidity that eludes the closest analysis. Such perception may, of course, be of various degrees according to the knowledge the mind possesses. Thus one may see and hear a great deal without comprehending it; and this vagueness of the life of sensation and perception is responsible for much mind-wandering and bad memory.

It will not be necessary to trouble ourselves

with minute questions respecting the physical mechanism of the senses, and how nerves are the paths by which knowledge is communicated to the mind. Our point of view is restricted to the psychology of the senses; we desire to know how they work in general, and how they may be trained for the cultivation of the mind with a view to securing efficiency.

Priority of Sight and Hearing—It has been said that taste and smell are inferior to the other senses, because they introduce us to a smaller range of interest and that they are not so certain on account of their *relative nature.* For instance, a moderately sweet drink is hardly sweet at all if we have just partaken of a very sweet drink, and there is apt to be confusion between smell and taste. You have possibly heard somebody say, "This *tastes* as musk *smells.*"

For all ordinary purposes, sight and hearing and touch are the most important senses, and of these we should place sight and hearing ahead of touch, and of sight and hearing we should place sight first.

It is generally accepted that a man who has lost the use of the other senses, but whose sight is unimpaired, is better able to meet the conditions of life than the man who has lost his vision while retaining the use of the other senses. Accordingly we select sight as the first of the senses to receive systematic treatment.

II—THE VALUE OF EFFICIENT SENSES

The importance of training the senses may be explained in the following way. When sensations are weak or inaccurate, our knowledge also will be weak and inaccurate. From this it follows that memory also will be confused; therefore a good memory depends on good knowledge, and good knowledge depends on a good choice of sensation and perception.

THE VALUE IN CULTURE AND ART

The values of sense training are mainly (1) educational, in the form of culture; (2) professional; and (3) financial or commercial. All the geniuses of the world have been distinguished by their remarkably comprehensive vision.

It is recorded of the famous artist, Whistler, that he was most exacting in the care with which he trained his observational powers. One of his biographers says:—"I shall never forget a lesson which he gave me one evening. We had left the studio when it was quite dusk, and were walking along the road by the gardens of Chelsea Hospital, when he suddenly stopped, and pointed to a group of buildings in the distance, an old public-house at the corner of the road, with windows and shops showing golden lights through the gathering mist of twilight, and said,

'Look!' As he did not seem to have anything to sketch or make notes on, I offered him my note book; 'No, no, be quiet,' was the answer. After a long pause he turned and walked back a few yards; then, with his back to the scene at which I was looking, he said, 'Now see if I have learned it,' and he repeated a full description of the scene, even as one might repeat a poem one had learned by heart.

"Then he went on, and soon there came another picture which appealed to me even more than the former. I tried to call his attention to it, but he would not look at it, saying, 'No, no, one thing at a time.' In a few days I was at the studio again, and there on the easel was the realization of the picture.

"This incident, which illustrates his capacity for rapidly taking in a subject as a whole and retaining the impression until he could realize it in painting, seems to throw a considerable light on the aim of much of his work, and to reveal in no small measure the secret of its charm."

Memory Through Observation—The same is true of Rembrandt. At the age of twenty-four, he did not possess sufficient knowledge to draw animals or figures from memory correctly enough to make them convincing. To remedy this he practiced observation exercises, coupled with a vigorous use of the pencil. Yet, in spite of this constant practice, years elapsed before Rembrandt had mastered the details of observa-

tion so completely that it became impossible to tell whether a figure in his work was drawn from a model or from memory. Excerpts from hundreds of biographies of men of thought and men of action could be quoted to emphasize the educational value of keen observation.

Nature and Poetry—Take Robert Browning's case. His biographer says, "It is interesting to know that many of the nature touches were indirectly due to the solitary rambles, by dawn, sundown, and 'dewy eve,' in the wooded districts south of Dulwich, at Hatcham, and upon Wimbledon Common, whither he was wont to wander and to ramble for hours. . . .

"I have heard him say that his faculty for observation at that time would not have appeared despicable to a Seminole or an Iroquois. He saw and watched everything—the bird on the wing, the snail dragging its shell up the pendulous woodbine, the bee adding to his golden treasure as he swung in the bells of the campanula, the green fly darting hither and thither like an animated seedling, the spider weaving her gossamer from twig to twig, the woodpecker heedfully scrutinizing the lichen and gnarled oak-bole, the passage of the wind through the leaves or across grass, the motions and the shadows of the clouds, and so forth. . . . He never forgot the bygone sunsets or great stars he saw in those days of his fervid youth.

"Browning remarked once that the romance of his life was in his own soul and on another occasion I heard him smilingly add, to someone's vague assertion that in Italy only was there any romance left: 'Ah well, I should like to include old Camberwell.' Browning thought that romance still clung to his birthplace because his youth was trained there in the right way."

Burroughs says of Tennyson: "A lady told me that she was once walking with him in the fields when they came to a spring that bubbled up through the shifting sands in a very pretty manner, and Tennyson, in order to see exactly how the spring behaved, got down on his hands and knees and peered a long time into the water. The incident is worth repeating as showing how intently a poet studies nature."

PROFESSIONAL VALUES

The second section of the subject concerns itself with the professional benefits resulting from trained senses.

An illustration of what can be done by close observation is found in the way in which a boy of twelve, by persistent watching, upset the pet theories of some leading ornithologists respecting the habits of young snipe. The bird experts said that young snipe run about as soon as they are hatched. The boy insisted that they did not, but were fed by the mother for several days after leaving the egg. "I first wrote down

what I saw," he tells us, adding rather significantly, "I have read very little about snipe." Had he been content with reading, he might have agreed with the expert opinion; but instead of being satisfied to derive his information from pictures and printed descriptions, he examined bird life for himself, and as a result confounded the authorities, who finally had to admit that he was correct.

A Scouting Episode—Now this same spirit and method should be applied to your own particular business or profession. The result may not be an immediate and striking originality, but you will have greater pride and confidence in your knowledge because you have gained it yourself at first hand; it will also be more intimate knowledge; and it ought to lead eventually to some type of superiority.

Take the case of military scouting. There was not much opportunity for this form of activity during the Great War, but Major Corbett Smith in his *The Marne and After* cites a striking illustration of close observation on the part of a British corporal. A small patrol of men under a corporal, all being trained in observation work, was selected to attempt to rush a farm without being observed.

"The back of the farm gave on to a copse of trees. 'What kind of trees?' asked the corporal. 'Beech,' was the reply. So the corporal knew at once that as there is little or no undergrowth

in a beech copse it would be difficult to get at the house from that side. However, they made a start.

"Very quietly they approached the copse. Suddenly a pair of wood-pigeons flew out, disturbed, so they guessed, by someone in the wood. That settled it, for there was no one else about save the enemy. The patrol crept around to the front, got in and surprised four of the enemy in the back kitchen. A fifth was in the copse collecting wood. Had the corporal not known about beech trees, and had they missed the significance of the pigeons' flight, the little surprise might not have come off so successfully."

THE VALUE OF OBSERVATION

The importance of accuracy in observation is illustrated by the manner in which many of the greatest discoveries in science and industry have been made. We all know the story of Newton and the falling apple. The result of his observation was the formulation of the law of gravity, a fundamental concept in science.

Those who are familiar with astronomy know that it was the observation of certain unaccountable eccentricities in the movement of Uranus that led to the conclusion there must be another planet somewhere in the solar system, and Neptune was finally located, and named.

Observation of the iridescent rays in a pile of

refuse outside an oil refinery led to the discovery of the possibilities of coal-tar dyes, and many of the most valuable by-products of petroleum.

In the realm of industry and mechanics, everyone has read the story of Watt, who observed that when he held a teaspoon in front of the spout of a kettle, the vapor forced it backward in spite of his effort to hold it still. From that hint he developed the steam engine. It was observation of the simple fact that an electric current lost its force when it had to pass through a coil of German silver wire that made possible the electric street car through the invention of the rheostat. Before that discovery and its application it was impossible to use electricity for motive power, as there was no way to graduate admission of the power for starting the car.

Keen observation of the habits of hawks, gulls, and swallows prepared the way for the invention of the glider, the motorless airplane. It was noted that the birds have one sensory advantage over man. They instinctively scent interfering air currents. The nearest approach to this ability is in the use of the pilot's skin sensations. A coating applied to his face makes him especially sensitive to the slightest breath of air.

The Detective Faculty—If you had a pair of worn boots given to you in order that, after a close inspection, you might say something def-

inite about the physical and mental characteristics of the wearer, would you be prepared to make the attempt with any degree of confidence? Perhaps not; yet close observation, plus experience can produce astonishing accuracy. Here is an illustration. A pair of worn shoes was given to a doctor who had specialized in the Sherlock Holmes method of deduction, and his interpretation was as follows:

"He is a very tall man, because no short man would wear such large shoes. He takes a long stride when he walks. I can tell that because the heels are worn down to a surprising extent.

"You will notice that when you take a long stride the heel of the foot touches the ground first, and this wears the heel away.

"He suffers from rheumatism, for the perspiration that has worn away the leather inside tells me that.

"He spends much of his time in the open air, and from the depressed mark on the sole near the instep I would venture to say he was a bus conductor. The mark would be caused by constantly stepping on and off buses.

"Whoever he is I should say he was careless in dress. He is not an athlete, for his toes turn in."

The boots were then given to a detective who reported thus:

"He is a tall man—about 5 ft. 10 ins.—and is very heavily built. Judging from the way his

shoes are worn down he weighs about 195 pounds. He is not of the laboring class. He is extremely careless in the way he wears his shoes, and by the way he has worn them down I should say he was hard up at the time he wore them. He is also pigeon-toed."

The shoes shown to the doctor and to the detective belonged to a newspaper reporter. The man, as the doctor stated, is very tall—he is over 6 ft. in height—and he also takes very long strides; he boards more buses than the average man, and is constantly in the open air. He also suffers from rheumatism, and although a tall, big man, he does not engage in athletic pursuits. In the opinion of several men he is careless in his dress.

Identification Systems—During the last twenty years we have seen great advances in the science and art of tracking criminals. "Systems" have been formulated for this purpose. The anthropometric method of Bertillon was at one time used in every country.

Sir Edward R. Henry's finger-print method and the Gross system were later in the field and apparently much more effective than the Bertillon system. Professor Gross brings into action every possible item of knowledge that may be involved in the crime. He maintains that he is an expert in all the methods of lawbreakers, using for his work a profound knowledge of

languages, photography, medicine, biology, bacteriology, chemistry, trades, and psychology.

Correct Inferences—The basis of this whole system is keen and accurate observation, plus the power to draw correct inferences. Let us take some instances. How does a prisoner sham deafness when he fears an acute cross-examination? He never even winks when a heavy weight is suddenly dropped behind him. His cleverness is his undoing, for a deaf man would wink and even turn around, the heavy vibrations alone telling him something had fallen.

A suburban house had been entered and many things were stolen. The thieves, in order to throw the police off the track, had caused foot marks to be imprinted on the soft soil of a flower bed. There were signs of four different people, one of them a woman. The detectives saw very soon that these footprints were intentional. The man who used the woman's shoes *had walked with a man's stride.*

Again, a suspected thief was being examined on a charge of having robbed a flour mill. The mud on his shoes proved to be the means of convicting him for there were two layers of mud on them with a thin layer of flour between!

The Artist as Observer—A very different illustration of the trained eye is furnished by the famous Leonardo da Vinci in his *Treatise on Painting* (London edition 1877). To a young man of artistic susceptibilities he says that "in

order to acquire a true notion of the form of things he must begin by studying the parts which compose them, and not pass to a second till he has well stored his memory and sufficiently practiced the first; otherwise he loses his time, and will most certainly protract his studies." Da Vinci then offers some of his own observations, one of which shows that the cartilage which raises the nose in the middle of the face, varies in eight different ways.

THE VALUE OF WELL-TRAINED SENSES IN BUSINESS

We said that sense training also has a financial value. If you go through life with trained senses, enabling you to hear more and see more than the average man, as you inevitably will do if you follow PELMANISM conscientiously, you will not only fill the treasure-house of your inward resources, but you will also be in the possession of qualities on which business men the world over have placed a great value.

Nothing is so annoying to an employer as inaccuracy on the part of his staff due to want of attentive observation of detail. A young man is sent to a job with blue prints for the foreman. When he comes back, his employer asks how they are getting on with the plastering and whether they have completed the second coat yet. He doesn't know. He didn't notice because he was not alive to his surroundings. How

different was the impression made on the employer's mind by a young man who could tell him promptly that they had completed the second coat on all but the ground floor.

Training Left to Chance—Now the man who failed to keep his eyes open was probably a loyal, trusted employe efficient in many ways, but he had never taken the trouble to develop a habit of observation. He probably never realized the importance of so doing. And what is true of him is true of thousands of other persons. They neglect this important matter of training, and postpone all action waiting for an inner call which somehow never comes.

To speak plainly, this is quite an unscientific outlook. In spite of all our boasted love of science, we never seem to apply that science to our own development. We seem to imagine that we see everything that is worth seeing, and hear everything that is worth hearing, and that these two leading senses never call for the attention of practiced discipline. In this way we are grievously mistaken.

The student may congratulate himself that, in taking up this Course of training, he has made an investment that in pure educational worth and practical business value will pay him a dividend of a hundred per cent., because it introduces him to the scientific method as applied to mental efficiency. It is the trained mind that wins, always and everywhere.

Use the Senses Together—In common experience many of the senses act together. Thus, if you take a walk and on returning try to remember everything that has appealed to your senses, you are reproducing sights, sounds, odors, and touch experiences. After you have carefully examined a coin about which you are doubtful, and found that it has all the appearance of being genuine, to the eye at least, you call in the aid of the sense of hearing by ringing the coin on the table to compare its sound with your recollection of the true ring.

When you examine a piece of cloth to see that it is all wool you do not trust to your sight alone, but run your fingers along the edge to compare it with your recollection of the peculiar feeling of pure wool. *To use the senses together is one of the precautions necessary to obtain accurate knowledge,* and the more highly developed each sense is, the better is it as a guide to facts. A true perception of an apple is a very complex affair made up of such sensations as size, shape, color, hardness, smoothness, juiciness, sweetness, coolness, and fragrance. Also, to *train* the senses together is important. Thus in the study of the violin, the ear is occupied with the sound produced by the fingers moving in response to *touch* and very delicate *muscle* and *joint* sensations, to create the proper purity and intensity of tone.

Two Interesting Cases—The value of a

trained eye has often been referred to, but we are in constant need of a reminder, every one of us,—the student, the business man, even the woman who goes shopping. Halleck says a lady went into a certain store to buy a lace collar. It so happened that only the cheaper grades were in stock, and these did not suit her. The unscrupulous clerk soon saw that she could not tell the difference between a fine and a coarse grade, or a machine or a hand-made article, so he continued making new discoveries in his stock and raising the price each time. He noticed that she was better pleased as the price rose, so he sold her "a fine imported" specimen at $12.50, which was nearly $10.00 more than he had at first asked her for the same quality of goods. This was a case in which careful inspection would have detected the fraud.

The Buyer "Eye"—One reason why some uneducated men are so successful in business is because they are such excellent observers. Instead of poring over books, these men, moving around the busy world, learn facts at first hand.

The head of a large firm, when asked why he employed such an ignorant man for a buyer, replied, "It is true that our buyer cannot spell correctly, and he has probably never read a book through, but when anything comes within range of his eyes he sees all there is to be seen. He buys over one million dollars' worth of goods a year for us, and I cannot recall a single instance

when he failed to notice a defect in any line, or any feature which would be likely to render them unsaleable. I shall never put in a bookish man as a buyer, because he will never see anything unless a book first points it out to him."

This business man's verdict was the result of observation, which, he said, was superior to theory. While there is nothing that forbids a proper combination of books with a use of our senses at first hand, such a combination is too seldom encountered.

Precious Stones—Another instance of the financial value of keen powers of observation is seen in the ability to distinguish the *artificial* from the *real*. This is a wide sphere in itself but let us take one that sometimes concerns us individually—precious stones. There are rubies—and rubies. Out of a thousand average men and women, how many can tell the politely termed "synthetic" ruby from the real thing? Probably not one per cent. Mr. Noel Heaton, an expert, has drawn up a little guide to "ruby reality."

STRUCTURE	REAL STONE	ARTIFICIAL STONE
Bubbles	Irregular in shape, often elongated and frequently angular.	Generally perfectly round, rarely elongated and never angular.
Variations of color..	Color frequently varies in different parts of the stone, the bands being either parallel or irregular.	Color generally uniform, but occasionally varied, the bands then being curved in outline.
Striations	Perfectly straight or angular in outline.	A series of concentric curves.
Inclusions of foreign matter	Particles of various size arranged in an irregular manner.	Small particles generally arranged in curves following the lines of striation.
Silk	Quite characteristic of natural ruby—due to a series of minute parallel canals arranged in three definite directions, giving a silky sheen by reflected light.	*This structure is never found in artificial stones.*

Note: In these days when there are so many imitations of the diamond, it may be useful to know that the simplest test is transparency. You can see clearly through a real diamond; but not through a rhinestone.

It is affirmed that with the aid of a jeweler's microscope the artificial ruby can be detected even by the uninitiated. It is, however, not an exercise which the Pelman student is compelled to practice. But to note how strikingly it shows

the value of a study of detail, and of the certainties that arise from such a study, witness the discovery announced in italics in the third column.

Nearly every proposition, if it be subjected to close analysis, will yield a similar discovery. You may persuade yourself that you know all about your business or profession, but there are undoubtedly many details you have yet to learn.

III—ACCURACY AND SPEED

There are two desirable attributes in the power of observation, one of which is *accuracy* and the other is *speed*. It is necessary to look at some things very carefully in order to be sure whether or not they move, or whether or not they change color. Sometimes, a very close inspection of material is necessary in order to discover defects.

All these operations depend on accuracy in noticing difference and agreement, and this accuracy is the direct result of attention. One of the first, and also one of the most difficult tasks in *training* the senses is to distinguish the action of one sense from that of another, as for instance to keep sight distinct from hearing.

Let us suppose that you want to remember the telephone number, 3112. Until you have, by considerable practice, trained sight and hearing to work in perfect co-operation you should

entrust the task to the mind through the better developed sense. Thus, if your memory is better for visual impressions you should look well at the telephone number in print or in your own handwriting; or *imagine that you see it.* If, on the other hand, you remember what you hear better than what you see, you should repeat aloud several times "3112." Later, when you have trained the senses to work together, you should combine both impressions.

Each sense plays its part in the problem of memory. According to the relative development of their senses, some persons remember most easily those circumstances presented to their minds through the sense of sight, while others more readily remember through impressions of sound. Often the memory of individuals is keenly responsive to the senses of touch, smell, and taste, but these are of less general utility in ordinary everyday life.

On the other hand memory for any of the various sense impressions may be peculiarly weak and the memory for ideas resulting from reasoning may be strong. Such a memory recalls ideas by means of their relations of cause and effect, whole and part, and kindred associations which will be explained in Lesson VII.

THE DEFICIENT SENSE

Some people place all their trust in only one sense, for example, the visual, thus neglecting

the auditory sense. It is necessary, therefore, that *the sense which is deficient should be developed.* The natural tendency is to depend on that sense which seems to produce the best results, and this favoritism works to the detriment of the other functions, which should be compelled to bear a share of the burden.

The student should be able to use any one sense to the full, and he should also be able to compel other senses to assist in acquiring exact knowledge and in memorizing it. For instance, if you find it difficult to remember anything in writing or in print, try reading it aloud to yourself, taking note not only of the meaning of the words but also of their appearance, their relative position on the paper, and their actual sound. You will thus be sending to the brain a visual impression and an aural impression at the same time (both being physical impressions), and with them you will also be uniting a better mental impression of the meaning of what you are studying.

By mental impression we mean the result of reflection on the material supplied by the senses. Thus, a boy may have a poor memory, *naturally,* but as a stamp collector he can identify thousands of stamps, and determine their values, because his physical or sense impressions have been strengthened by the mental impressions arising out of his love for stamp collecting.

HOW TO REMEMBER NAMES AND FACES

"My memory for names and faces has served me well," said a New York man one day as he stood in his store. "Two years ago I was introduced to a Mr. Brown at Omaha. I saw him for just one minute. Yesterday morning he opened my office door and I recognized him instantly. 'Good morning, Mr. Brown,' I said, 'how are you and all your friends in Omaha?'

"He seemed quite staggered. He probably expected it would be necessary for him to recall our meeting. Of course he was all the more pleased that I saved him the trouble, and I sold him more goods than I might have had I failed to identify him, or worse still, *pretended* to and bungled.

"Yes, I tell you, memory is good business. I *always look for a distinguishing mark*, as well as try to get a general impression. Brown has a blue mark on the bridge of his nose and his eyes are fiery."

"Of course you practiced a good deal?"

"Yes. And now I never forget a face—once I have really *seen* it."

The key to the whole position is found in the last phrase "never forget . . . have really *seen* it."

Names by Sound: *Faces by Sight*—The great difficulty in remembering people's names arises from the fact that the name is a "hearing" while

the face is a "seeing." We have little or no difficulty in remembering names that we are in the habit of seeing, especially when they are usually presented to our attention in immediate connection with the face to which they belong. The faces used in magazine advertisements, for instance, are always associated with the name. We are in the habit of seeing both together. They have been presented so often to the mind as ideas of equal strength, that they have been blended into one idea, and either the name or the face instantly recalls the other.

Names of famous persons, which are continually before us in the newspapers, are easily remembered, because we have the visual memory of them to help us. We seldom forget the names of persons with whom we correspond, because we are familiar with the visual appearance of the written name, and it has gradually blended with the general memory of the person to whom it belongs.

It is the names that we never see written or printed that we forget, or the names of people just introduced to us, or whom we meet casually in society or business. Whenever you find yourself unable to recall the name of a person that you have met dozens of times, if you will think it over, you will usually discover that it is a person to whom you have never written, and whose name has never been to you anything but a sound. The auditory impression, in such

cases, needs to be supplemented by the visual impression.

Sound and Spelling—In order to bring the sight memory of a face and the sound memory of a name into the same class, to establish the connection whereby one shall recall the other, *the student should concentrate his efforts chiefly upon paying attention to the name when he hears it.* Let him ask how it is spelt if he does not know. He should also pronounce it aloud, paying particular attention to the spelling and to any peculiarities that the name suggests.

Every time you think of a person, be sure to recall the name at the same time, and mentally spell it. Every time you meet a person whom you know, recall the name, even if it is not necessary to address him by it; and, in recalling it, try to get the visual memory of it, or spell it to yourself.

The most important thing is to pay attention to the name upon the first introduction. Many persons are singularly careless in this respect, and do not really hear the names. They are under the impression that it is impolite to show a desire to have the names repeated.

This practice allows the "sight" impression of the person to be so much stronger than the "sound" impression of the name that the ideas do not unite. The stronger completely obliterates the weaker.

In order to cure yourself of this habit, if you

have contracted it, try for awhile to get a stronger impression of names than of faces, when you meet people for the first time; and, above all, do not forget to combine with the sound of the name an image of its written appearance.

If for any cause the memory for names begins to decline, the student will find an effective remedy in carrying out the hints just given, and using proper names when speaking to, or of, the people concerned. Do not be content with such phrases as "Mr. What's his Name." It is useful in this case to devote a few minutes daily to the recall of personal names in groups associated with particular places and various periods of life: as it were to overhaul one's stock of names and to see that they are all in their proper niches.

IV—SUMMARY AND PERSONAL APPLICATION

Look back upon the pages you have read and pondered. What do these sections and divisions amount to? What is their effect upon you? How are they going to improve your mental abilities and impart moral interests? In what way can they increase your finer sensibilities as well as your emoluments? These are the personal questions you ask yourself, and we will deal with them at once.

This lesson shows you how to train the senses, especially those of sight and hearing. Have

you made up your mind to take that training? If you have, you will enjoy the succeeding exercises, and profit accordingly; if not, you will go through them perfunctorily and receive only a fraction of the possible benefit. Now we want you to realize two facts: that much depends on your own efforts, and that these efforts are fraught with great value and consequence to your future career. Begin, therefore, to act. When you have studied the Memory Training section which follows, plunge into the exercises with judgment and enthusiasm. The circumstances and routine of your life will suggest, when you have practiced these exercises formally as they are here prepared, many useful applications of them. Determine that your senses shall be acute and that your mind shall be a keen instrument, whose quickened sensibilities will aid the interpretation of the material presented.

V—HOME EXPERIMENTS

The influence which one sense exerts upon another is illustrated by the following surprising fact: If beef and mutton be cut in very thin slices and eaten in the dark, most people cannot discover any difference. You may even find it difficult to distinguish between a thin slice of pork and that of the breast of a turkey. Similarly coffee in a glass, as the French take it, does

not taste the same as in a cup. Taste can give us only four simple sensations—sweet, sour, salt, and bitter.

All our delicate taste discriminations are due to the sense of taste *aided by smell and touch.* You have, doubtless, noticed that when you are suffering from a stuffy head cold, impairing your sense of smell, all your food tasted alike. Hold your nose, close your eyes, and then have someone give you a spoonful of clear tea, coffee and cocoa, in an order unknown to you. Observe how the aroma and flavor are both lacking. In determining solid foods the *touch* sense in the tongue, showing the graininess, grittiness, smoothness, and the like, plays an important part.

Seeing and Not Seeing—The exercises up to the present have had the object of developing the perceptive powers in a general sense with a view to training the student in *accuracy and speed.* Of course the notion of *comprehensive vision,* seeing and hearing all that is worth while, has not been forgotten, but emphasis has been laid on the difference between *mere seeing* and *real observing.*

A professor once undertook to show his pupils the difference between these two visual acts. Taking a graduated glass he filled it with a certain liquid. He then inserted a finger in the liquid, and afterwards was observed to put a finger in his mouth.

The pupils were requested to file past the table, accurately to repeat his action, and return to their seats. They did so, each man receiving from his finger, in restrained silence, a horrible dose of asafoetida, (a strong odor and taste of garlic) which he was careful to see his successor should not miss. When the class had all resumed their seats, the professor remarked, with a weary smile: "Gentlemen, you did not *observe* that the finger I put in the graduated glass was not the finger I put in my mouth."

Real observing includes another factor, namely *interpretation*. We must *understand* what we see and hear.

The interpretation of your observation is the practical application. Take the question of *character*. What qualities strike you when you meet an individual? To know him externally by seeing him is one thing. It is another to divine some of the elements that make up his personality. Does he suggest egotism or altruism? Is he refined or vulgar? Is he shy and reserved by temperament or does he pose? Would you trust him? If he is careless in dress is it mere slovenliness, or does it indicate that he is so absorbed in other interests that he has not time to think of his appearance?

We shall now introduce some more advanced exercises, quite as interesting and profitable as those which have already been given.

A General Test—Ideal sensory efficiency does

not mean proficient observation of objects under the artificial conditions of a special test; it implies rather a proficient observation of everyday objects under normal conditions. For this your senses must be in a state of perpetual efficiency, so that you are always observing well. There are two ways of finding out whether this is the case. One is with old objects and the other is with new ones.

Few students get 100 per cent. in naming chief characteristics of old objects with which they should be completely familiar. Few women, indeed, could match the pattern of the dinner set they place upon the table every day. They might recall the color or have some vague idea that there were flowers in it. They see the general effect, not the details. Their senses are not highly efficient.

With reference to new subjects: let us suppose you had an interview with Mr. Lee, of the Cape Linen Co., yesterday. Can you remember the details of his face, the color of his eyes, the cut of his clothes, the tone of his voice, the table or the room or many other of the thousand and one things which your senses sensed? You can remember very few; again because your senses are not efficient. However, not *all* details are to be especially noted. *Select only those that will aid in recall of objects or situations of interest for you.*

Study Details—Think of three objects which

you see daily; your breakfast table, the face of a friend, a certain stationer's shop or a building, anything, indeed, that makes an *appeal* to you. During the next three days inspect the selected objects closely, and in the evening try to visualize each object with as much detail as possible.

Then select some object connected with your calling, and when you feel you know it in this intimate manner, add other objects and treat them in the same way. The value of all this is twofold. You will, in time, amass a store of rich material for memory, imagination and thought; and your senses will reach, eventually, a very high state of efficiency in lines of benefit to you. You will also form the habit of rapid, accurate observation.

A Doctor's Training—Below we give an example of the way in which an M.D. student of the Pelman Institute adapted the principles of perception to his own professional needs.

I. *Examine the Tongue.* A brief observation should enable one to note:

(a) the shape and color, and whether the surface is dry or moist,
(b) whether it is protruded in a straight line,
(c) the presence or absence of fur, and the character of the papillae,
(d) whether or not the tongue is tremulous.

II. The artist, and the student of Medicine, will find it useful to observe any anatomical pe-

culiarities. For example, the shape of the head and face offers much scope for observation:

(a) is there any want of symmetry in the head?
(b) are the two sides of the face alike?
(c) what is the facial angle? (The angle formed by a line drawn downward from the forehead to the nostrils and another drawn horizontally from the nostrils to the ear. The ideal Greek facial angle is a right angle.)
(d) are there any peculiarities in the shape of the ear, or in the manner in which it is united to the head?

III. On a patient being announced glance at him and state:

(a) the build: spare, medium or full habit,
(b) observe his manner of walking: does he walk straight, or does he tend to deviate? If his gait is abnormal, would you classify it as:

spastic (spasmodic),
ataxic (disorderly), or
reeling?

An acute observer will be able to write fully on all these points after a momentary glance.

IV. On *shaking hands*, a careful observer should note instantly:

(a) the strength of the grip,
(b) any clamminess or heat,
(c) tremor,

(d) shape: stunted, spade-like, joints large, enlargement of the finger ends?

V. *His manner of speech.* Is it:

(a) scanning,
(b) lolling,
(c) slurring.
(d) syllable-stumbling? or what?

VI. *The eye.* A glance should suffice to determine:

(a) whether the pupils are equal or not,
(b) the condition of the Sclerotic (the "white"),
(c) whether or not Ptosis (drooping of the upper eyelid) is present?

VII. *The face*:

(a) is the skin dry or smooth?
(b) undue pallor or redness,
(c) any want of symmetry,
(d) when he smiles is there any sign of paralysis?

Driving a Motor Car—To take a very different example, we now present an application of Pelman teaching in the use of Observation when driving a car. A Pelmanized driver-owner minimizes risk of accidents. For, as one writer has said in a brief review of the Pelman Course, "the Pelman discipline makes him see quickly, hear acutely; it sharpens all the senses." Pelmanism inculcates "road sense." The eye of an alert car-driver takes in signs, sounds and

sights with the sharpness of an experienced scout. He deduces probabilities and controls his wheel accordingly. He makes note of the destination legends on public vehicles in the crowded streets of towns, thus checking his route. When driving at night he watches the tops of distant telegraph poles to catch the light from the head-lamps of approaching cars. By glancing at the direction of the telegraph wires, one may determine whether the road that lies ahead turns suddenly, or is crossed by another road. His ear detects at once not only that something is amiss but what is amiss in the running of the car. Every significant sign is sensed almost automatically by the observant driver.

VI—DON'TS

1. Don't say "My senses are naturally keen" until you can work all the exercises with speed and accuracy.

2. Don't undervalue Perception in this system of mental training. Genius has unusual perceptive power as one of its primary characteristics.

3. Don't train in *your* way: follow ours. It is based on years of experience.

4. Don't worry if progress is slow at first. Proficiency is simply a question of time.

5. Don't forget to adapt the Perception Exercises to the needs of your calling.

6. Don't work moodily in the spirit of "I—suppose—I must." Keep cheerful and press on.

VII—THIS DO

1. Determine to learn something (some star groups, for example) purely by observation as far as this can be done. When you know them by sight and position, buy a star atlas and learn their names.

2. Ask yourself what new and undiscovered thing there is in your calling that can be brought to light by developed senses.

3. Believe in your possibilities, and act up to your belief.

4. Strive to understand the meaning of the *significant* things you see and hear. To catalog them in the mind is not enough.

5. Strive also to see the extraordinary things which camouflage themselves in the apparel of the ordinary.

6. In the realm of the Real look for the Ideal.

VIII—MENTAL EXERCISES

EXERCISE XIII—ANALYSIS IN BUSINESS

This method of close analysis is of high commercial importance. We have known of cases where minute investigation of a commodity supposed to be perfect has revealed defects, which, when remedied, greatly increased the utility of the article, and naturally increased demand. This meant increased production, lower costs, and more profit.

You are now in a position to choose some small object for close analysis, preferably an object that is of importance to you in some way. A tobacco tin, a fountain pen, a lock, anything will do that is detailed in composition. As you make your discoveries one by one, write them down on a slip of paper. In reporting on the exercise you should state the object selected, the length of time spent in analysis, and the number of new discoveries you made. A "discovery" is, of course, something you did not know before. The exercise should be practiced until the habit of analysis has been developed.

Illustrations in Sight Training—Another method of training the powers of observation by close analysis is to take up the study of finger prints. Text books on the subject are available in any of the public libraries. You can begin with your own finger prints, a small tube of printer's ink, and a few unglazed cards being the

only materials necessary. With a small magnifying glass you will soon become interested in the study of loops, arches and whorls.

When you know the technical names of the various parts of a finger print, you can compare your own prints with those of another member of the family, or of a friend in order to discover likenesses and differences. The various uses of such knowledge, when applied, are more numerous than would at first be imagined.

Another exercise which might be suggested is the study of the marbles used in the corridors of the various office buildings which you visit. If you begin with Italian and learn to distinguish it from American or Vermont, you will soon be able to pick out the colored marbles, so as to recognize Knoxville, Pavonazza, Egyptian, Sienna, and many other beautiful grades that are used in decoration.

In the country, try your eye on the trees. Begin with the pine, and the difference between it and the spruce, or the hemlock or the fir. Get so that you can tell the difference between the blossoms of an apple tree from those on a peach, a pear, or a cherry. Learn to tell an elm tree from a maple, and a sycamore from a beech.

These sight training exercises are not outlined in the belief that they represent finality, but they contain basic principles of method which are capable of an almost infinite number of variations. The discovery of these variations is in it-

self a pursuit both attractive and profitable, and we recommend it to the student's earnest attention. We know from years of experience that the conscientious observance of such exercises as are found in this lesson is certain to produce not only a vast amount of detailed and accurate information, but also a facility for noticing things, which cannot help but prove materially profitable.

EXERCISE XIV—EAR TRAINING

(a) The human voice offers an unusual opportunity for training the sense of sound by providing a great number of inflections, tones, half-tones, all of them indicative of change in feeling and thought on the part of the speaker. To study the voice in relation to character is therefore an effectual exercise in both hearing and judgment.

Why are some voices so grating and others so pleasing?

Why are some so irritatingly monotonous?

How would you classify voices?

Such questions, which you can ask yourself as you listen, may help you a great deal in mastering the science and art of reading character. Unfortunately there is no book on the subject, but this fact allows greater scope for originality.

(b) 1—Ask a friend to give you verbally the telephone numbers of three people known to him; then try to repeat the three (1) immediately after hearing them; (2) five minutes after hearing them.

2—Ask your friend to give you a few verbal orders one day with the object of your reproducing these orders the next day, without having committed them to paper.

The orders may be varied in many ways, but as long as the rules laid down are carried out, the details of the orders are of no consequence.

If a friend's help is not available, try to recall a conversation or a remark heard on the previous day; or listen to a lecture and write down afterwards the most striking sentences.

EXERCISE XV

For this exercise it is necessary that you should select a street which you know very well indeed —or a section of a street if the one chosen be a very long one. Write down the following from memory:

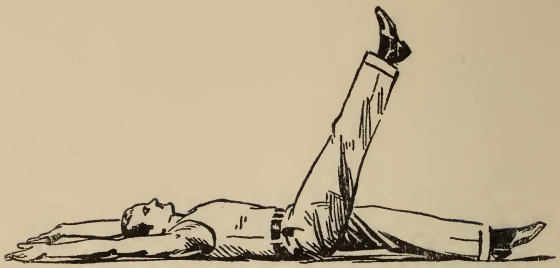
(a) How many drug stores are there in it?
(b) How many grocery stores on the corners?
(c) How many shoe shops?

The object of the exercise is to test your *unconscious* observation.

IX—HEALTH EXERCISES

FOURTH LESSON

Exercises of themselves are only a means to an end. The end sought for is an efficient machinery to make life pleasanter, work easier and daily existence more comfortable. If we accept the statement that the body is only the instrument of the brain, we must realize that unless there is co-ordination of the senses backed up by the will to do, there can be very little value in the performance of any series of exercises that have for their purpose the establishment of a closer relationship between the mind and the body. Therefore in order to make our efforts profitable it would be well to adopt some slogan that in some way symbolizes the aim that we have in mind. A simple little saying that we can repeat while exercising or while carrying on the daily routine of business; one that would help us while we are relaxed from business cares or personal worries, such as "*Stand-Straight To-day*" may well prove of incalculable value. It implies an interest in your appearance and health and could well be used as an aid in benefiting your mental and physical being.



28



29

GETTING UP—NO. 1

For the first few seconds after the alarm clock goes off, one's mind is usually hazy and there is a general feeling of physical laziness. Do not jump out of bed; close the windows and begin a strenuous exercising. The heart and blood system is not ready for this strain. This sudden burst of action is comparable in its effect to the flare of a flashlight that goes off when you are not expecting it. The result is startling and to some, at least, nerve-racking. Prepare yourself for the ten minute work-out as suggested in some of the preceding lessons, by yawning and stretching. Throw back the covers then stretch one leg upward as far as it will go (Fig. 28). Roll it around in a large circle with the toes pointed and the instep arched, as you did in the ballet dance. Put that foot back on the bed and do the same with the other leg. Then, if you are able, swing both feet around several times, all the time lying flat on your back (Fig. 29).



30



31

Now roll over on your side, the side on which you get out of bed. Extend your feet over the side of the bed and raise yourself to a sitting position, both legs stretched out straight in front of you. Can you touch your toes (Fig. 30)? No? Just keep trying a little harder each day. It will take but a few mornings and your efforts will be successful. While you are still sitting on the bed place your feet on the floor with the legs straight and see if you can touch your toes now (Fig. 31). You may fail by a few inches but a little forced effort will loosen the back muscles and you will soon be reaching beyond the toes. It may take you several weeks but it is worth the effort.



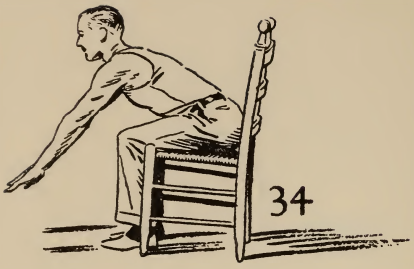
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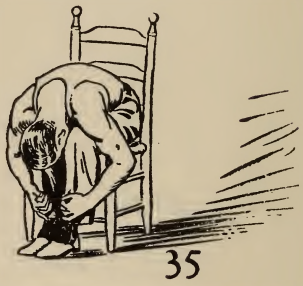


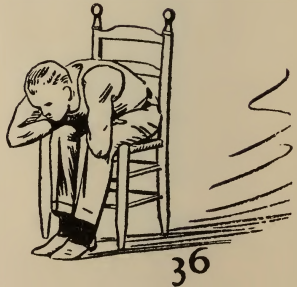
33

BENDING—NO. 1

Stand up and practice the windmill exercise (Lesson III); inhale rather deeply several times and then *Standing-Straight*, place your hands behind your neck, finger tips touching, elbows back and as high as your shoulders. Do not let your chin drop forward. Bend forward from the waist (Fig. 32). Be sure the elbows remain behind, and that the spine remains straight. Bend only from the hips. Now stand erect. Repeat five times. Try bending to the left and then to the right (Fig. 33) five times. Always come to a stop in the erect position. You will find these simple little moves have brought into play and softened up all the large muscles of the upper body.


34


35

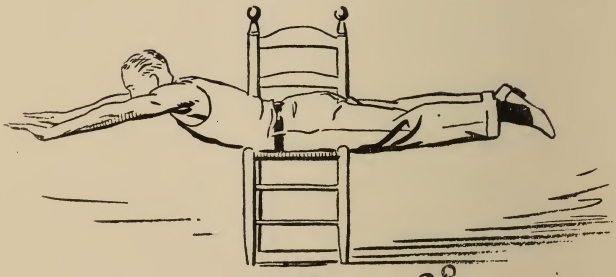

36

CHAIR—NO. 1

You have a chair in your room, perhaps a dressing bench or a stool. Have you ever thought that you could exercise while sitting down? Just sit well back in the chair with the head held high, the chest raised well up and your body erect. With the feet together in a natural position, bring the knees together also, then raise your arms shoulder high in front of you. Bend forward and reach for the floor (Fig. 34). Very stout people may experience some discomfort because of the surplus tissue around the abdomen. Make the effort, however, as it is the effort that counts, not so much the touching of the floor. In fact, touching the floor may be a very easy matter for the slender person; in such a case, just catch the ankles with the hands and pull the body down between the knees with the arms (Fig. 35). As a milder variation, place the hands on the knees, then lean forward until the chest rests against the hands (Fig. 36). Now the real effort is in raising the body to the original sitting position. Instead of just sitting up, push yourself to the sitting position with your hands, at the same time resisting the movement by trying to remain in the forward position. The amount of resistance must be gauged by each person for himself. Allow enough resistance to make the arm work seem slightly tiring. Repeat the bending and straightening five times.



37



38

BREATHING

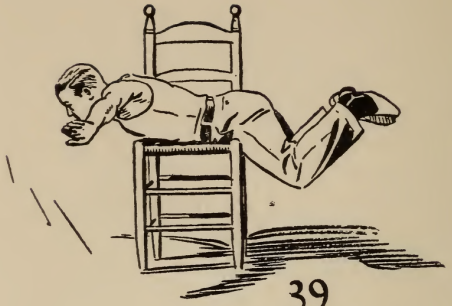
Sit erect in the chair, slowly inhale and count four as you place the hands behind the neck as in the previous exercise. Hold your breath, slowly bend forward, keeping the elbows back and the head high while you count four (Fig. 37). Sit erect again while counting four, still holding the breath; then lower the arms and exhale as you slowly count four. Repeat three times.

Examples:

Hands behind neck inhale—1—2—3—4
Bend forward, hold breath—1—2—3—4
Sit erect, hold breath—1—2—3—4
Lower arms, exhale—1—2—3—4.

SWIMMING—BREAST STROKE

If you are fond of swimming, there are several ways by which you can utilize this fondness to good advantage. The breast stroke calls for extreme co-ordination and is used mainly for racing purposes but it is a splendid form of general exercise. Imagine yourself in the water, stretch out full length face down on your bed or across your chair, your legs are together and extended as far backward as you can reach, toes extended and insteps arched. Your hands and arms are similarly extended upward alongside of the head so that you are lying in a straight flat position, completely stretched out (Fig. 38).



39



40

Now draw the knees up on each side at least as high as the hips. The lower leg will then be at right angles to the upper leg. As the knees are being drawn up, the arms are slung sideward, outward and downward to a position slightly below the shoulders. Palms are outward, arms are held stiff, elbows unbent (Fig. 39). Complete the arm circle by bending the elbows and bringing the hands to the chest, palms together as if praying. Now the feet are swung outward from the knees, way out to the side (Fig. 40). Almost in the same motion the legs are brought backward and together to the original extended position. At the same time the hands are stretched straight overhead to the original starting point. This is almost a continuous movement with only a slight pause at the end of the complete extension and should be an easy swinging rhythmic motion. Take it slowly at first but as the co-ordination becomes natural and the various parts are synchronized, increase the time. In order to complete our imitation, we can sprint the last twenty yards by a very rapid action. Fifteen or twenty times is enough at the beginning.

Finish your morning's health renewal by practicing the Ballet Dancer's exercise.

It is generally recognized that pressure properly applied is healthful in reducing excess fatty tissue. While these lessons are not intended for this purpose, you can take advantage of whatever they contain to help in taking off extra weight. These swimming exercises given above will necessitate lying on the abdomen. It may be moderately uncomfortable but the mere posture is of value if weight reduction is being considered. The bending forward exercise with the chair will also be helpful.

SUGGESTIONS FOR THE DAY

Avoid loss of sleep. Some people apparently live comfortably with a very small amount of sleep. The average individual, however, needs more than he usually allows himself. While the loss of sufficient rest and sleep may not be immediately apparent, the result ultimately is costly in the loss of nervous energy, irritability of disposition and disorganization of normal functions. It is better to save now and spend later rather than to spend now and go without later. Sleep in a well ventilated room. Have a window or door open to allow air movement. A reasonably warm room is better than a cold one. A cold room is no proof that the ventilation is good, nor is it conducive to complete relaxation and rest. Too much cold requires too many covers and too many covers are depressing. Insufficient covering should also be avoided. To be

of value, sleep and rest demand comfort. Six to eight hours' sleep is normally enough for any healthy, active individual.

Reference:

STAND-STRAIGHT
WARMING-UP NO. 3
BASEBALL BALL PITCHING
BALLET DANCE.

SPECIAL INSTRUCTIONS AS TO PROGRESS SHEETS AND TEXT BOOKS

1. Write your name and address legibly on every Progress Sheet.
2. Your number should appear on all your communications, otherwise much unnecessary labor devolves on the staff.
3. Do not think that your answer must be confined always to the space beneath the question. Use additional sheets if you desire.
4. The Text-Books should be kept by the student for future reference. Remember you will want to use these attractive and durably bound books for years to come. They will be a library of practical value for you.
5. From seven to ten days is usually sufficient for the mastery of a Text-Book and the completion of the Progress Sheet, but it is possible to do these things in a briefer period. Everything depends on the student's leisure. There is no fixed time for the return of Progress Sheets.

PELMAN LESSON V

The next lesson will deal with the vital subject of will-power. It puts the subject in a new light. You will realize the value of effort in life as never before. The principle of suggestion is expounded and illustrated. Habit, as an economy of will-effort, is a further topic of great practical importance.