

Gales of GOTHAM and other CITIES

New York Building Has World's Strongest Rooms

NEW YORK.—In the basement of one of this city's latest skyscrapers are two vaults of a safe deposit company which claim the distinction of being the strongest rooms in the world. From first to last they took two years to build and cost over \$500,000.



In reality they consist of two huge steel boxes, placed one above the other. The lower one is 180 feet long, 31 feet wide and 10 feet high, and the upper one 85 feet long, 20 feet wide and 10 feet high.

They are built of the best Harvized nickel steel armor plate, and about 14,000 tons of this material was used—a greater quantity than goes into the making of a modern warship. None of these plates of which the vaults are constructed weighs less than five tons, and some of them turn the scale at fifty or sixty tons apiece.

Indeed, the two biggest plates are the largest pieces of armor plate ever forged for any purpose. These plates, which form the shell of the vaults, are five inches thick, except at the openings for the doors, where the armor is 18 inches thick. No bolts or rivets were used in the construction of these strong rooms, the plates interlocking into each other by means of wedge ends and channels. This means that the completed structure is, to all intents and purposes, one solid piece of metal, and any force applied to the joints has only the effect of tightening the grip of the wedges.

As a further precaution, a firewall of concrete, 12 feet thick, was laid around the vaults, except, of course, at the doors. Then, underneath, comes the foundation, which consists of ten feet of alternate layers of concrete and steel rails, laid flange to flange, built up from the solid rock.

Access to these strong rooms is gained through two round doors. They weigh 25 tons apiece, and are the largest and heaviest round doors ever made. Twenty tons of this weight are in one solid mass of material, seven and one-half feet in diameter, while the remaining five tons are accounted for in the bolt work and mechanism operating the lock. There are 24 round bolts in each door, weighing 100 pounds. An electric motor hung on the inside of the door gives the power to the gear.

Modern Orpheus Plays in the Philadelphia Zoo

PHILADELPHIA.—The rhino and the rabbit, as well as the bear and the bison, at the Philadelphia zoo are yearning for the return of a mysterious Westerner to "soothe their savage breasts." The animals, whose ancestors probably underwent the same experience with the great God Pan or Orpheus, were alternately aroused and soothed, excited and calmed in a quite shameful manner by the stranger by means of a violin, which skillfully imitated the cries of birds and beasts.



The musician, who described himself as Roy Young, "violinist and nature poet," secured permission from the zoo officials to experiment on the animals with his violin. For two hours he "fiddled," causing shrieks of fear and anger and then bringing the animals to passive submission by playing a soothing lullaby. Some of the creatures refused to respond. The failure, Mr. Young explained, was due to the fact that these particular animals' "dominant note" was an unknown quantity.

The ability of a musician, especially a violinist, to make a dog howl with a certain note is well known. This was the principle on which the "nature poet" worked. His first effort went into his valuable violin, as a bull bison took exception to a certain weird strain in "That Alamo Rag" and charged, causing Mr. Young to scramble over the fence. Somebody's "Hunting Song" caused the herd of Scotch red deer to flee in terror. Tschalkowsky's "Marche Slave" made a huge chimpanzee show its teeth and howl with rage. Its anger was in an instant changed to joy with Schubert's soothing "Traumerel." Ostrich, rhinoceros, leopard and monkeys were in turn made subjects of the experiment.

Chicago Police Entertain a "Future Senator"

CHICAGO.—Desk Sergeant Jerry Neilligan of the Desplaines street station spent one happy hour the other night. Jerry possesses more than a passing pride in his star and chevrons, and nothing delights him more than to exhibit to the "stranger within his gates" the wonderful efficiency of Chicago's police department.



He needed but one look at the middle-aged, rotund man who stepped up to his desk to classify him in a category far above that of the average complainant.

"I'm William Schauer," said the visitor, stroking his mustache. "You don't know me. I'm from Minnesota. I may say," he added, smiling as he clasped Jerry's hand in a convincing grip "that I'm the future senator from Minnesota. Now I'm making an issue of police protection in my campaign and I've come to Chicago to investigate conditions in your police stations, which, I have been informed, are far superior to those up our way. I was referred to you—er—a—oh, yes, Sergeant Neilligan—as the man most thoroughly acquainted with these things."

"Sure thing, senator—er—r—Mr. Schauer," replied Jerry, beaming. "I'll be delighted to show you through."

Accompanied by half a dozen detectives, Jerry led the way through the various offices of the squadroom. He showed the visitor the operators' room and how police and fire calls were received.

The detectives led the way to the cellroom, where they pointed out the "prize prisoners" and told the record of each. Then the corpulent visitor drew Jerry aside and whispered:

"I want to get the experience of spending a night in a cell. Do you think you could arrange it? Put me in with some bum."

Jerry stroked his chin.

"Besides," added the "senator to be," "I have no money and no place to sleep anyway."

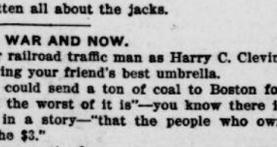
"Oh, Doc," yelled Jerry.

Dr. John O'Brien, ambulance physician, came and looked the visitor over.

"Nut," was his diagnosis.

Why Jefferson City Man's Car Refused to Start

JEFFERSON CITY.—Assistant Attorney General Thomas J. Higgs is the owner of a new automobile. He is his own chauffeur and he delights in entertaining friends when they come to the state capital by taking them for drives on the good roads about Jefferson City.



Some days ago a distinguished member of the Kansas City bar went riding with Higgs. The weather was fine, the road in splendid condition, and the assistant attorney general started to make the "33-mile run" via Wardsville and Taos.

About twenty miles out there was the trouble. Higgs "jacked up" the back end of the car, and in about half an hour had fixed things up. But when it came to starting, the car refused to budge. Higgs was at a loss what to do. His guest was anxious to get back to town to catch a train.

"I'm dinged if I know what is the matter with the dad-blamed thing," said Higgs.

"Say, mister," said a farmer who had driven up, "it looks to me like that machine would run if you took them jacks out from under the hind wheels."

And so it did. Higgs had forgotten all about the jacks.

Charting the Arctic Archipelago

AFTER a cruise of more than 4,000 miles through the Arctic archipelago, during which he placed on the map many new islands, bays and promontories, Capt. Joseph E. Bernier has returned to warmer climes.

During eleven years of Arctic exploration this hardy skipper has charted over 500,000 square miles of islands in the great northern archipelago and has discovered many records of Arctic expeditions, including documents left by ill-fated mariners, and pieces of wreckage, grim reminders of craft that went down in the Arctic seas, writes C. H. Dorr in the New York Sun.

Captain Bernier has left a record of his own work in various places to guide future explorers. If Vilhjalmur Stefansson, leader of the Canadian Arctic expedition, now in the polar regions, happens to reach Winter Harbor, Melville island, he will find there a substantial cache built several years ago by Captain Bernier, and well stocked with provisions, enough to last him a year or more. Captain Bernier established many of these caches or life-saving stations in the polar regions, for he knows by experience the needs of Arctic explorers.

On his last voyage Captain Bernier started from Pond's Inlet, Baffin's island, with the exploring ship Guide and a crew of ten men and an equipment including forty dogs and sledges. While voyaging through Arctic seas two of his crew found parts of the hull of one of the vessels of Sir Edward

Belcher's squadron. These relics of Arctic disaster were discovered on the north end of Bylott's island, in the Arctic sea.



ESKIMO CHIEF AND PARTY FROM IGLOLICK

Captain Bernier believes that these relics were part of the Pioneer or the Intrepid of Sir Edward Belcher's squadron. Three vessels in the Belcher squadron were not accounted for, the Pioneer, the Intrepid and the Assistant. The Pioneer was abandoned in the Arctic and all on board were lost.

Another relic of the Arctic found by Captain Bernier's crew is a spear from Sir John Franklin's expedition, which drifted in on the tide in Erebus bay, North Devon island, the bay being named after the Franklin ship Erebus. It is a wooden spear with iron point and the name Erebus stamped upon it. The spear from the Franklin expedition was probably lost overboard in a storm and drifted, swept on by ice and tide, to Erebus bay. The wreck of the Erebus was found on O'Reilly island, south of Victoria strait, by Eskimos years ago.

For fifteen days Captain Bernier and members of his Arctic expedition on board the Guide were caught in the ice of Melville bay, in latitude 75. After battling with huge masses of ice drifting down from the north for two weeks the Guide managed to get free from the ice packs and make her way into the open sea.

An interesting theory of a route to the pole for a vessel is advanced by Captain Bernier, and is based upon deductions made from his discoveries of relics of marine disasters in the Arctic and study of the polar tides. He believes that, starting from a certain point in the Arctic, a ship well equipped can make the voyage from ocean to ocean and to the Pole.

Thinks Ship Can Reach Pole. "Capt. George De Long was a pioneer in the field of Arctic exploration," said Captain Bernier the other day while in New York. "and his first expedition aroused my interest in voyages in the North Pole regions."

"I followed De Long's expedition with keen interest, and I realized that he was undertaking a voyage almost certain to lead to destruction. But his experience pointed out a route leading into the northland, and other explorers have doubtless profited by his example. When Doctor Nansen proposed a trip to the Arctic he planned his voyage along the lines of Doctor Long's trip to the polar seas."

"Diatoms found on the east coast of Greenland are similar to those brought back by that great explorer Nordskjold from regions to the westward, and comparison showed that these specimens were of the same type as the diatoms brought from Cape Wadardum, in Asia.

"The finding of these diatoms proved that a passage existed from the Pacific to the Atlantic, but did not indicate the time it took to pass through from sea to sea. Later an American harpoon was found by an English whaler in the Atlantic Arctic sea, which proved also that there was a passage by which a whale could go through."

"Then later on wreckage of the Jeannette and some part of the clothing of two members of the Jeannette's crew came ashore on the west coast of Greenland at Julianehaab. This proved to me that if the Jeannette had not been lost she would have drifted into the Atlantic ocean in about four years and a half. It also proved that there is a passage from ocean to ocean.

"When the Fram was caught in the ice she drifted into the Atlantic ocean from the Pacific, which also proved my theory of a free passage. When Admiral Melville and President Bryant of the Philadelphia Geographical society placed casks in Bering strait and set them adrift they demonstrated the time it took to pass from ocean to ocean.

"Now the last link in my theory is illustrated by the wreck of the Karluk, Stefansson's ship, which was caught in the ice off Point Barrow. It was not a good place to start, but she drifted in a short time to latitude 73 north, and would have completed her voyage to the Atlantic in about four years, because she was drifting faster than the Jeannette."

SKUNK KNOWS NO FEAR

LITTLE ANIMAL IS WELL ABLE TO PROTECT ITSELF.

Picks No Quarrels, but Decidedly Never Goes Out of its Way to Avoid Them—Formidable Weapon of Defense.

The skunk is not only one of the handsomest of American "varmints," he is also the boldest. He is the beau sabreur, the Cyrano, the insouciant, devil-may-care adventurer. Confident in his powers of offense and defense, he goes carelessly about his way, asking only to be let alone. He is not looking for trouble, neither is he avoiding it.

Encounter him about sundown on a country road and he will let you alone, if you do not crowd him. Perhaps he will hop along in your pathway, keeping just far enough ahead for your common convenience. If you are acquainted with his little peculiarities you will permit him to set the pace. If you are not acquainted with them—if, perchance, you think he is a pretty, black-and-white, kittenish little thing, and if, so thinking, you rush up and try to make a capture, distasteful will soon be your portion.

For when you are at just the right distance he will give his white-tipped tail a quick flick in your general direction. You will then pause. You will suddenly have lost all inclination to advance. Probably you will be nauseated, possibly half-choked and half-blinded. All the Arabic perfumes necessary to purify Lady Macbeth's little hand wouldn't purify your apparel in a year. You are likely to feel a longing to hide from your fellow man for some time to come. Your fellow man is likely to reciprocate the feeling with usury.

You have committed a gross indiscretion, a great strategic blunder, and you will have to pay the price. But you have added to your stock of knowledge. Never again will you try to kick any little polecat around.

The oil he employs with such effectiveness is a yellow, clear liquid, slightly phosphorescent, so as to be faintly visible at night. It is acid and is virtually acrid when it falls upon any tender living tissue. It is extremely volatile, and a tiny drop is sufficient to fill all the surrounding atmosphere with the offensive odor. When inhaled in large quantities it is suffocating, sometimes producing unconsciousness and even death.

The liquid is distilled within the body and is carried through long tubes to two small capsules imbedded in the thick muscles at the root of the tail. The animal can discharge either or both capsules at will, and his aim is astonishingly accurate. One would never think it, but he is very miserly with this fluid. He will not waste it, and will even try all kinds of bluffs to avoid using it. With animals anywhere near his own size the skunk prefers to fight with tooth and claw. The conclusion, when one is in the neighborhood of a skunk's recent operations, that he has fired all the oil in the universe, is premature. It smells that way, however, and this is a pardonable error.

Serbian Gnawed Bark Off Trees. The English Red Cross unit attached to the Serbian army had to abandon \$5,000 worth of tents, several motor cars and valuable sets of operating instruments, besides leaving the wounded behind in the hands of the advancing Bulgarians.

Two of these nurses have reached Saloniki with nothing but the clothes they had on. Everything else was lost. The two young women had trapped for seven days, making 24 miles in one day.

Roads were covered with mud and the women had to spend the night in barns and earthen hovels. Some of the refugees and prisoners were so hungry, said the nurses, they ate the bark of trees. They declared the patience and endurance of the Serbians was marvelous and there was no complaining.

His Curiosity Satisfied. "I just want to see what this will do to me," said Louis Annesser, twenty-seven years old, of Wapakoneta, while in a drug store. He took a drink out of a bottle which stood on the counter.

Clerks, knowing the danger of the poison, rushed to him and gave emetics, and ten minutes later he was writing in pain in a local hospital. Before he lapsed into unconsciousness he said: "Well, I guess I saw all right."

Physicians in attendance say the man cannot recover. Annesser denied that he had suicidal intentions.—Lima (O.) dispatch Cincinnati Enquirer.

Kew's Nameless Tree. Kew gardens has its mystery in the form of a tree which no one yet has been able to name. It is not far from the entrance from Kew Green, and a tablet confesses the inability of the learned men at Kew correctly to place it in the botanical system. It is something like a plane tree, but it is not a plane tree. It is, or was as late as last summer, when the present writer saw it, simply "a tree." Can any reader solve the mystery and restore it to its lost family?—London Chronicle.

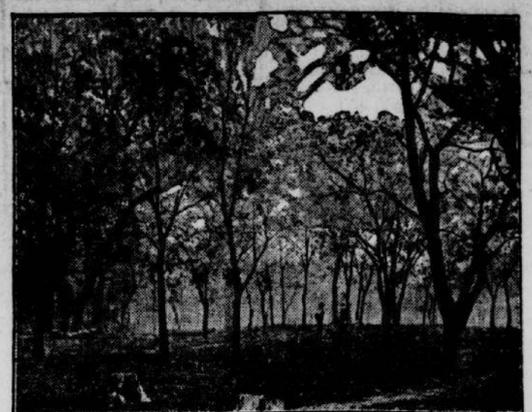
Finger Marks. Furniture has a bad habit of getting finger marked. And it is a good thing to know that sweet oil will remove all signs of them if the furniture is of the varnished variety. But kerosene is better for furniture which is oiled or waxed.

Thread in Your New Wick. To put a new wick in any lamp burner carefully and quickly, first thread a needle, then run the thread across the wick and pass the needle through the burner.

His Long Suit. Mr. Swiggs—Any way, you can't accuse me of contracting bad habits. Mrs. Swiggs—No, indeed. You in variably expand them.

Perhaps. "Some people say that our ancestors were monkeys." "Well," replied Miss Cayenne, "may be some of our ancestors would say the same of us."

PROPAGATION OF PECAN TREES IN SOUTH



Pecan Forest Near San Antonio, Tex., in Progress of Transformation into a Grove by Elimination of All Trees Other Than Most Desirable Pecans—Note Distance Between Trees.

(Prepared by the United States Department of Agriculture.)

Pecan orchards, say specialists in the United States department of agriculture, probably offer possibilities of profit in almost any fertile and well-drained portion of the area included in the southern portions of the Gulf states and the eastern portions of the South Atlantic states. Many thrifty young orchards are already scattered over this area. North of lower Virginia the pecan tree is not often found and it does not thrive in mountainous sections or in lowlands where water stands on or near the surface of the ground for a considerable period. A deep, fertile soil, sufficiently porous to admit of free root growth and well drained, but by no means dry, is best adapted to the trees.

The pecan does not reproduce itself true to seed. It must, therefore, be budded or grafted in the same way that apples, peaches, oranges and other fruit are treated. Farmers' Bulletin No. 700 of the United States department of agriculture, by C. A. Reed, gives detailed instructions for the more common forms of grafting and budding. It is pointed out in this bulletin, however, that the processes involved require much experience and skill and that it is better, wherever this can be done, for the orchardist to purchase his stock from some reputable nursery instead of attempting to propagate it himself. Under certain circumstances, however, the pecan grower must do this work himself and it is largely for his guidance that this bulletin has been issued.

One form or another of cleft grafting, says the bulletin, has been longer employed as a means of propagating the pecan than budding. It is performed either during the late winter months just as the buds begin to swell slightly deeper. The iron wedge is then removed from the middle of the cleft and the cut surfaces, including the tip of the scion, covered with specially prepared grafting wax, care being taken not to cover the buds. If the stock is inclined to split further after the wedge has been removed, it should be tightly wound with several wrappings of a stout, rather coarse material before wax is applied.

Thin calico or cheap muslin saturated in melted wax, drained and allowed to cool, makes material which answers both as a wax and as a binding substance. The cloth should be torn into strips of convenient width before being immersed in the liquid. When it is thoroughly saturated, it should be taken from the solution and the excess of hot wax removed.

Another method of grafting is known in the nursery as whip grafting. This operation is usually performed in the latter part of the dormant season at some point on the trunk which may be immediately below the surface or several inches underground. The several inches underground, the stock and the scion should be very nearly the same size and preferably not more than three-fourths of an inch in diameter. With the knife held so as to make an upward stroke, cut the stock entirely across at a long angle. About one-third of the distance from the upper end of the cut, make an incision parallel with the grain. Cut the scion at as nearly the same angle as possible and make a similar incision in the cut surface. Push the cut surfaces together in such a way that the tongue of the scion made by the incision will be crowded into the groove made by the incision in the stock. Bind the two parts together with raffia or other material and pack firmly with earth. In this process the use of wax is not necessary. In some respects budded trees are preferable to grafted ones and it is probable that more pecan trees have been propagated by annular budding in some form than by all other methods combined. This process is performed during the summer at the time when the bark splits or peels the most readily. Annular budding consists in transferring a ring of bark cut from a bud stick of the desired variety to which a bud is attached to the trunk or branch of another tree to take the place of a similar ring of bark previously removed. Specially designed tools are used for the purpose of cutting the rings. After the two rings have been exchanged the stock should be wrapped at once with wax cloth, care being taken not to cover the bud.

With the annular method it is necessary to have stock and scion of approximately the same size. If the bud stick is slightly larger than the stock, a portion of the bark to which the bud is attached may be cut away so that the two ends of the ring just meet around the stock. If the bud stick is smaller than the stock, a strip of bark on the latter may be left in position to complete the ring. In actual practice this is very frequently done and is known as patch budding.

The propagation of pecans is of particular importance because it is essential to success that the right varieties be grown in the best localities. A list of these varieties and the localities to which they are best suited is contained in the bulletin already mentioned.

SIMPLE WAYS TO SEAL SILO

Air Always Spoils Some of Silage Unless Feeding is Begun at Once—Cover With Stalks.

In a good silo the contents are protected from the air on all sides except the top. The air always spoils some of the silage on the top unless feeding is begun as soon as the silo is filled.

Various methods for preventing this waste have been tried. One is to cover the silage with straw and then soak this protecting layer well with water. This keeps out the air fairly well and the waste is only slight. Another method is to sow oats on top of the silage. When they germinate the dense mass excludes the air.

The simplest and probably the most practical method is to remove the ears from the last three or four loads of cornstalks brought to the ensilage cutter and then run just the stalks through. In that way, the corn itself is not wasted, and the loss from the stalks is but slight.

DAILY FEED FOR BROOD SOW

Ration Should Include Little or No Corn—Avoid Any Radical Change in Farrowing Time.

The daily ration should include little or no corn. Oats, shorts and wheat bran are good. Ground rye and wheat bran are also excellent.

Whatever the feed do not make a radical change at farrowing time. Three days before farrowing shut the sow up alone and feed a light ration.

Work in the Orchard. Gathering the apples, storing or marketing them, does not finish up the year's work in the orchard.

Growing Crops for Silage. Growing silage leaves laid clear early in the season for planting fall and winter crops.