

# CALLS GYMNASTIC FOR THE LITTLE FOLKS



BENDING THE KNEES



FOR THE FOREARMS



BALANCING



swallowed up, while others escaped by moving rapidly backward. Alexander von Humboldt relates that on this occasion many houses sank into the earth with so little damage that the occupants, safe from all injury, were able to open the inside doors and await their deliverance for two whole days. They went from room to room with lighted torches to see their way, cooked their food and discussed with one another the chances of their being rescued.

Among the most curious effects of earthquakes must be reckoned the deep wells, which open instantaneously and which are found to be full of water or sand to their mouth, the latter, being, as a rule, round and convex, and nearly always surrounded with a layer of slime. The most celebrated of these basins, in respect to number, dimensions and symmetry, are those at Rosarno, in Calabria, which had their origin in the two earthquakes of 1783. Immediately after the shock most of these wells had the shape of a funnel inside and looked like small ponds, some filled with water and others with sand, which came right up to the surface. This fact might possibly be explained by the large quantity of earthy substances forced up to the surface, which, accumulating, produced an obstacle which the water, raised from the depths of the globe, could not surmount.

the last century were for a long time subject to nervous disorders. They would roll convulsively upon the ground and then jump up and accuse themselves of all sorts of imaginary crimes. At Philippeville (Algeria), again, after the earthquake of 1856, several persons lost the use of their speech, while upon other occasions, as at Broussa in 1855, there have been many instances of paralytic patients regaining suddenly the use of their limbs. These and many other instances of like character are related by M. Boscowitz, a French writer on earthquake phenomena.

It would be thought that the deep and terrible emotion caused by an earthquake would only be felt in large towns, and that people inhabiting sparsely populated regions, like the South American Indians, and living in huts constructed of reeds and palm branches, would not be afraid of earthquakes. Yet a long way from the coast upon which the towns and villages are built, in the vast solitudes of the Orinoco and the Magdalena, human beings are not less alarmed by this phenomenon, which terrifies even the wild beasts of the forest and the monsters of the deep. For animals are in mortal terror during an earthquake, and Humboldt relates that the crocodiles of the Orinoco, generally as silent as the ordinary lizard, escape in haste from the heaving bed of that stream and make off with piteous groans toward the forest.

During the shock which occurred in the canton of Valais (Switzerland) in 1855, the owls, which are, as a rule, the most timid and suspicious of birds, gathered upon the trees nearest to the houses, while other birds, such as swallows, took their flight toward other lands. It has been noticed in the West Indies and elsewhere that, during an earthquake, domestic animals, such as the ox and the horse, will get close to each other and tremble all over. During the series of earthquakes shocks in Calabria 100 years ago the dogs howled so loudly and dolefully that they were killed, and the same was the case at Philippeville in 1856; while at Bougie, in Algeria, the very nightingales and other song birds were so struck with terror that none of them uttered a note for more than a week.

During the violent shocks which occurred in Spain during September, 1884, some enormous crevices were formed and

At times the waters of a stream are precipitated in a fresh direction, impelled by the underground shock, which, after having destroyed their former bed, has made a fresh one for them, by either raising or lowering, as the case may be, the ground around them. In 1540, after a violent earthquake, which destroyed the cities of Sichern and Rama, the waters of the Jordan first began to fall and then disappeared suddenly, the bed of the stream remaining dry for two days and two nights, but upon the third day the stream again filled. During the Andalusian earthquake in 1884 the river Cogollos suddenly altered its course and all the streams and rivulets around the village of Guevarja disappeared, while the bed of the river Almachar, in the same district, was riven asunder, and its waters inundated the surrounding country, which it was no longer possible to irrigate.

At times the water of rivers and large lakes rise like a mountain to a great altitude and in falling back submerges the surrounding country. The fall of this mass of water is always accompanied by a terrible crash and it buries everything which comes in its way. Thus, on August 26, 1856, during a violent underground earthquake in Honduras, a lake several leagues in extent suddenly overflowed and did more damage than the earthquake itself.—Leslie's Weekly.

Probably no living person has quite so many godparents as Princess Irene, the wife of Prince Henry of Prussia, who possesses 4000 godfathers. She changed to be born in 1868 during the war, and her father, Prince Louis of Hesse, asked all

### Begin to Train Their Muscles While Young If You Would Have Your Sons and Daughters Grow to Be Strong Men and Women

There is just one proper time to begin training muscles, and that is, when they are born. The first time that a youngster is encouraged to kick the infant gymnasium is opened. Next it thrusts a fist into your eye and you are a living sacrifice to the system. It rolls and it spurs and its little muscles grow and wax strong.

But for awhile it doesn't take kindly to your theories. You have to leave the muscles alone and trust to their training themselves. Then, just as soon as you can teach exercise, begin to do it.

Don't be afraid that the growing, strong-willed youngster will object to them. On the other hand, he will be the biggest fun in the world. The youngster that runs away from the first reader and the spinning blank will run just as far to his callisthenics lesson. It doesn't seem to be studying at all when you are learning how to manage your body.

It isn't worth one paragraph to argue on the benefits. They have been established so long that we no longer need to be convinced that rightly directed exercises give strength as well as ease, grace and poise. Let's skip that.

The thing is, what to teach the little folks to do with their arms and legs and bodies.

In the first place, go slowly. Remember that the muscles are growing and young and tender and that they won't stand the amount of hard work that yours will. Serious results have come from overdoing the gymnastics for the growing child. Begin with the lightest exercise and go slowly.

Don't use weights and apparatus at first. They are too difficult. In fact, a good many think that weights are never worth while unless you are training to be a circus performer. They harden the muscles, which is unnecessary. They often strengthen at the expense of grace. They are likely to strain one. Dumbbells and Indian clubs should always be of light weight if they are used at all, and they needn't be. Don't let the youngsters have them, at any rate.

The muscles will grow fast enough by their own use without any extra pounds added to their efforts. Teach them to use themselves with plenty of force and vim and they will grow like pants in California.

Look out for the muscles of the trunk. Bending exercises will do this. Try this one:

Clasp the hands together and raise them as high as possible above the head. Then bend forward until the clasped knuckles touch the floor.

Try it, because you must learn the exercises yourself before you can teach them. This is a bit tiresome to the waist muscles, and it makes your head wonder which way it belongs until you are used to it. Three times repeated is plenty for a beginning. It is easy enough to increase by one repetition every day, until you can do it a dozen times without stopping. But five times is enough for a little child.

Lay the youngster flat on the floor and tell him to sit up without bending his knees. He won't be able to do it. He will scramble up with his knees bent like a lizard. Hold the knee flat down and see what comes of it.

Look out for the muscles of the legs. These will require less attention, perhaps, than the others, for they get exer-

cise in running and jumping and dancing. But for the city child the running is far too scarce, and it pays to supplement it.

Teach kicking. Put your youngster on the floor, roll him over on his side and have him lift his leg and lower it as far as possible—that is, kick upward. Try it three times, then roll him over on the other side and repeat the performance. This is fine training for some of the trunk muscles as well as the legs.

He can lie on his back and raise his legs to a perpendicular position, the knees unbent. It will take some time to learn to keep them straight.

Have him do this with the legs alternately at first, and after several days' practice try it with both legs at once. There is an inclination to tip over backward when this exercise begins, as you will find for yourself if you try it. Be careful that the enterprising youth does not land on the back of his neck, for that hurts.

The balancing feat not only trains the leg muscles, but helps nerve control as well. Tell your boy or girl to stand on one foot as long as possible, holding the other extended horizontally. The little arms will reach out, clutching at air for a balance. Time the performance each day and you will find it increasing in length. Change from one foot to the other, of course. There is more fun if you can have several children together for these exercises; a jolly rivalry springs up and the inspiration of competition begins.

Another kicking exercise is this: Let the child lie face downward, then raise the foot up and forward, bending at the knee. He should be able in time to strike his body with his heels. In time, too, it can be done with both feet at once.

While he is still face downward teach him another exercise. Have him raise himself upon his elbows, then upon his knees. Have him extend the legs flat and rise upon the knees in alternate counts. In this way he can come to a knees-and-elbows position and extend the legs again several times in succession, bending easily from side to side as he does it. It is the best exercise in the world to relax the whole body, and should not be confined to little people alone.

For the ankles, put the hands on the hips, thumbs backward until they meet at the back of the waist, then rise on the toes as high as possible. Go down very softly—don't let the heels thump.

Any of the little bending exercises given in dancing schools are good for the young ankles and insteps. Easy dancing steps are pretty and useful. The English waltz, given in a slow count of three so that the parts of the step are separate and do not merge into one, is excellent.

Teach deep breathing from the beginning. Begin your daily exercises with it, close them with it. See that the little chest is expanded to its fullest capacity, then have the air expelled through the open lips. Always have them closed for inhalation.

With the hands on the hips try a knee-bending exercise. Bend as far as possible. Then try the same with the hands

UNTIL THE KNUCKLES TOUCH



A BACKWARDS KICK

KNEES AND ELBOWS POSITION



PHOTOS BY STANFORD STUDIO

straight down at the sides, letting the tips of the fingers touch the floor. They won't do it at first. The bending won't go far enough. But with practice it can easily be achieved within a week, and the goal is worth working for.

Now for the chest. The breathing is really enough of itself to assure a good development; but there are ways to aid the breathing. Draw up the fists to the chest, elbows straight out at the sides. Stretch the arms out, keeping them horizontal. Do this with arms separate, then together.

Place the tips of the fingers on the shoulders, clasp out at the sides. Extend the arms full length, then replace.

The biceps will be strengthened by these motions, as well as the shoulders and chest. But in looking out for the biceps don't forget the forearm. One simple little exercise will do enough for this. Extend the arms straight in front, extend the hands as well, then clench and unclench the fists.

It is interesting to see for yourself, or feel, rather, what this accomplishes. To test it, do it with one hand alone while you clasp its forearm with the other. There! Don't you feel the muscle at work inside?

Place the finger tips together above the head. Hold them tight together, then swing the arms in great half-circles, to the floor, over the head, back and forth.

Place the hands on the hips—let it be understood that the thumbs are always toward the back and as near meeting as possible—then bend the body to the right side, to the left, forward, backward. Both of the above exercises bring the trunk muscles into good play and relax the whole body at the same time.

It is the best thing in the world for a child to lay it on the floor and roll it as you would roll a frolicsome puppy. This has to be done gently with a delicate child, but it will soon learn to stand harder handling. A fastidious mamma will see

## EFFECTS OF EARTHQUAKES.

THE losses of life and property incident to such fearful catastrophes as that which recently occurred in the Lesser Antilles are the greatest but by no means the only calamities following in the train of such

cataclysmic events. The effect upon the survivors of such scenes of horror and death have sometimes been of the most painful character. Most of the survivors of the disaster which befell the town of Caracas early in

houses were swallowed. Along the tableland of Quito in 1797 several cracks opened and closed in such a way that some people were able to escape by stretching out both arms. Many persons on horseback and mules laden with merchandise were

the officers and men of his cavalry brigade to stand sponsors to the baby girl. The ceremony took place at the close of hostilities, and the name Irene, which means "peace," was appropriately bestowed on the little princess.

RAISE THE LEGS PERPENDICULARLY



LIE ON THE SIDE AND KICK UPWARDS

FINGER TIPS TOGETHER

