

SCIENTIFIC.

A clever distinction, in the opinion of Dr. F. Lagrange, should be established between two methods of exercising the body. A certain set of muscles, as those of an arm, are strengthened by being exercised, but for quickening all the vital functions—respiration, circulation, digestion, etc.—the simultaneous activity of various muscular groups, as in running, leaping or tennis, is needed. Athletic exercise gives special strength, while hygienic exercise is necessary for health. Unfortunately, nothing is rarer in practice than to see applied, with discernment, the gymnastic method that respects rationally to the one or the other of these very different indications. In most cases, we prefer the gentlest exercises to be applied to delicate subjects whose vital functions are languishing, and in whom it would be necessary simply to quicken the play of the organs. An endeavor is made to give them larger muscles, while they really need larger lungs; a larger heart, more tractive steamer, and blood richer in oxygen. In a word, it is forgotten that health is a resultant of which muscular strength is but one element, and not the most essential one.

The basis of the French system of ideographic elements from prison records, as explained by M. Berthillon, is the keeping of accurate measurements of the body parts of the body which change little after maturity. These parts are the head, the foot, the middle finger and the extended fore-arm. The head is measured in centimeters, and there may be thousands of photographs it is easy, by these measures, to find whether the exists of any individual, the photographs or descriptions being divided into the three classes of tall, medium and short persons, according to height, weight and build, and also least, again subdivided according to the width of the head, and so on. If no photograph of criminals have been thus classified, a small group of some fifteen corresponding in measurement to any suspected person may be quickly selected, thus completely identifying the criminal. Criminals may be recognized many years after measurement, and even, by their skeletons, long after death.

In our country surgeons have given astonishing proofs of the possibility of saving life and restoring health by removing portions of such vital organs as the brain and the liver. Prof. Tillmanns, of Leipzig, has found that surgical treatment may be extended even to the lungs, and to the airways of consumption. In a case of tuberculosis of the lung, the surgeon, by removing portions of the diseased part of the lung, exposed, when that portion sterilized, when the patient recovered, and is made able to work. Prof. Tillmanns believes that this may prove a desirable treatment when the disease is localized, and when it is not possible to expose the affected parts of the lung and bring about atrophy and shriveling and a second surgery removes the parts after becoming functionally disabled.

The protein of measuring the man's health has been solved at last by Mr. C. V. St. John, one of the professors at New York University. He means to quarry limestone to has produced a barometer of almost incredible delicacy. By this remarkable apparatus he can render sensible the heat of a candle up to the distance of a mile and three-quarters, and by directing the microscope to the instrument he can tell when the warmth received from its reflected light is equal to that given out by a candle at twenty-one feet distant. Observation seems to show that, although the moon's face is under the blight of an ordinary sun for four days, it remains comparatively cool, and that whatever heating it does ultimately receive is rapidly gained and rapidly lost.

An English barometer has patented a new form of steamship, in which four horizontal rollers are made to support on their journals above the water a strong steel frame. The frame is built like a ordinary and all that is necessary to fit the ship as a carrier of passengers as a pleasure yacht, marine residence, sanatorium or hotel. Each roller is provided with paddles and is rotated by a steam engine at each end. The ship thus moves single file along the water, the floating rollers, pushing and pulling, can be reduced and made even imperceptible by increasing the size of the rollers and their distance apart. The rollers may be made of almost any size, and when very large should give greater speed, as well as steadiness, that can now be attained.

Modern science accomplishes many wonders, but none of its miracles can exceed in interest that of giving speech to the dumb. This seeming impossibility has been accomplished at the Royal Dublin Institute for the Blind. In fact, the little girls, deaf, dumb and blind, have taught to speak. The process of training was arduous, and yet the vocabulary of the pupils is limited, but they have acquired the power of vocalization and sometimes the power of words in their sound. After this, a complete acquisition of speech ought to be merely a matter of steady growth in intelligence and of practice in the exercise of new-found faculties. "Can the dumb speak?" loses force as an interrogative negative.

A German anatomist has called the attention of his class to certain hysterical women who, when afflicted, make a kind of animal cry, "rat-a-tat" especially if they are pained. They number 300, and are remarkable for the extraordinary length of their silken hair. Many of the purest jet black, while others were plebeian. The animals looked as if they were a cross-breed between the dog and ordinary sheep.

Give your farm credit for furnishing you a home rent free and for a thousand and one necessities and luxuries which you would have to pay cash for in a city.

Receipt for vicious horses—patience, gentleness, fitness and petting, one pound of each. Mix thoroughly with one half a pint of common sense, and give to the horse every day.

Running a dairy without a thermometer is as inconvenient as running a household without a timepiece. The good workman must have good implement to produce the best results.

Grafting is an old art not sufficiently appreciated. By it any old fruit tree that is healthy but unproductive can be soon changed in its character. Thousands of farmers do not know how to graft, though it is easily learned.

Salt is an excellent fertilizer for some crops, as it aids lime in decomposing organic matter in the soil, and supplies sodium wherever it may be required.

The large logs in New Jersey are fed day and night, a prize being offered for the heaviest. Some of them are made to attain extraordinary weights.

Too much harrowing of the soil is not indeed bad, but the free use of the harrow will do more to increase the crops than any other kind of work.

Clover and a feed of bran at night is better than too much grain or clover exclusively. Bran for pigs, calves and growing stock of all kinds provides vitamins and largely aids in developing bone.

Cows will not refuse stagnant water when thirsty, and as such water contaminates the milk the matter of a plentiful supply of fresh water is an important one.

ALMOST A REPROACH.—Texas Editor.—A Mormon editor is in jail for supporting four wives.

Wife—You say he was an editor?

That's the way it reads.

And he supported four wives?

Just so.

I don't believe it.

EXACTLY SO—Customer—Isn't there a great profit in these shirts \$1? I saw in the paper the other day that the poor girls here make reg'd to 17 cents a shirt.

"Yes, sir, but all the girls have to do is simply to make them."

Customer—"Precisely; they make the shirts and you make the money."

No News—Mrs. Gabb—"Yes, my daughter appears to have married very happily. Her husband has not wealth, but must be admitted, but he has family."

Mrs. Gadd—"Yes, I heard he was a widower with six children."

FARM NOTES.

WOMAN'S HARDER PART.

Her Daily Life Contrasted With That of Her Husband.

KICKING COWS.—A kicking cow is a nuisance in the farm yard, but as often occurs, these same cows are exceptionally good milkers, hence the desirability of some cure.

A correspondent of American Rural Life described his device, which, he claims, works well, and as the plan is a simple one, we reproduce it for the benefit of our readers.

All that is required is a bit of rope.

The stick should be ten or twelve inches long, bring up the foot so as to form a right angle at the knee. Next place the stick in the "angle"—crosswise—and secure it with the rope. In other words, arrange it so as to compel the cow to stand on her hind legs, with her front feet meet on an equal footing, neither having any advantage. And it is there that she proves that instead of being the weaker she is infinitely the stronger and more enduring.

Let a wife be taken ill, and for twenty-four hours the husband is never

so ill as his wife, and very likely he scarcely leaves her bedside.

The second day finds him still as poor, but he is beginning to weaken, even the loss of one night's sleep has nearly "broken him up." But the third day he is comparatively a wreck, and ready to yield up his spirit as nuse to any one who will fill it.

Not so, however, with the wife when he is ill. Day after day and night after night she hangs over him, never for a moment thinking of instructing him to the care of another. If she sees it is in her child's or his wife's hands, while the rest of the world is outside, she stands by him, scolds him down, and prays for him to stand by him.

She has not fun enough," answered Bob, stoutly, "it's all Jo's fault, too. We boys wanted the pond to ourselves for our own day, and we made up our minds to have the girls come wading out. But Jo got us in trouble."

"I think this is Jo's to tell," interrupted Uncle John. "How was it boy?"

"Why," said Jo, "I thought the girls had as much right on the pond as the boys. So I spoke to one or two of the girls, and they said, 'We'll be your friends if you'll let us in.'"

And so the water was let in, and the girls waded in, and the boys waded out.

Bob's mother was the weaker, but no physician who has been long in practice will be convinced that such is the case.

MAN AND WIFE COMPARED.

Men compare with women as does cast iron with steel. He is strong, and yet is comparatively easily shattered, whereas you can bend her, you can put her to tests which would, figuratively speaking, pulverize him, and yet he is not broken.

She is the one on the highest part of the hill that generally most needs to be fertilized.

An exchange suggests to farmers that wherever cattle and horses have pastured during summer, the clods of manure they have scattered over the surface should be broken up in the fall, and every part over-worked woman.

—In the evening, when the husband

has reached his first, she has

reached her first.

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