

SCIENCE AND NEAR-SCIENCE UP-TO-DATE

Must AMERICANS RECLINE at Meals AND THUS ESCAPE Nervous DISORDERS Which THREATEN Vitality of THE RACE?

Famous Authority Points to Habits of Men of Rome as Proof That a Nation Must Avoid the "Quick Lunch" as It Would the Plague

SHOULD we rest or exercise after meals?

Rome was strong in its early days; Rome was strong because its digestion was good and its digestion was good because it rested and took things easy during and after meals.

Ergo—Rome was strong because of its mealtime couches. Such is the opinion of Dr. Anna Dwyer, an eminent physician of Chicago. She says "Rome was temperate, virtuous, sensible in its youth. The things that made it powerful were the same things that weakened it when abused. For instance, in the days of the republic, Romans exercised excellent judgment in their eating; they had the best of digestion, consequently they were a happy, optimistic, energetic race. They gave their digestive organs a chance to perform their functions. After a meal they rested on long couches beside the tables, thereby gratifying the demands of nature and performing the acts which gave those delicate parts of the anatomy the full ability of their functioning powers.

What Man Requires. "The digestive system in man is so arranged that a short period of relaxation, of complete restfulness is required after a full meal has been taken into it. Modern "quick-lunch" habits are sent directly against this law and are responsible for much of the indigestion and, therefore, much of the worry and irritability of the present-day races.

"The Romans reclined during and after their meals. They stopped all their activities of body at this time; they spent the period in joviality, in hearty enjoyment of their food and of the companionship of their guests. They ate slowly; they were in repose; they were contented. After dinner music played for them, simple food rested pleasantly within them.

Some Modern Fallacies. "Their success in things governmental and executive should be a lesson to us today, used as we are to believing fallacies,

about haste and lightness in noonday meals, about vigorous walking after eating, about "settling our food" with exercise. For fallacies these beliefs are. Brisk walks subsequent to the filling of the stomach delay digestion. They take the blood away from the digestive centers and hold up the processes that should proceed without hindrance.

"The twenty minutes directly after the completion of a meal should be spent in rest. From thirty to forty minutes should be given to eating. Altogether an hour should be devoted to each meal.

Why Rome Fell. "If twentieth century people would realize the delicate adjustment necessary for health they would emulate much of the manner of Romans.

"The decay of Rome in later years bears out this theory of its dietary wisdom, for when the mealtime rest hours were given over to sensualism and Bacchanalian revelries the benefits of the rest period were first neutralized, then ruined. Mere repose could not atone for the injuries of intemperance. The Romans, so long as they were hardy, enterprising workers toward

the ideal of citizenship, were restrained and most careful. They preserved themselves from bestiality. Sensual images are not driven from the mind except by ideals that lie beyond the intellect. The Roman had for his highest ideal citizenship and as quick as he had this realized he began to neglect the rigorous care of his

body and health. Rome decayed because the leisure hours after dinner were devoted to orgies and drunkenness.

"Their physical fitness lost the excellence which generations of strong self-control in all things had bestowed upon them. Licentiousness guided their minds away from their rules of eating, and they be-

came gormandizers, indulging themselves in every imaginable manner.

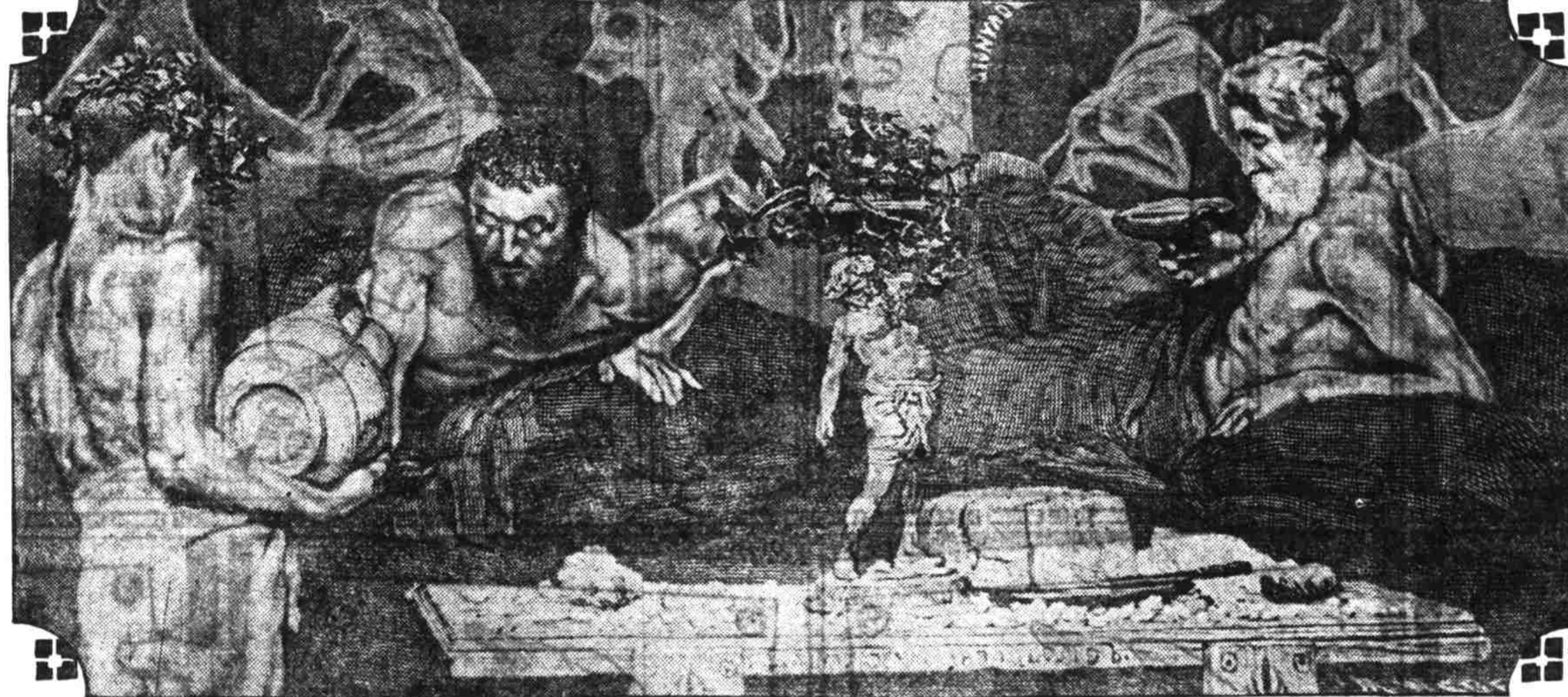
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Alma Tadema's famous painting of a scene from a Roman repast.

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The rush of the modern American who gives scant time to his meals.

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France Imports Snails to War on Vineyard Pests

NO HEALTHY, free-living creature is common or unclean in a naturalist's eyes, and to apply the word to a snail gazing along with its horns out and its house on its back is mere prejudice. At the same time it has to be admitted that snails do a great deal of damage in fields and gardens, and would do much more if it were not for their enemies, such as birds and hedgehogs.

In this connection some interesting observations have been made on the extraordinary appetite for snails and slugs exhibited by a Mexican snail with a shell about two inches long, which a naturalist has been trying for four years to acclimatize in France.

The point is that it seems to have an extraordinary keen liking for everything in the snail line of life. It was tried with salad and fruit on the one hand, and with minced meat of various kinds on the other, but it would have none of them.

Snails and slugs, however, it devoured with avidity. A watersnail occupied its attention for about ten minutes; the common garden snail, with its strong, muscular, creeping sole, took longer. In seventeen days five of these snail-eating snails—scientifically known as *Glandina*—accounted for 100 snails, and one hungry individual was seen to eat a dozen vineyard snails in twenty-four hours.

It must be noted, however, that there were usually long intervals between meals, and that one garden snail every two or three days was generally enough.

In most cases the *Glandina* grips its victim before the victim has time to draw its body into the shelter of the shell, but it is also able to deal with a snail that has drawn itself in, for it contrives to break down the doorway of the shell.

Why Barber Gives Better Shave

WHETHER you secure a close shave without enduring a feeling of rawness and soreness to the skin of the face depends upon the angle at which you hold your razor, according to a well-known expert.

Often it is said that no man can secure as satisfactory a shave at his own hands as he will be given by a barber. That this is not the case but that the reverse would be more properly true is the claim of manufacturers of razors of various designs.

It is pointed out that all cutting utensils must of necessity have a sawlike edge and that any object is more readily cut by drawing the blade across it in a diagonal stroke than by a straight attack.

Barbers understand this secret well and sometimes illustrate it by tapping their tongues with a razor blade. That the tongue is not cut is due to the fact that the blade meets it at right angles. Were the blade to move a degree to the right or left at the time it struck the tongue the latter would be lacerated.

It is because the barber moves his razor blade in a diagonal stroke, namely, downward and to the side at the same



Razor, when held at an angle and moved downward, performs its work most effectively.

time, that he does not "pull" at the hair and cause irritation which is felt for some hours.

Artificial Rays to Rival Sunlight

THE intense heat, equal to that of the sun, which has been recently obtained by Dr. Lummer, a well-known European scientist, has opened up new possibilities in the world of lighting, notably in producing by artificial means a light exactly like that of the sun.

If you were to look at the sun through a spectroscope you would see the white light split up into all the colors of the rainbow—violet, blue, green, yellow, orange and red. By means of a new instrument the relative brightness of these colors can be measured, and when, for instance, electric light is measured in this way it is always found that there is much more red and green, compared with violet and blue, than in sunlight.

The new arc lamp invented by Dr. Lummer, however, gives a light very nearly identical with sunlight, because it is so much hotter than anything produced before.

If you hold a poker in the fire it gradually becomes red-hot; later it may glow almost with a yellow heat. If you burn up a piece of iron wire by passing an intense electric current through it, it burns with a brilliant white heat. In other words, the hotter a piece of metal is made the whiter it becomes.

The carbon pencils of an electric lamp were found by Dr. Lummer to become so intensely hot that the carbon in the neighborhood of the arc actually melted into vapor—in fact, it boiled. Now, if water were boiled in a kettle with no lid or spout, it would only boil at a much higher temperature than usual.

So, in order to get more heat, Dr. Lummer placed his arc lamp in a sealed chamber, and, further, compressed the air in

May Use Ice As Gun Foundation

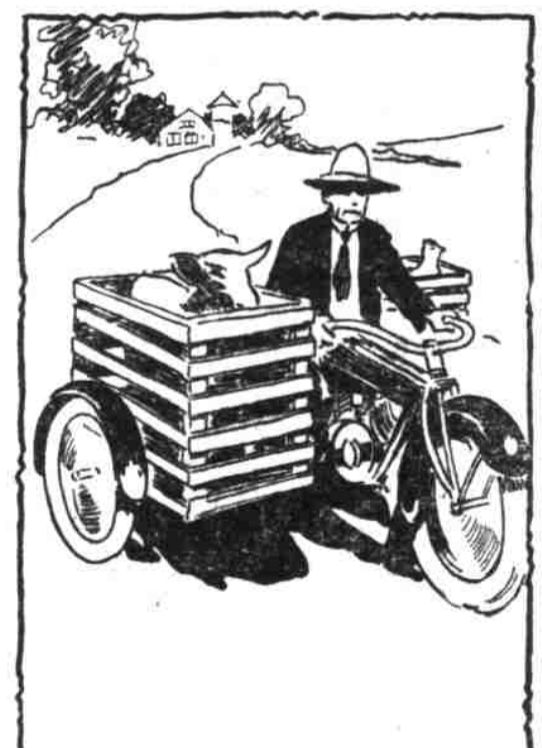
A PROPOSITION was advanced some years ago that a temporary repair should be made in a vessel holed below water line by forming around and thickly over the hole a block of frozen sea water by means of refrigerating engines and a number of small copper pipes traversing the collision mat.

"May I further suggest," says an authority, "the use of a similar method of extemporizing gun emplacements in this war? Take the case of the amphibious fighting at the Dardanelles. Monitors of light draft have to be run close inshore, and they might be fixed in position by dumping large quantities of cement and rubble. But this method of stabilizing the monitor permanently 'on the rocks' would sacrifice the vital advantage of changing position. If the monitor were simply frozen into sand or other loose bottom then by introducing steam to the copper tubing it could be released when desired. Taking the net cost of ice-making by electric transmission of power from a refrigerating ship—that is, a converted collier—at 50 cents per ton, \$500 would pay the price for 1,000 tons of ice ballast anchorage. The system might even find application on land.

Delivers Live Stock by Motorcycle

QUITE an unusual employment is made of a motorcycle and side car by a Missouri farmer, who has converted the vehicle into a quick delivery machine for carrying certain products to market.

By securely fastening a crate over the rear wheel and placing another on the chassis of the side car, he is able to transport a considerable load with dispatch and without particular difficulty. His country place is more than thirty miles from St. Joseph, but with this delivery van he recently carried a calf and a dozen chickens to market and returned within a few hours' time.



Motorcycle used as delivery cart for live stock.

The Egg That Dances on Water

AN EGG dancing on the water is an interesting sight that will always attract the attention of those who see it. But it is not every egg that will dance, though with care and patience any boy may give an egg the necessary liveliness.

Having selected a good sized hen's egg, we prick the shell at two points and blow or draw out the contents. Then, placing the shell aside to get perfectly dry inside, we obtain a small quantity of quicksilver—half a teaspoonful, or even less, will be sufficient.

With care, so that none may be lost, we pour the quicksilver into the egg, having previously stopped up one of the holes with sealing wax. Then, when the quicksilver is all inside, we seal up the second hole, and when over the two small patches of sealing wax so that they appear part of the shell. All is now ready for the performance. We place the egg on the surface of a large pool or pond, give it a push, and immediately it begins to dance about just as though it were alive, and this action it keeps up.

The explanation is that the push, the wind, and the ripples give the eggshell a slight movement, which is greatly increased by the heavy quicksilver inside continually trying to find its own level. The result is that the motion continues.

As a trick to be performed before others, everything depends upon the natural appearance of the egg.

Why French Flag Has Unequal Stripes

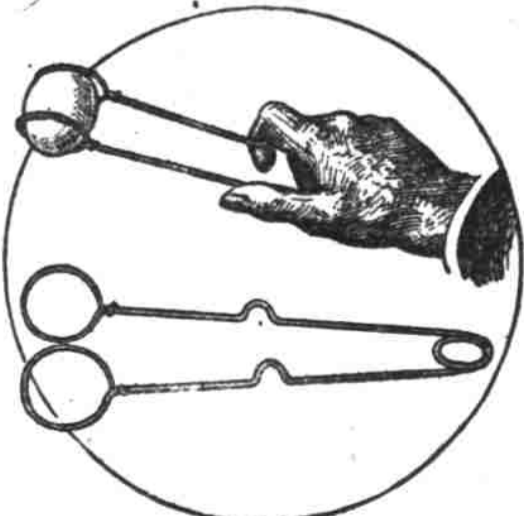
IT IS not generally known that the three stripes of color that make up the French national flag are not equal in width. When the tri-color was first authorized, 1792, the positions and proportions of the three colors were not stated, and such a variety of flags was seen that two years later the National Assembly declared that the national standard should be formed of "the three national colors in equal bands placed vertically, the hoist being blue, the middle white, and the fly red."

For years the flag was made in this way, but though the bands were equal, they never looked equal owing to an optical illusion, the blue appearing wider than the white, and the white wider than the red.

At last, after many experiments, it was officially decided that in every hundred parts the blue should be thirty, white thirty-three, and red thirty-seven.

Device Prevents Egg Breaking

A NOT unusual catastrophe occurs when freshly boiled eggs are taken from the hot water, and a device that overcomes this danger, according to Technical World, may be made of a wire bent to give a spring, and looped at each end. Angular bends between the looped ends and the spring serve as "finger holds," by which the device is easily operated. An egg may be readily grasped in the loops and safely lifted from the boiling water, or may be dropped in for cooking.



The little wire tongs save danger of letting eggs drop because of heat.

Fourteen Words Save German Fleet

WE HAVE a saying that speech is silver, but silence is golden. There is now an exception to the rule. Some years ago it was proposed to establish a chain of British wireless stations round the world, but it was not done. The Germans did, and the result is interesting.

Great Britain declared war on Germany at midnight on August 4, 1914. Seven hours earlier, at five o'clock in the afternoon, Germany sent out a message to all its wireless stations. Each station had a radius of 2,000 miles, and each in turn flung this message forth to German ships out at sea. "War declared on England. Make as quickly as you can for a neutral port."

Only fourteen words, and fewer still in code, but it was enough to save Germany the bulk of her merchant fleet. The ships saved were an enormous number.

Egg Flip as Snake Bite Antidote

INDIA'S annual loss of over 20,000 lives from snake bite has forced the production of an antidote serum. The Parel Laboratory, Bombay, keeps a supply of cobras from which venom is extracted every ten days. The snakes are forcibly fed with egg flip through a tube. The venom is dried over lime and then dissolved in a salt solution.

Increasing doses are injected in a horse until at the end of two years the animal can stand a dose 200 times the original one and is quite immune from the cobra poison.