

Push or Being Pushed.

As we have said repeatedly, there is nothing in the world like energy. In order to succeed, it is required that the aim in view be pursued with unwavering determination. It is the persistent effort to advance which we commonly designate by the term *push*. A business man without push might as well shut up shop and save his money, for sooner or later he will be swamped by the irresistible onward rush of progress.

Quite different, however, from this faculty of push, exerted in a particular direction for individual advancement, is the being pushed by others. He who is awake to his own interests, who is possessed of push, needs no pushing from others, and, on the other hand, no amount of pushing will benefit the weak and the laggard. Constant spurring will only induce stubbornness and sulkiness, and we all know how the mule will act if urged against his will.

We believe that he who does not feel that diligence and earnestness and a constant striving for improvement (be it in his own business or in that of another, if he is not his own master) will pay best in the end, cannot be brought to it by compulsion.

Compulsion, force, driving, moreover, is unworthy of the spirit of our age. Let him who will not move his arms and legs to keep himself afloat go to the bottom, the sooner the better. It is a deed of charity to such a being and in the best interests of others.

We have no patience with men who are like *dumb, driven* cattle, and who work solely because they must have their earnings in order to fill the stomach, whose chief prayer is

"Come day, go day,
God send pay day."

They are not *men*, but *machines*, and in the case of machines we expect a certain amount of work from the expenditure of a certain amount of fuel, and we take steps to get it. But a *man*, be he employer or employe, will do his best; what he may lack to-day, he will make up to-morrow. He will have *push*, but will object to being *pushed*.

Push is absolutely a requisite in this world; *pushing* is unnecessary, and may result in the very opposite of that which it was intended to accomplish.—*Lithographer and Printer.*

Petrification of Organic Bodies.

At a recent meeting of the Italian Medical Society at Perouse, Prof. Angelo Corni, of Rome, made known the processes of preserving anatomical specimens and of petrifying corpses, the secret of which he has kept to himself for more than fifty years. These processes are two in number, and are as follows:

1. *Process of Making Organic Bodies as Hard as Stone.*—The substances employed are boiled linseed oil and dento-chloride of mercury, which are to be stirred up in a mortar until a soft paste is formed. In this oily paste is immersed the corpse or any anatomical specimen that it is desired to render unalterable by giving it the consistency of stone. The immersion is prolonged for several months, according to the bulk of the body which is to absorb the above-named substances.

When the induration seems sufficient, the objects are washed with turpentine, and exposed to the air until they become thoroughly dry. Then they are polished with an agate, and burnished as is done in the silvering and gilding of wood, but without the use of water or soap. These operations necessarily require considerable practice combined with a certain dexterity.

If the objects to be preserved contain cavities, the latter must be previously filled with a mixture of equal parts of finely powdered cement and dento-chloride of mercury. Finally, if it be desired to preserve the body with its eyes open, artificial eyes must be substituted for the natural ones before immersion in the paste.

2. *Process of Preserving Bodies in a Soft and Flexible State.*—For preserving organic bodies in a soft and flexible state for several months, and permitting them to be dissected without any danger to the preparator or the anatomist, they are placed in some sort of a receptacle or other and covered with a layer of the thickest and purest honey that can be found in the market. If it be desired to preserve an entire cadaver by this simple and cheap process, we begin by carefully filling the encephalic, thoracic, and abdominal cavities with a sufficient quantity of tannin. This process, when applied with care, gives remarkable results, and a corpse thus prepared appears for several months to be asleep. One might say that the alcoholic fermentation that occurs under these circumstances serves it as food while preserving its softness and flexibility. When the fermentation ceases, a hardening of the parts occurs and renders the artistic forms of the body still more marked.—*Revue Scientifique.*

A CURIOUS ICE FORMATION.

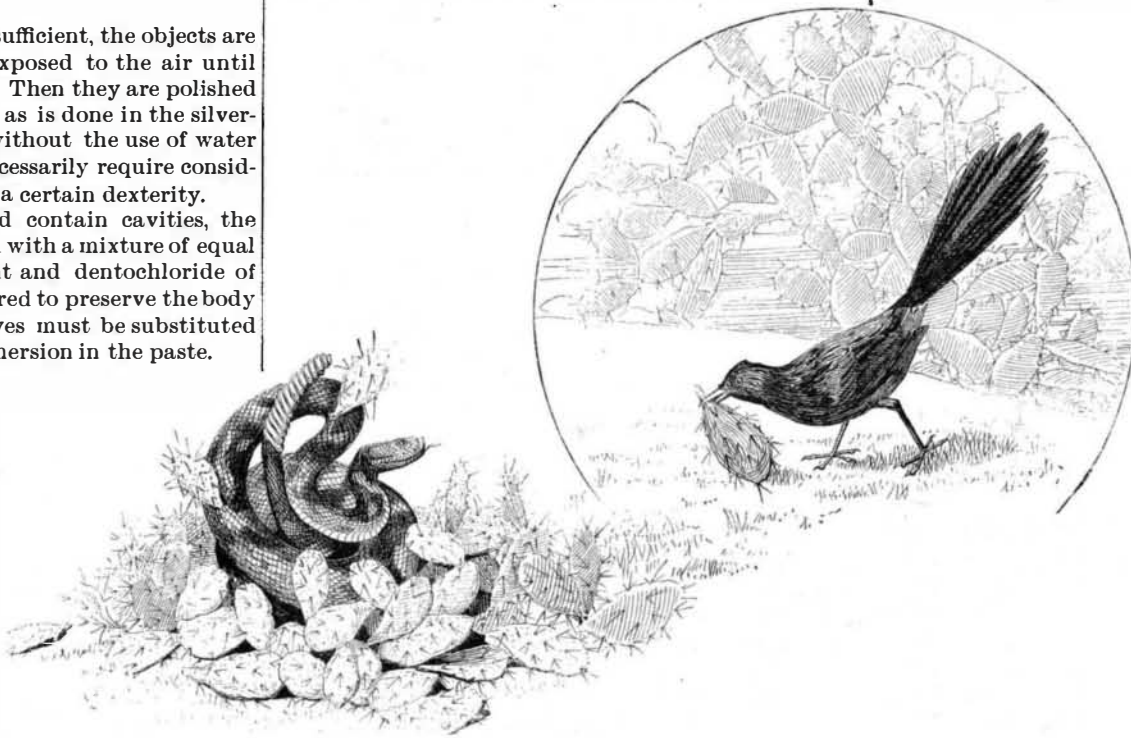
The accompanying illustration represents a photograph of an air bubble found near the center of a cake of ice by one of our correspondents at Eau Claire, Wis. The beautiful shapes which ice often assumes in such formations are sometimes quite notable, but it is very rare, we think, to find a specimen of nature's work in this direction where the idea of some design seems to be so well suggested as here. The whole may indeed



CURIOUS FORMATION IN ICE CAUSED BY AN AIR BUBBLE.

be taken as a shadowy representation of a beautiful flower stand, most delicately carved in crystal, suspended above which, and partly seeming to spring from it, are formations which give no bad suggestion of flowers and vines, while tapestry and bric-a-brac of rare excellence can be evoked, with but little effort of the imagination, from various other details of the representation.

EXTENSIVE soda works have been begun at Owens Lake, in California. A portable engine is employed, and as soon as a vat is filled the engine is moved to



THE CALIFORNIA ROADRUNNER (GEOCOCYX CALIFORNIANUS).

another, and the water is left to evaporate from the one that had been filled. This process will be repeated at all the vats until the soda sediment in the water accumulates in the pit until it reaches the surface. It will take about a year to get a crop of soda by this method, which will bring \$35 per ton. They expect to gather fifty tons of soda to the acre annually. The number of vats will be increased till they hold an area of 50,000 acres of soda, the income from which is expected to be nearly \$2,000,000 a year.

THE CALIFORNIA ROADRUNNER (*Geococcyx Californianus*).

JOHN R. CORYELL.

A very singular and yet a very little known bird is the roadrunner chaparral cock, or, as it is known in Mexico and the Spanish sections of the United States, the *paisano*.

It belongs to the cuckoo family, but has none of the bad habits by which the European cuckoo is best known. It is a shy bird, but is not by any means an unfamiliar object in the southwestern portions of the United States and in Mexico. Sometimes it wanders up into middle California, but not often, seeming to prefer the more deserted, hotter, and sandier parts of southern California, and from there stretching its habitat as far east as middle Texas.

It is not by any means a brilliantly colored bird, although some of its hues are very beautiful. The prevailing color of the roadrunner is olive green, which is marked with brown and white. The top of the head is black blue, and is furnished with an erectile crest. The eyes are surrounded by a line of bare skin.

It is not a large bird, being seldom twenty-four inches long, with a tail taking more than half of that length. The tail, indeed, is the most striking feature of the bird, being not only so very long, but seemingly endowed with the gift of perpetual motion, since it is never still, but bobs up and down, and sidewise, too, into every possible angle, and almost incessantly.

But while its tail is most striking, its legs are most remarkable, being not only long and stout, but wonderfully muscular. How muscular nobody would be able to imagine who had not put them to the test.

A traveler in Mexico tells of going out with his rancho host to hunt hares with a brace of very fine hounds. Going over a long stretch of sandy plain, relieved only by pillars and clusters of cactus, the Mexican called the attention of his guest to an alert, comical-looking bird, some distance from them.

With the remark that the gentleman should see some rare coursing, the Mexican slipped the leashes of the straining hounds, which sprang off as if used to the sport, and darted after the bird. For a moment it seemed to the stranger a very poor use to put the dogs to, but he was not long in changing his mind.

Instead of taking wing, the bird tilted its long tail straight up into the air in a saucily defiant way, and started off on a run in a direct line ahead. It seemed an incredible thing that the slender dogs, with their space devouring bounds, should not at once overtake the little bird; but so it was. The legs of the *paisano* moved with marvelous rapidity, and enabled it to keep the hounds at their distance for a very long time, being finally overtaken only after one of the gamest races ever witnessed by the visiting sportsman.

The roadrunner, however, serves a better purpose in life than being run down by hounds. Cassin mentions a most singular circumstance among the peculiarities of the bird. It seems to have a mortal hatred of rattlesnakes, and no sooner sees one of those reptiles than it sets about in what, to the snake, might well seem a most diabolical way of compassing its death. Finding the snake asleep, it at once seeks out

the spiniest of the small cacti, the prickly pear, and, with infinite pains and quietness, carries the leaves, which it breaks off, and puts them in a circle around the slumbering snake. When it has made a sufficient wall about the object of all this care, it rouses its victim with a sudden peck of its sharp beak, and then quickly retires to let the snake work out its own destruction, a thing it eventually does in a way that ought to gratify the roadrunner if it have any sense of humor. Any one watching it would say it was expressing the liveliest emotion with its constantly and grotesquely moving tail.

The first impulse and act of the assaulted snake is to coil for a dart; its next to move away. It quickly realizes that it is hemmed in, in a circle, and finally makes a rash attempt to glide over the obstruction. The myriad of tiny needles prick it and drive it

back. The angry snake, with small wisdom, attempts to retaliate by fastening its fangs into the offending cactus. The spines fill its mouth.

Angrier still, it again and again assaults the prickly wall, until, quite beside itself with rage, it seems to lose its wits completely, and, writhing and twisting horribly, buries its envenomed fangs into its own body, dying finally from its self-inflicted wounds. After the catastrophe, the roadrunner indulges in a few gratified flirts of its long tail and goes off, perchance to find its reward in being run down by hounds set on by men.