TOLD OF BIRD AND BEAST.

LOVEMAKING, POLYGAMY, AND THEFT AMONG THE SPARROWS.

Big Game in Central Africa—Two Lions at a Shot and Three Lions on One Trip—Richard Harding Davis's Bear and Alligator Lore Discredited—Early Catches of Trout in New England—Carnivorous Plants—Identification of Eggs.

As lovers, the English sparrows are rather interesting to those not too much prejudiced against them. This is the time of year when they are most interesting, being now ardent lovemakers, and the close observer will notice their odd ways.

Like other lovers, the sparrow is more or less jealous, and many a fight is to be seen on house tops these days between them, and a demure-looking bird is usually not far off, waiting to receive the attentions of the victor. A few days ago a pair of sparrows were seen in a Brooklyn street acting in a curious way. The male bird would hop along, with his feathers out, like a turkey cock, and dragging the tips of his wings on the ground. The female bird was alongside, and was caressing the feathers on his back with her bill. It was no wonder that he was vain, for she was a right trim-looking bird. Both birds were apparently talking to each other, and the chirruping was less loud than usual.

The sparrow is very often a polygamous bird. One had four wives last year up near 125th street, with four separate establishments. A long, narrow box had been laid on its side in a rear yard and three partitions put in. In each of the pigeonholes the sparrow had a wife, each wife raised a brood, and all the birds seemed to live amicably together.

Some of the sparrows are thieves and scoundrels. It is related that several industrious sparrows were building nests close together in a sparrow tenement house. One of the birds, a female, saw one of her neighbors bring a big white feather and put it into his nest, after showing the other birds what a fine prize he had found. He went away, after viewing the nest with satisfaction, to get more material.

The female bird next door, as soon as he was out of sight, went into his apartment and took the feather out. She was a knowing bird. She did not take the feather and put it into her nest at once. Instead she flew with it to a near-by tree, and securely fastened it in the forks of a branch, out of sight. Then the bird took a straw and began treading it into her nest. Pretty soon back came the cock sparrow with a string, and busied himself in his apartment to build more into his nest. He dropped the string with an angry chirrup, and went into the next apartment with a rush. Out came the hen bird, and while the cock looked all about her apartment she scolded and stamped, plainly telling him to get out, that she wasn't that kind of a woman, and other things betokening honest indignation. When he flew away after the unsuccessful search, she chirrupped after him derisively. When he was out of sight she got the feather and moulded it into her nest.

The nature of a sparrow fight may be judged from the fact that several instances are on record in which cock birds fought in the vicinity of iron foundries and continued to struggle with each other even while treading on slag so hot that their feathers were singed and feet burned. The city sparrows know no "edge" with which these birds fight, and when they see such a combat make a quick sneak and often get both birds.

Sometimes sparrows build remarkable nests. In the outskirts of cities are occasionally found big wasps' nests hanging from tree branches. Sparrow nests have been found in them, but whether the sparrows came before the wasps deserted the nest or not is not known. Years ago, in England, before the sparrows took to the hedges, they made nests with domes overhead. When the sparrows were first brought to the United States, at Springfield, Mass., they took an old robin's nest and built a cupola over it a foot high and raised a brood in it. What the naturalists would like to know is, was it instinct, tradition, or reason, that made these birds, under strange conditions, make a nest like that of which they had not made, to man's knowledge, within a hundred years? They do not build such nests now because they have learned that they are unnecessary.

Should sparrows persist in building nests in troublesome places, a smooth-bore breech-loading pistol, loaded with smokeless powder and No. 11 shot would kill them, and a policeman half a block away would not know it. The pistol would have an effective range of ten yards. An air rifle also will serve to kill them.

BULLETS AND ALLIGATORS.

Did Native Yarns Lead Richard Harding Davis Astray?—Remarkable Bears.

Richard Harding Davis, according to E. L. Peritara of Tegucigalpa, Honduras, in *Recreation*, was the victim of the native jokers in Ladino land, or perhaps it was their excessive politeness. Mr. Davis and two other gringos tried to shoot sundry things with modern rifles down in Central America, and among them was the alligator. Instead of rolling over dead, the alligators slid off into the water unwounded, and then the natives applied soothing salve to the wounded feelings of the gringos, saying:

"The bullets of your rifles cannot penetrate the scales of the alligators or crocodiles. You must shoot just behind the shoulders or in the spinal cord at the root of the tail." It would take an expert rifleman to do that, so the gringos satisfied themselves by "shooting into the horny scales."

Mr. Peritara says that the natives were too good-natured for their own good, because the story they told was apt to keep sportsmen who desire to kill alligators from searching for them. Mr. Peritara says that he has shot into the brain of an alligator with a 44-40 rifle, with a forehead shot, and a forehead shot is one that Mr. Davis said was ineffectual.

The London *Field* said the other day, in an article about crocodiles, that the idea that modern rifles would not penetrate crocodile skins was a myth of the old days, when bullets were poor and the powder worse, and so seldom do bullets glance off crocodiles' skins without penetrating that the incident is worth mentioning in a sportsmen's paper when it does happen. Mr. Peritara is very sorry, but for the sake of others he felt that he ought to let Mr. Davis down from the idea that he had even hit the alligators. Mr. Peritara says further that Mr. Davis and his two gringo companions were singularly fortunate. Mr. Davis said that the three gringos saw two bears in Central America near large towns in thickly inhabited districts. The singularity of Mr. Davis's observation may be realized when one learns that nobody else ever saw bears in that part of Central America, or anywhere near where Mr. Davis saw them. It is a great pity that he did not photograph them with a camera, because some naturalists may be sceptical. Squier, the great naturalist, says that there are no bears in Central America, and naturalists stand by one another. Mr. Davis has one way out of the dilemma. If he will submit to the X ray for a while, the impression the bears made on his brain, as shown by an X-ray photograph, might cause the natural histories relating to Central America to be revised as regards bears.

FOOD THAT WAS DEADLY.

The Fate of Some Animals That Bit Off More than They Could Chew.

A curious tragedy in nature's life was told about in the *Deutsche Fischerei-Zeitung* recently. A twenty-five-pound pike was found dead near the Villa Scholz, at Horn. On examination a trout weighing four and a half pounds was found stuck in the pike's mouth in such a way as to choke it to death.

Various animals have died of suffocation in this manner. Especially is this true of herons, grebes, bitterns, and other fish eaters, which have been found dead with fish in their throats.

A gull, up in a Massachusetts bay, was seen acting in a way that caused two boys to take a rowboat and go out and see what the matter was. The gull would fly away, then tumble into the water, struggle a while, then fly again, each flight being shorter than the one before, and at last the bird merely skimmed the surface heavily. When the boys got to it the bird's head was under water and the wings were flapping slightly. They pulled the bird into the boat, and it was seen that on the end of the bill was a clam shell. The gull had tried to get the clam; the clam had closed its shell upon the bill, and the scared bird had tried to fly off over the water, but, breathing being hard, it was soon exhausted.

A wild turkey was found one time in the Tennessee bottom lands. The turkey, in jumping up to get some berries, came down with its neck through a fork of the bush. The bird, being unable to pull its head through the fork, was choked to death, but not until it had covered the ground with feathers for ten feet on all sides.

Some of the birds that use strings or hairs in the construction of their nests—swallows, sparrows, &c.—become entangled in the material every spring and are choked to death.

A man named Allard was coming down the Columbia River years ago from Astoria, Or., to another Hudson Bay Fur Company post at Vancouver. He had a crew of Indians for his canoe, and all were pretty hungry, having been living on dried salmon and hard bread. As they rounded a point one day they put up a flock of swans, which flew past them. The Indians had never seen a man shoot a bird flying, and the trader had no ammunition to spare, although they offered a splendid shot, especially the leader, which was a bird of unusual size. It was so fine a mark that the trader lifted up his paddle and, taking imaginary aim, said "Bang!" in a loud voice. What followed made the Indians gasp. The big swan at the word went tumbling head over heels to the water, struck with a loud splash, and by the time the canoe was alongside had ceased its struggles and was dead. There was not a mark on the bird, and as the Indians looked it over they nodded toward the trader with looks of amazement and fear on their faces. The trader calmly loaded his pipe and puffed away as unconcernedly as if he was not wondering how it had happened.

That night, while the Indians were pulling out the canoes, the trader had a private autopsy of the swan, and he found a large bulb of the swan's favorite food, the "wappato," or *Sagittaria variabilis*, as it is known to botanists, stuck in the swan's throat in such a way that the bird had choked to death. The man removed the bulb, and on the return of the Indians said nothing of it. That night the party feasted on the swan, but not until the trader had made weird sounds over the carcass and had impressed the Indians wonderfully. Thereafter that trader was the most respected, almost-worshipped man among the Indians, who ever after called him, "The-man-who-shoots-flying-swans-with-a-paddle."

SPRING DUCK HUNTING.

Three Western Sportsmen Get Two Hundred Birds on One Trip.

Spring duck shooting is not regarded favorably by most sportsmen, but there is a grist of it going on. R. B. Morgan and his boy, Dan, got more than 130 ducks in four days' shooting near Gibson Wells, Tenn., and some snipe, a few days ago. R. B. Organ, Will Mussey, and Ed Bingham of Chicago killed more than 200 ducks on Lake Koshkonong, Wis., in early April. The ponds and lakes throughout the Northwest are very dry, and in consequence there is more water in the Mississippi than elsewhere. This has caused the ducks to go up the valley principally, and the "slaughter has been ten times greater this spring than last fall's kill," according to a *Forest and Stream* writer.

Sixty-nine ducks were killed by two Milwaukee gunners a few days ago at Fox Lake, Wis. Curiously enough, the fifty-five which were bluebills were nearly all males. The only ones were shot over decoys, and the chances are the males were young and were looking for sweethearts. Bluebills were killed in greater numbers at Fox Lake during this spring's shooting, although other deep-water ducks, like redheads and canvasbacks, came in numbers. The birds seem to have arrived all at once at Koshkonong, where Ed Bingham and his friends got their 200 birds.

LAKE MWERU'S ATTRACTIONS.

The Game One Sportsman Found There, and Why He Lost His Night's Rest.

Six days, by land, south from Tanganyika, in Central Africa, lies Lake Mweru. It is a game country thereabouts such as sportsmen travel far and endure much to visit, for here are found elephants and guinea fowl, with a lot of animals of intermediate size, like lions and buffaloes. Alfred Sharpe in the London *Field* tells about this region. He says:

"The upper half of the west shore of Mweru is very steep, with cliffs coming down to the water's edge, and it is no easy matter to find a good landing place. Only here and there, where streams, coming down from the ranges behind have carried out small deltas into the lake, could we find flat ground for camping. * * * The natives all fled from their houses, supposing we were 'Wongwara,' or coast men." The coast men are murderous robbers or slave hunters. "Being in want of meat, I camped early and took a round with the guns. We soon crossed a buffalo spoor [trail], quite fresh, and, following it up, sighted a herd feeding in a gully. As two of the herd were posted as sentinels on the top edge of the gully, it was difficult to approach over the 200 yards of open ground." The sentinels ate while on duty, and in consequence, "I placed an eight-bore bullet into one of their shoulders. There was at once a tremendous stampede among the buffaloes in the gully, and they came pouring over the edge and galloped down in a mass toward me. I jumped up with a yell that turned them, and the forty or fifty beasts went past me." With his left barrel he broke a big bull's leg. "We now had enough meat for camp, the wounded one having been finished, as it stood, too sick to run."

Next day they saw ducks, Egyptian and spur-winged geese, and a few snipe. The day after that Mr. Sharpe went hunting, but, having duty of meat, did not shoot any of the numerous buffaloes. "Just as we turned for camp we saw a lioness standing alongside an ant hill. We got her in line with another hill and, making a dead sneak, got within forty-five yards of her. Taking the Martini, and climbing up on the top of an ant hill, on which a few bushes and a euphorbia tree grew, I saw that the lioness was still standing, while lying close by was a large lion stretched out on his side. He never stirred. As soon as I fired, two other lionesses bounded into view from behind the hill to the left of the lion. None of them knew where the danger was, and I waited to see what would happen. First the three animals went snarling around about the dead lion, their lips curled up, and their tails twitching about. Then one of them sniffed at the blood oozing out of the dead lion's mouth. The two being directly in line from where I was, I fired again, the bullet passing through one and into the next one, knocking both sprawling. One soon recovered herself and came limping in my direction, but fell dead into the grass." He had the three dead lions at the end of the hunt.

He got some ducks next day. Three lions were seen while going along on foot, but no shots were fired at them. "That night we had an unpleasant experience. I was already beginning to doze, when I was awakened by the sudden growling sound of a lion which had apparently been crouching near the meat. At once every one came tumbling into the tent. The night was pitch dark. Lions were all over the place and kept roaring in all directions. One came rushing by the camp. I fired into the darkness. This sort of thing kept up for two hours. We finally took fire sticks and made for the beach, in which we anchored a little way out, where we were safe."

Native guides take pleasure in misleading parties, winding up by telling that there is no such place as the point desired, or something else. The best guide is one's compass and common sense, says the writer.

"I get three elephants and wounded a fourth one day," he says, "out of a big herd that I stalked."

Small plants floating on the water, resembling cabbages, are gathering in the southern end of Lake Mweru and are filling it up. Already there are extensive marshes because of thes plants. There is some fishing also to be had in the lake and various bayous.

FISHERMEN'S LUCK.

Early Catches of Trout in New England and on Long Island.

The warm weather of the last few days has started the anglers a-fishing as nothing else could have done, not even stories of large catches of big trout. The first few days of the season were not especially delightful from the trout fisherman's point of view, the air being a little too raw and the water altogether too cold, but still there was a goodly number of fish taken on the opening day, and ever increasing sizes and messes have been the rule since. Trout fishing was legal sport in Connecticut, Massachusetts, Rhode Island, Long Island, and New Jersey on April 1.

E. J. Brown took a fine mess of trout near Sandwich, Mass., from private waters. His largest fish weighed 2¼ pounds. Mr. Brown got it by pure luck, as the gut parted at the hook shank just as he got the net under it.

Joshua S. Dunckleé of the Boston Board of Assessors got nine good-sized fish on the opening day in Massachusetts waters. William C. Hamilton, Dell A. Hamilton, and James C. Mellor got fifty-three fair-sized trout in waters near Worcester, Mass., in spite of the cold.

A. N. Cheney tells in the *Forest and Stream* how Geo. Mortcombe caught twenty trout of one pound and a quarter to one and a half each. Mr. Cheney, it appears, flabbergasted the friend by asking him if he meant to tell the Governor that those fish were taken on artificial flies. They were "garden-fly" fish, taken in small boy style, on angle worms; but trout are trout.

It is estimated that 150 anglers went to the various club houses on Long Island on the first day for trout fishing, and the attendance, especially on Saturdays and Sundays, has been high and increasing since. It is now a common sight on late afternoons and evenings to see men with rods and creels in the bridge cars. It would take an early riser to see them starting in the morning. These men, as a rule, use fly rods and artificial lures exclusively, but some of them cannot get over the old hankering for the sport as they enjoyed it in their younger days, when they used live bait.

Bait fishing is prohibited in the streams of Massachusetts, and the tenderfoot feels sure there must be water thereabout, but the woodsman says there is not a bit. Then he picks up one of the numerous pitchers, puts it to his lips a moment, then throws it to the ground. Water flies out and the thirsty one sees it. He breaks one off and without examination takes a couple of big swallows. The woodsman shrieks "Fly soup," and rolls over on the moss bed of the waterway, kicking his heels in glee. And for years after the mention of hunter's pitchers makes him gag—it is two or three days before he cares for fish or food.

A BEETLE THAT GNAWS SHELLS.

And It Does Other Things Calculated to Make Its Prey Tremble.

Of all the insects the beetles are the most interesting. There is one that carries a cannon, which a naval man would call a stern chaser, and is loaded with a fluid. When pursued the beetle fires it, and the other insect, usually a carnivorous beetle, is blinded by the discharge of fine, acid spray. Hence its name of bombardier. The latest thing that has been learned about beetles is that *Dytiscus marginalis* cuts its way through the shells of snails and mollusks and eats the inhabitants.

W. B. Tegetmeier writes to the London *Field* and tells about the curiosity of naturalists at finding shells manifestly gnawed by some insect or other, and the final discovery of *Dytiscus marginalis* at work on the shell. Then he tells some things about the Dytiscus family. Says he:

"I know of no more interesting animal in an aquarium than a Dytiscus, who soon acquires the habit of feeding the finger first fed, and amuses himself at night. If the aquarium is open, by flying round and round the room, and occasionally misses the way, and being unable to return is found on the floor in the morning. There is one drawback to the habits of this creature. He is a most thirsty tyrant of the aquarium, requiring the whole place to himself, for if kept with tadpoles, frogs, fish, or any other animals he quickly destroys them, even if many score times his own size.

"What hawks are to the other birds, cats are to other mammals, sharks are to other fish, the Dytiscus is to other insects.

IGNORANCE THAT KILLED.

Great Might Be Living Had He Been Taught How to Handle a Gun Properly.

An accident which shows the danger of not teaching boys how to use firearms is reported in the *American Field*. Seventeen-year-old James Groat of Omaha, Neb., with three comrades, was hunting ducks on the river. Not finding the birds plentiful, boy fashion, they thought they would play about in the willow blind. They laid their guns down and began to skylark. All of a sudden a flock of ducks was seen coming, and there was a rush to get the guns.

The third had probably been stunned by the culprit which the man carried. On recovering the bird found itself being carried, and craftily waiting until it got over being dizzy, struck the man with such vigor as to kill him at the first blow. The bird probably escaped.

EVA'S WHISTLING LARYNX.

The Remarkable Musical Equipment of a Little Girl of New Haven.

From the New Haven Evening Register.

One of the most remarkable instances of peculiar anatomical development known to medical science has just been discovered in New Haven. The circumstances are as yet unknown to the New Haven physicians and surgeons, but a leading professor of music, to whose attention the case has been brought, pronounces it the most remarkable he has ever observed. The case, in the layman's parlance, is known as that of a whistling larynx, though the doctors have a technical name for it, which is at once sounding and cumbrous. The subject is a little girl, an individual in whom this peculiarity has developed is the little daughter of Mr. and Mrs. W. H. Spear of 312 Columbus avenue. Eva is eight years old, and, notwithstanding her youth, the case is remarkably well developed. Eva plays, sings, reads, and is able to whistle without the use of her lips, pharynx, palate, or cheeks, all of which are brought into play by the ordinary whistler.

Eva gave the first manifestation of her larynxgeal whistling ability when but two years of age. Spear lived near a railroad track, which was very apt at mimicking conversations between the members of the family. On one occasion he repeated a remark made by Mrs. Spear to Eva. Mrs. Spear was astonished to hear the little one repeat the remark in an exact imitation of the manner in which it was repeated by the bird. Her astonishment amounted to amazement when the little one mimicked the whistle of the parrot apparently without the slightest effort. It was apparent then that the whistle was not produced by the lips and tongue, as people ordinarily whistle, but by the throat or some part of it. Eva rapidly developed the ability to whistle in this peculiar manner, until she now whistles popular airs, or such snatches of them as she hears, without touching her lips.

Prof. Bonney, the musical instructor, was greatly interested upon learning of Eva's whistling ability and at once manifested a desire to investigate the case. He listened to an impromptu performance by the little girl, and requested another. He immediately the case worthy of the attention not only of the medical profession, but of the musical instructors. At present Eva's whistling is confined to those snatches of popular songs which she hears her sisters play on the piano and to the hymns which are performed in church on Sundays. She has no technical knowledge of music, but whistles "by ear." When she is doing so her lips are as they would be when at perfect rest. There is not the slightest contortion of them or any movement. She whistles equally well with her mouth in its ordinary shape. Upon attempting a high note, however, she unconsciously opens her mouth as a singer would in attempting the same thing. However, there is no suggestion of singing in her whistling.

The impression conveyed to the listener is similar to that produced by one proficient in mimicking the notes of a horn, though of a much finer and clearer tone. The notes are clear and full, the low ones with a volume and tone seldom or never heard in ordinary whistling, and the high ones with a clearness and fulness beyond anything produced by the most artistic whistler of the ordinary kind. While nothing of the fineness of the ordinary whistling is lost, the strength and volume of the sound are far greater than that ordinarily produced, and from the fact would lend to great improvement over ordinary whistling when performed in the presence of an audience.

Eva is somewhat shy in exhibiting her accomplishment before strangers, but amuses herself and her parents and sisters with it at the family, as any boy might, by whistling in the time-worn fashion common to all ages. No attempt has ever been made to cultivate it, as Eva has only begun to take lessons on the piano, but even now there is a suggestion of an extraordinary ability to perform difficult warbles when the little one attempts such melodies as "The Whistling Coon" or the "Mocking Bird." She has a range of two and a half octaves. She has discovered that she can whistle even when holding the tongue between the index finger and the thumb.

HER HEALTH AND BEAUTY.

HOW WOMAN MAY KEEP ONE AND IMPROVE THE OTHER.

The Advice and Rules Miss Lindley Gives in "Health in the Home"—Massage and Movement Cures—Wrinkle-removing Devices—Some Prescriptions as Well.

Every woman wants to be beautiful, but very few women succeed in attaining their wish. Some people are born beautiful, a very few acquire beauty, but no woman ever had beauty thrust upon her. Even though women all pine for it, they seem to regard it purely as a gift and not as something which can be purchased by constant care and attention. Probably an ugly woman could not make herself a raving beauty by any amount of care. She is too badly handicapped by nature. But if one is to believe the authorities, she can do a good deal toward removing the handicap.

Probably all these women who want to be more beautiful will seize with avidity upon Miss E. Marguerite Lindley's new book, "Health in the Home." If women followed all the good advice which Miss Lindley distributes through her 414 pages there is no telling what would become of the professional beautifiers. Perhaps they would all establish themselves as masseuses, and would give the Swedish movement cure which Miss Lindley considers so important.

The book contains minute and careful directions for every conceivable movement, and also describes most of the ills which flesh is heir to, and prescribes the movements best suited for their relief. There is an interesting chapter, also, on massage, giving such plain directions that one could use some of the simpler methods for one's self, or by their aid afford a great deal of relief and comfort to some one else. For example, here is the prescription for the relief of congestive headaches:

"The movement is made with the palmar surfaces of the fingers, and is necessarily vigorous. Begin on top of the head, and continue the treatment backward and downward to the base of the brain; continue also from the temples backward and downward. Much and heavy rotation at base of brain should follow; also crosswise rubbing on the back of the neck, and stroking from the head down back of the ears to the shoulders, for the purpose of emptying the veins. A foot movement or arm massage should follow, to draw the blood to the extremities, and thus relieve the head. It is best in severe cases to have passive foot movement and arm massage precede as well as follow the head treatment.

"The tendency to congestive headaches may be greatly lessened by dashes of very cold water at back of neck and down the spine before the morning bath."

"The aim in massage," says Miss Lindley, "is to improve the capillary and venous circulation and to stimulate the nerves. For joints and irregularly shaped muscles a rotary movement is employed. Place the hand, or the palmar surfaces of the finger ends, in touch upon the part needing massage, and by a rotary motion move the skin on the muscle, not occasioning friction of skin. The movement is not necessarily rapid. The amateur should give no manipulation for sensitive joints, unless instructed in physical exercises.

"The capillary circulation in the long muscles is stimulated by rubbing them crosswise their length, both hands being used in close touch, out moving in opposite directions. The movement is preferably slow, but must be firm and vigorous.

"After stimulating the capillaries, the veins should be emptied. This is done by stroking heavily on the large veins toward the heart. The veins thus emptied fill from the lesser ones, and these from lesser branches, and so on to the capillaries, which finally empty the smallest are reached; and these fill from the capillaries, which receive in place of the venous blood a fresh supply of arterial blood. Veins are provided with valves that prevent their filling except in one direction. Rubber gloves are helpful in massage, and also relieve the attendant greatly in giving treatment for back and limbs."

In another chapter on "The Regulation of Flesh," Miss Lindley says that the thin are always asking how they may gain in weight and the stout how they may reduce their size or become thin. She says that malassimilation is responsible for each evil, and that this is due to a lack of harmony among the digestive organs rather than to indiscriminate selection of foods. Sometimes persons of small nutrition, who eat lightly and normally, nevertheless gain flesh steadily, but these cases are not usual. Generally the stout person seems to crave foods that tend to increase weight, and unhealthy conditions exist which cause abnormal appetites, just as diseased nerves distress sufferers with the delirium. Various causes may be assigned for the presence of too much flesh, such as imperfect and interrupted heart action, but the most obstinate cause is the lack of mental control, which would keep a person from overeating.

"We know of no Keeley cure for such," says Miss Lindley.

"The cure can be accomplished through the circulation only. The blood has deposited the adipose, atom by atom, and no other agent can remove it. The removal is necessarily a slow process. There are veritable tales of successful reduction in a week's time through 'dry diet' are untrue. It is, however, possible by this means and the aid of doses of sulphate of soda to reduce the girth in that length of time, but no reduction of the adipose itself can be effected in so short a period of time and by such means."

Miss Lindley then goes on to explain that adipose is reduced by increasing the combustion, thus bringing adequate to the reserve of fat stored that the system may draw upon of exercise. "Further aid is given by taking less fat producing food. The steam or hot bath, followed by the cold shower or sponge bath providing the physician considers this advisable, is temporarily helpful in some cases, but many authorities think that these means reduce in ultimate increase of weight. The Turkish bath, while it may regulate the distribution of fatty matter and temporarily reduce the weight, does it only by increasing combustion. Fat is not sweated out, as some people suppose. When adipose is reduced by exercise the tissues are rendered firm and resistive, the digestive apparatus is improved, and no immediate increase in weight is to be feared. When it is reduced by diet, massage, and hot baths, the tissues are not strengthened, and are likely to yield to former conditions again."

Miss Lindley, however, goes on to remark that walking cannot do this, and that it is often too heavy a tax on organic health. Her test results, she says, have been obtained by a reduction of the quantity of food, of starchy foods and of liquids with foods, and by using systematized exercises. These exercises she carefully describes, and as each one is accompanied by diagrams, even the uninitiated can comprehend them.

Hard as is the lot of the fat woman, that of the thin woman is just about as bad. "The thin woman, who is called beautiful by the anostle, "lacks blood; not only in quantity, but in quality. Shall she eat more fuel foods? one asks. Not until the health of her digestive organs has been restored. Shall she exercise less? another will ask. Not less, perhaps, but more. Must she feed her and we must feed her discreetly, in small quantities and frequently. She must also practise systematized exercise and breathe plenty of fresh air. Massage, perhaps with oil, still is a valuable remedial agent for her, and it must be applied with more discretion than that for the stout woman. Turkish baths (providing her heart action permits them) are also valuable aids to tissue growth.

"The thin woman must await patiently the evolution of her beauty. Her ideal must be to her as a single day, which is not generally in accord with her taste. Usually we find her restless, impatient, impulsive, and, before collapse reaches her, priding herself on the multiplicity of duties she can at one and the same time perform. Nervousness is her mistake a virtue, as this broad sweep of labor ultimately results in collapse.

"Prominent among the many causes for the defect called leanness are nervous worriment, too little fresh air, and malassimilation, which may be due to one or the other of both the preceding. These may give rise to organic weakness, which in many cases goes into grave conditions, before medical aid is sought, or they may be the result of organic weaknesses. In extreme cases, absolute rest, fresh air in plenty, nourishing food, and a change of place are the beginning treatment for lesser cases, whatever may be the cause.

"By absolute rest I mean that the patient must be isolated from all care or knowledge of care. Not even the interesting phases of home life should reach her. A quiet, cheerful, and a cheerful, but not talkative, attendant, are the chief characteristics of this home rest cure. This will seem an impossibility to the woman who is able to go about her usual routine, but if she will but realize that her recuperation depends upon her health, and so spare her friends the calamity of constantly caring for her in her invalidism, she will find it easily possible. Two months' isolation in a room of her own home should appeal to her as a more desirable prospect than a sanitarium or an institution, for fear that it may be to her if she neglects these early warnings. She must make rest of herself, and allow nature opportunity to restore her normal body.

"By simple, frequent feeding, I refer to the milk dietary prescribed by our specialists. These methods should be carefully studied, and the use of heavier foods added, according to the conditions of the patient. Massage should be mainly for limbs and back.

"The foregoing remarks apply to those cases where emaciation is the result or accompaniment of some serious organic disease, or where there is mal-nutrition or dyspepsia. In average cases of leanness a woman's curriculum should be plenty of rest and fresh air; avoidance of worry; repose of manner; absolute rest of half an hour to two hours after each meal; frequent, easily digested meals, gradually increasing in quantity; daily cold bathing; massage and exercise. Milk and cream should enter largely into the dietary. In case it causes acidity, a little salt or bicarbonate of soda, or both, may be added. Eggs, game, fish, mutton, bread and plenty of butter, cod liver oil, baked apples, soups of marrow bones, vegetables, and other nourishing, easily digested foods of this order would best form the staples of dietary. Grapes and oranges, pears, peaches, plums, apricots, and other large fruits (cooked or uncooked), except bananas, are valuable foods."

Probably nine-tenths of the women who read "Health in the Home" will turn the first thing to the chapter on "Care of the Complexion." They will find plenty of good advice plainly given.

"The causes to which defects in the complexion are traceable are as numerous as those leading to defective health, and study of the individual is necessary in order to accurately prescribe treatment. If proper conditions of health are attained, and the facial tissues do not respond to the general treatment here recommended and take on their natural beauty, then the advice of an able specialist had best be sought.

"The practice of what are erroneously styled 'facial gymnastics' is a deadly enemy to comeliness. They create and accentuate disfiguring lines in both face and throat. Lines form when the connective tissue which attaches muscle to bone becomes over-strengthened or hardened, forming a cord into which the skin shapes itself. Instead, therefore, of practising exercises that contract these muscles the more, it is necessary to employ a method for softening and normalizing the connective tissue by means of enforced circulation. Head movements, massage, and passive work are the only desirable exercises for improving the face muscles. They may be performed either by the patient herself or by an attendant.

"The use of such devices as irritating washes, plasters, masks, and poultices is another baneful practice. The theory upon which these and the bleaching compounds are advertised and put forth is that irritants remove the impaired cuticle, and that a fresh and youthful skin will grow to replace the former disfigured one. But whether the wash, mixture, or appliance is composed of chemical ingredients, or merely contains lemon juice, alcohol, or alkali, remember that in the economy of nature more tissue should not be removed than can be easily and quickly rebuilt; and the punishment of a worn-out skin will secure or later follow this harmful practice. Of course some phenomenal exceptions prove this rule in error; but the advice given here is not for the exceptions, but for the majority. Internal remedies are even more pernicious than those for external application. Amateur advice and advertised skin treatment should alike be submitted to a competent physician. Let the woman who would be beautiful remember that her thoughts rather than her cosmetics or her clothes decide her facial attractiveness."

Miss Lindley then emphasizes the value of good digestion toward a good complexion.

"Sour stomachs produce sour looks," she says. "Living in an ill-ventilated room has a bad effect on the skin; and thin-soled shoes and insufficient clothing, which admit of chilliness from damp or cold, cause contraction of the muscles, with consequent deepening of wrinkles, marking of lines, and enlarging and coarsening of pores. This condition we designate as 'goose flesh' is established.

"Under ordinary conditions, the face needs washing but once a day, and that in the morning. Use a silk or wool washcloth in preference to cotton or sponge; and the palmar faces of the hands are preferable to either. Manipulation during the bath is invaluable. Employ the rotary movement, and spend fully five minutes on the face bath. Plenty of rotation on the lines will go far toward obliterating them.

"It is not generally known that the prone position usually assumed when one stoops over the basin to bathe the face is bad for the muscles. Massage should not be given to sagging muscles; instead, they should be distended, to avoid congestion. Hold the face erect during the manipulation, that the blood may circulate properly. The face should be dried with a soft towel applied with a rotary motion. Do not drag the muscles downward.

"For the 'oily' skin of which many complain, frequent manipulation with dry fingers is advantageous. The movement should be upward and outward, moving the skin about on the muscles, not rubbing on the surface of the skin. A paste of fine table salt, moistened with water or milk, is a valuable stimulant for a healthy skin, but should not be used if there is any disease. This should not be applied oftener than once a week. Rub it well over the face. Then wash it off thoroughly and dry with a soft towel. This sandpapers off some of the cuticle and stimulates it to healthy growth.

"A simple formula of face massage, followed at night, will be especially beneficial, as the night's repose is a valuable aid in tissue building. If practised before going out in a dry, strong wind it will prevent chapping. A cream made of vegetable oils combined with some simple astringent should be used."

Then follow prescriptions for face massage:

PRESCRIPTION I.

"1. Apply light touches of cream on the face, and rotate it thoroughly into the pores of the skin.

"2. Direct the movement from the centre of the forehead upward and outward each way; from under the eyes work lightly outward toward the temples. These tissues are extremely delicate, and must not be fingered as roughly as the cheeks, forehead, and chin.

"3. Rotate much at the base of the nose, and over the nostrils. The skin here is apt to coarsen, and the pores enlarge to the size of pinholes, making a very ugly appearance which this treatment is pretty certain to modify, if not entirely remove.

"4. After rotating the whole surface of the face and neck with the fingers, as directed, stroke heavily, using the palmar surface of the hand, the fingers being held straight, making the passes from the centre of the forehead outward, and back of the ears downward on the veins at the side of the neck; also upward at the sides of the mouth and nose, and from the chin to the ears, to empty the veins, and promote better circulation. Dry off the cream that remains on the surface by rotating with a soft towel. Then rotate a few moments with dry fingers and stroke softly. The process should occupy from twenty to thirty minutes, but even a five-minute treatment will be a substantial benefit. It will leave the skin peculiarly soft and velvety, a condition which in a little while becomes permanent.

"In connection with the foregoing prescription, about once a week, after giving the massage recommended, the face should be bathed with hot water and soap, then dashed with cold water, and dried in the manner already described. Rotate a little with the fingers, and if the washing has left the skin too dry, use a touch of cream, applied as aforesaid. This process is wonderfully beautifying, and is recommended for occasions when a woman wishes to appear at her best, but should not be repeated oftener than twice a week.

"Face steaming may be resorted to, but it is not safe to practise it unless one has been properly instructed. The time of the steaming should not exceed five minutes, and three minutes generally suffices for delicate skins. This question, however, is determined by the nature of the skin, the reactive power, and the health of the individual. Thorough massage must follow the steaming. Without it nothing but harm can result. Properly administered, steam rejuvenates the complexion, and so softens the muscles that less results are obtained from the after massage. Without care, it renders the skin dry and lifeless. Those doting to reduce double chins must rotate the muscles heavily, stroking in the direction of the large veins. Those who sag badly, but follow will have to manipulate with lighter, more persuasive touches, and frequently."

Prescription III. is for a wrinkled or drooping skin.

PRESCRIPTION III.

"1. With the palmar surfaces of either the first, second, or third fingers, whichever is most convenient, rub with a decided stroke into the groove, the fingers held side by side, but moving in opposite directions.

"2. For the lines that in later years are apt to extend from the base of the ear down in the throat, begin at the lowest point, and with the same movement rub from the ear, stroking well into the deep line to render flexible the still muscle and the connective tissue. Bear in mind that the treatment is to soften and normalize these tissues.

"These throat lines are not necessarily age marks, but are often due to a wrong carriage of the head. 'Poking the chin,' and holding the head too rigidly will cause them, by putting an undue strain upon the side throat muscles. This posture of the head also causes baggy cheeks. The exercises prescribed under the 'head movements' are adapted to counteract these tendencies.

"3. The horizontal wrinkles upon the forehead should be treated with the same cross stroke, directing the movement from the centre outward to the temples. Perpendicular lines, as between the eyes, should be worked upward. Pressure is required in this line treatment.

"4. For minute lines or wrinkles under the eyes, the cross stroke should be used, but the fingers must be held firmly but not guarded against pressure upon the eyeball. The touch should be light and even."

Pesates in Juneau.

The old-time Yukoners who stayed in Juneau so long that the first of the incoming rush reached the Alaskan metropolis before they started for their summer's work in the interior got an unusual, and to them unwelcome, evidence of Eastern civilization through the introduction into Juneau's fractional currency of what the *Mining Record* scornfully calls the "humble penny piece." The Yukoners regard the silver quarter as the smallest national coin and they despise dimes and think the nickels an outrage on humanity. For the penny as a coin they have no satisfactory vocabulary of denunciation. They prefer rather to denounce the persons who use it, and such denunciation usually includes the entire genealogical tree of the unfortunate offender. The only possible use a Yukoner has for a penny is to treasure it as a curiosity.

THREE TELEGRAPH STORIES

SHOWING HOW MUCH DEPENDS ON THE RAILROAD OPERATOR.

How One of Them Made Up for a Blunder by Saving the Limited—An Engineer's Nerve—An Accident Where Accidents Were Deemed an Impossibility.

From the Pittsburgh Commercial Gazette.

Said the telegrapher: Jones was night operator at a town near Altoona, on the Pennsylvania Railroad. He had lost a great deal of sleep and was very tired. The night were along and trains were few. It was hard to keep awake. Finally the operator in the signal tower next to the west reported No. 4, the express, passing east. The track was clear and Jones pulled the white signal and waited for No. 4. He had almost fallen asleep when he was aroused by the roar of the train as No. 4 swept past the white signal. He saw the red lights at the rear of the train as she disappeared around the curve and he reported her to the operator at the signal towers next east and west. Then he waited to hear that she had passed the tower east. Three or four minutes was all it should have taken her to reach that tower, but he waited long after that and no word came to him. He called up Smith, the operator there, and asked him if No. 4 had passed. Smith said 'No.' They talked over the wire and concluded that she had broken down or been wrecked between the two towers.

"At about that time the train despatcher called up and asked anxiously where No. 4 was. Jones said that she had passed his tower, and Smith was sure she had not passed his. Everybody was wide awake now, for the train was certainly lost, and a lost train is a serious thing on a railroad. The despatcher thought that she might have slipped past with out Smith seeing her, but the towers all along the road beyond declared she had not passed them. A freight going west was stopped at Jones's tower and the conductor was asked if he had seen No. 4 between the two towers. He said that there was no sign of her.

"Then the perspiration began to stand out on the operators and despatchers. The track between the two towers lies along the river. A high stone wall supports it. The only possible explanation seemed to be that No. 4 had gone over the wall into the river. She could not have gone up into the hills, so far as I know, but he may have been misled by some one else's blunder. One day the limited was going east in two sections. It is very, very seldom that the limited runs in more than one section.