

Woman's Physical Exercise Should Be Light

Interview With the Superintendent of Physical Training in New York City's Schools

"DUMB-BELLS" said W. R. Harper, the supervisor of physical training in the public schools of New York City, when interviewed on the subject of physical culture for women. "Yes, dumb-bells, to be sure, but not according to the old school. I would no more put a girl through what has been commonly called physical training than I would give her piano to move. The physical culture of the strenuous school is a dead letter."

"What did it do that it ought not to have done?"

"It over-strained fragile women, tiring them into prostration and illness. It racked their nerves with the effort to accomplish the assigned task. When it did no harm of this kind, it built up lumps of muscle that have no place in the contour of the beautiful woman. Who wants to see humps and boulders standing out upon a woman's shoulders, arms and back?"

"And what did it fail to do?"

"It failed to give graceful curves of form; it failed to give flexibility; it failed to give nerve relaxation, properly distributed circulation, bodily rest."

"Then what should the ideal modern gymnast offer?"

"Rather say, what should it suppress?"

In the first place, let pulley weights be done away with. Do not consider them harmful; used properly, they may be very beneficial. But they have been over-used by the enterprising young women of the now-lying fad—that fad which taught that the heavier the weight a woman could lift, the better off she was physically.

"Ladders, bars, weights, leather-mounted horses—all these have been used improperly in gymnasia. It seems hard for girls to repress themselves, otherwise they might be given all the apparatus with impunity. But under the strenuous fad is past I should say. Furnish a gymnasium with rings for swinging; mattresses for floor work; handball; medicine ball; foils and masks; wands; two-pound dumb-bells, and one-pound Indian clubs. Be sure to provide a piano; the outfit is then complete."

Mr. Harper represents the newest movement in physical culture for women, and he went on to explain what that movement means. It is based on the principle of relaxation. It is designed to ease and limber muscles that are



cramped by the ordinary life of the non-athletic woman. If she writes at a desk, stands at a blackboard, stitches at a machine, rides in her carriage, her muscles are not having full play, her body is not free. There is a bodily constraint in any life without athletics or some form of physical culture. Even housework, although good as far as it goes, has its limitations. It leaves certain muscles un-moved.

The new school remedies that fault of our modern housed life and does its best to make up the time when the fair sex reached for its own coconuts and ran wild in forests. Every form of exercise introduces what is known as "extension

work." This means nothing more than stretching.

In the dumb-bell work the reformation shows more than in any other line. There was a time when you could see in every woman's gymnasium a graduated row of bells hanging against the wall. The beginner was given a light wooden pair, gradually the weight was increased, finally a heavy iron pair was put into her hands. She had developed a manly muscle in the meantime, and she wielded these irons vigorously, pumping them up and down as violently as her brother. She was proudly becoming "hard." She stood rigidly during the performance. The up-to-date teacher offers nothing



A TWIST AND A BEND WITH THE DUMB BELLS

heavier than a two-pound bell to his most advanced pupil. His point is not to work up to the power of handling a heavy weight; it is to use the bells as a means to the end, namely, stretching. The light weight of the bell helps the pupil to put more force into her motions than she would if going through them empty-handed.

Even the primary exercises involve stretching. One bell is raised high above the head, then the other. Both are raised, are stretched forward, to the sides. As soon as a few motions of this

kind are learned, the steps are introduced.

Here enters another reformation. The new school does not give arm-work without leg-work at the same time. Mr. Harper says:

"It used to be customary to let a pupil stand rigidly still, sometimes for half an hour, and go through the most difficult arm-work all the time. The result was that the circulation was violently stimulated in the upper part of the body alone. The modern idea is to push the blood into stronger and quicker circulation through-

out the entire body, distributing it equally.

"Circulation is the watchword. On it depends everything. All the system is stirred to activity. The skin is cleared and brightened; that is the outward and visible sign."

So here is a word to the wise who want to better their complexions. As soon as the dancing steps and the dumb-bell motions are learned separately they are combined, and we have all sorts of pretty bends and twirls and stretches. There is far more grace in the new work than in the stiff, muscle-building old style.

Not but that the new builds muscle; but that is not the primary object, and the building is carried only to the point where it rounds out the form sufficiently for beauty—never beyond that.

Indian club exercises are the same as ever, with the addition of dancing steps. This work is based on the same principle, that the circulation of the blood must be evenly distributed throughout the body.

All the exercises are given in quick time for the sake of this circulation. The piano means much in that it inspires grace. If you will experiment you will readily find that it is easier to fall into pretty poses and move in pretty curves in rhythm with music than at the instigation of mere counting.

It is claimed that the old school failed to increase the flesh for the thin in that it worked their flesh off. It is an established fact that violent exercise, causing profuse perspiration, does this. In the last century all women, fat and thin alike, were given the same kind of hard lessons.

Abdominal work of all kinds is one of the specialties of the new gymnasium. Mr. Harper claims that dancing is one of the best exercises for the abdominal muscles. The jarring strengthens them. Certain twisting and bending movements effect the same result. That work is prominent also.

Most of all you may or may not know, is done while lying on a mattress on the floor. The legs are stretched to their full extent, up, out, and so on; the knees are drawn up on the chest; all the muscles in the region of hips and abdomen are forced into action.

"Handball is one of the best games a girl can play," says Mr. Harper. "It is light and quick. The blood is started into brisk circulation, but the physical strain of the game is not intense."

"Dancing and rope-jumping jar the body in such a way that they amount to an abdominal massage. They are invaluable in strengthening the abdominal muscles which are so inclined to be weak. When women have strengthened themselves in this way there will be less need of stern corsets to 'flatten the stomach'—to say nothing of less backache and better general health."

"Medicine balls" is the big, lightweight ball tossed from one to another. The tossing is required to be at short distance. This compels quicker action and less muscular force, the end and aim of the new work.

The rings are of benefit because they give extension. A girl dangling from them by her hands cannot well avoid being stretched to the utmost.

"Physical culture was a fad in the last century; today it is an accepted part of every education, based on scientific principles," says Mr. Harper.

KATHERINE MORTON.

Some Dainty Coiffures and Smart Blouses

These Are Essential This Winter for the Feminine Theater Goer

IN THESE days of luxurious costuming and bare heads for theater and concert, the importance of the coiffure cannot be set aside. It is not sufficient to have the hair clean, well brushed and arranged with a moderate degree of becomingness. The head which sets off a smart gown must match it in elaboration and show smooth and regular waves, puffs, coils and braids, all to be raised from the cranium in a way to suggest a dainty wig. To accomplish this, professional fingers are required, and now, as in the olden days, previous to all the styling functions, the hair-dresser goes from door to door to coax rebellious locks into wonderful structures.

False pieces are required for the majority of heads, and such bits go under the general titles of the transformation, the Parisian parting and the recent dip. The pieces are made up with identical rollers into the long and the most part to order. Many of them mingle with the natural hair in a most deceiving way. There is never a false or heavy lock for instead of the old matted, painfully introduced "long hair" all front padding is now made of long hair. These lightly-wired "pompadours" or "transformations," or whatever they may be called, are put under the growing hair or over it. If under it, the straighter outside hair parts here and there to allow a false loose-lock to emerge; at the back, the ends of the pompadour are gathered into the long up and down braid used, or the double figure "K" effect, which is of later introduction.

The low hair dressing, which displays a chignon, is made up of puffs and braids under a net is also much admired, as well as a broad-looking simple braid. This last style of coiffure, upon youthful heads, is frequently ornamented with artificial flowers sprinkled with rhinestone dew-drops, which produce a most brilliant picture. An enormous number of tinsel and flower ornaments are used for evening coiffures with very dressy or low toilettes, and some are so expensive as quite to take the breath away. But the ordinary high bodice which the theater goer calls for does not demand these spangled bows, iridescent butterflies and diamond-sprinkled wreaths, which, in Paris, deck elaborate puffs set like pincushions at the top of the head.

A smooth, wide waving of the front and side locks, with such combs and slides as appear fitting, seems to be the chief thing here for the ordinary evening head. Then it must not be to the coiffure newly washed. A modicum of natural oil is necessary for good results, and this is besides supplemented by a dressing that keeps the hair from scattering, and supplies it with a brilliant burnish.

Many, indeed, are the valuable secrets the coiffure might pour into the listening ear, but the final word on the hair subject has a literal golden weight. To be well coiffed one must spend money, and much money, for human hair is growing dearer every day, and the false pieces are so delicately made that they are soon unfit for use. Professional care of the hair is also indispensable for knowledge on the subject of correct washes, dyes and methods of treatment will naturally result in poor results. As to dyes, the fashionable colorings still include many shades of obscure and bluish-black, for the sentimental thing. "But in Paris," writes a correspondent of authority, "a number of the best coiffures object to dyeing and only resort to it when absolutely necessary. The consequence is one encounters many women with gray or turning hair supererbly dressed, who look years younger than if their heads were tinned a youthful hue. A certain colorless brown-mouse you might almost call it—which goes with a white-skinned, dove-eyed type of French woman is also enormously admired."

Thus was the word on the subject of hair. A word on bodices may follow.

the same pattern, with pipings of blue velvet. This jacket represents, one of the novel theater garments of the season and it is meant to be worn with a plain velvet skirt in the same color.

In a fashion equally fastidious and quaintly old-time is a point Marie Antoinette bodice in ivory mousseline velours. A tight swathing of the soft material over a closely fitted lining, and short sleeves which are feats of millinery, are delightful features of this waist which is shown with a skirt in the same material. The yoke is of lace draped with a fichu of India mull, and the bodice fastens slightly at the left front under three bows of coral pink taffetas.

The third bodice in importance is of orange lace net. The wrist length sleeves are shirred down the outside, the fullness falling in a puff above the tight cut piece. In soft contrast of coloring is a lace yoke in pure white, over which the net blouse opens in a long V outlined with folds of orange velvet. Three rosettes of the same, held down with topaz buttons, finish the front of the waist.

A fourth corsage is made quaintly charming through a sash and fichu drapery of embroidered India mullin. French gray silk, in a trilled vine pattern, composes the gown itself, which accords admirably with a demure crown of braids.

The fifth waist, which is also part of a costume, shows the elegant and smart combination of mauve and pale blue, as well as the puffings so universally employed. The gown is of blue silk and the trimmings of mauve chiffon and velours mousseline combined, while the skirt front depicts the old robe treatment French makers delight to exploit.

"But," the fair critic will say, "since

the subject was theater waists why introduce the skirts," and Madame the Modiste will tell you that it is because the high world now looks a little coldly upon the old bodice. Rayishingly smart dressers, but the harmonious ensemble of a costume is thought to supply the most satisfactory get-up. Numerous splendid skirts of velvet, silk, poplin, etc., are accompanied by waists entirely of lace, but whatever the color of the skirt the bodice matches. If more continually is desired, bretelles and sashes of the skirt material are often added. The only exception to this, maybe, is in the jacket of colored brocade, which may be worn with a black or white lace skirt. Numbers of such coats are seen, brightly hued, and made dashing with stiffened tails, formed buttons and rich laces which form smart cravats and sleeve trimmings of much beauty.

Charming details of the theater get-up are some new French gloves, whose wrinkling arm pieces are ornamented with minute lace rosettes or insets.

These, incongruously enough, are of suede, and the ornamentation comes from the fact that sleeves are so much shorter than formerly. Then they may, in a way, be called gloves de style, for they are designed especially for the pointed, high-busted bodices which owe their inspiration to the courtly old models. With such bodices and gloves, a black velvet band about the bare throat and velvet bracelets are said to be worn in the evening by chic women in Paris. Magnificent gem brooches fasten the bands, and a unique ornament is sometimes worn in the highly dressed coiffure. This is a large, flat rosette of yellowish white lace, placed against the pin cushion of puff to look like a tiny cap set slightly askew.

MARY DEAN.

Price of Diamonds Once More Raised

The United States Buys Four-Fifths of the Entire World's Product

WHOEVER has been planning to buy diamonds as Christmas presents must now go deeper into his pocket. Only a few days ago the diamond trust, as the De Beers Consolidated Mines, Limited, is generally known, has boosted prices 5 cents on the dollar. This will take out of American purses, according to trade experts, an extra revenue of more than \$1,000,000 a year.

The United States now buys annually enough diamonds to constitute four-fifths of the world's entire output. It is estimated that the diamonds found in one year are worth \$30,000,000. The diamonds both rough and cut, imported into this country yearly are valued at \$24,000,000.

If the De Beers Company, which controls nine-tenths of the world's output of rough diamonds, continues to advance prices as it has done diamonds will prove a far more profitable investment than the most glittering securities of Wall street. In the last two years the trust has raised the price eight times, and each time 5 per cent. Desirable stones, therefore, are

valued 40 per cent higher than at this time in 1902. Smaller sizes have advanced from 20 to 30 per cent, according to the availability.

Helps Impoverished Peers.

To many a European nobleman the boosting of diamond prices will bring as much satisfaction as to the directors of the De Beers Company. The importations of cut stones into this country last year amounted to \$14,000,000 and not a few of them were from tarnished European corners.

"When a poverty-stricken Duke sells the family jewels," as one Maiden Lane dealer expressed it, "he does it secretly. It is an act of which he is deeply ashamed. He hires some agent to dispose of them in order to conceal his own identity. Before the buyer sees them the coronet or tiara or whatever it may be is broken up and the stones recut and remounted. On any opera night one may see glittering about the necks and arms of any number of New York women jewels that once adorned the courts of Kings and Emperors. I daresay that if the Czar should want to sell the great Orloff, the fourth greatest diamond in the world, for which

Empress Catharine II paid \$450,000, in order to add to his war fund he would find plenty of would-be purchasers in America."

It is not long that this country has been so fond of diamonds. Forty years ago Americans spent only one-twentieth as much money for them as they do now.

The South African mines now produce 98 per cent of the world's supply, and they are prospering more than ever before. For the year ended November of last year the De Beers Consolidated Mines, Limited, marketed \$28,205,869 worth of diamonds and realized a profit of \$11,511,490.

American Men and Machinery.

Americans, however, are proving themselves to be diamond diggers as well as diamond wearers. In the management of the huge plants of the De Beers Company at Kimberley most of the officials are Americans, and a large proportion of the mechanical devices used bear the tall-masted initials, "U. S." American machinery and machinists are appreciated at Kimberley for several patent reasons. In diamond mining especially a company is likely to suffer losses from theft. Not

only does the mine reveal small gems of great value, but it is worked by blacks, who have an hereditary instinct for stealing.

Whenever human hands, therefore, can be supplanted by iron fingers, a machine is built and put into operation. In digging the diamonds are not scattered in debris in proportion to the coveted prize than in any other line of mining. A vast amount of earth must be sifted as if with a fine-tooth comb. One ton of diamond-bearing earth would be found to contain four grains of diamond. If the 3,000,000 cubic yards of rock and dirt excavated from the New York subway were, as rich in diamonds as the best of Kimberley mines, it would be found to contain gems worth only \$3,000,000, or about one-fifth of the cost of excavating the underground road.

In their rough state the "subway jewels" would weigh only 120 pounds, or what might be carried off by one man. Accordingly, the diamond miner must have machinery which will handle vast quantities of earth and perform the task with extreme minuteness.

Old Devices Soon Discarded.

One evidence of the way the De Beers Company appreciates machinery is to be seen in the great mountain of junk which towers up near its mines like a Golgotha. Here may be found machines for intricate workmanship and of huge dimensions, many of them costing a good fraction of \$1,000,000, yet all abandoned to make way for superior devices. Here a whole plant, although hardly used, may have been dumped, because some new system had been discovered which made it antiquated. Whenever a mechanism is found which will handle a few more tons of dirt it is adopted regardless of cost.

Despite all the labor-saving machinery introduced the De Beers Company still employs 10,000 blacks, whom it guards almost as closely as keepers watch the inmates of a prison. The Kafirs contract to work not for a year or two, but for a term not less than three months, and for that length of time they are shut off from the rest of the world.

Eight hours of the 24 they are at work in the mines looting the tunnels with the "blue stuff," or diamond-bearing clay, and the other 16 they are loafing about the "native compound," as it is called—while, in fact, in an outdoor jail, having no right to prevent any escape and a roof of wire netting to make any attempt at throwing the diamonds outside in an accomplice futile. When a Kafir is about to be discharged he is put in an isolation ward and carefully examined and then watched for a day and a night.

Stealings Are Enormous.

Yet even in spite of the most rigid precautions it is estimated that more than \$1,000,000 worth of diamonds are smuggled out each year. Most of them find their way to Natal, where they are sold by the leading merchants. No question is asked concerning their origin.

One way of smuggling diamonds which escaped the eyes of the De Beers detectives for a long time made veritable martyrs of its perpetrators. A Kafir, shortly after being admitted to the compound, were he lucky enough to find a rich enough prize, would cut a deep slit in the fleshy part of his leg, where it could not easily be detected, and hide the rough jewel in the very quick. He would then conceal himself in some unworked part of the mine until the sore healed.

It is now regarded as certain that the pipe-shaped pits from which the diamond-bearing clay is taken are the craters of extinct volcanoes, and that this clay, which, because of its color, is called "the blue dirt," has welled up from the bowels of the earth. The diamonds are bits of carbon that have crystallized under great heat and pressure.

Grease is regarded by the Kafir as even more of a foe than the largest labor-saving machine. A year or more ago a kind of "stickum," called Stauffer's lubricant, was discovered, which picked out the diamonds far more rapidly and just as accurately as the 500 men employed for this work. Accordingly the men were discharged and the grease substituted.



SMART COIFFURES, NATURAL AND ACQUIRED.