HOW IT IS POSSIBLE TO RECORD EMOTIONS OF CERTAIN VEGETABLES.

—Did you know that vegetables can write? An Indian scientist, who has made a very close study of vegetables, has invented an elaborate instrument through which vegetables record their emotions in visible marks and dots.

As, in the ordinary course of events, it would take too long to wait for the emotions to occur (for vegetables do not pass through such rapid emotions as human beings), the scientist induces the emotions, "reading," subsequently, the vegetable's remarks upon the subject.

This scientist excites the vegetable, and its excitement is plainly shown by the manner in which it writes its dots. He benumbs it with potassium cyanide. The "pen" writes nothing. He makes it drunk by administering intoxicating vapors, and the dots are as straggling as a toper's foosteps!

Finally, he kills the vegetable by heat. The dots descend as the temperature rises. At 140 degrees Fahrenheit the dots bound suddenly upward. This is the final spasm—The vegetable is dead.

Astonishing as this may appear, it is less surprising, scientists say, when it is realized what a fine line divides the animal and vegetable kingdoms.

REVERSE METHOD OF NATURE

How Japanese Produce Dwarf Trees Which in Many Cases Are Remarkably Beautiful.

There is a general impression that the method of producing dwarf trees is a secret that the Japanese have never divulged, but the course to be pursued is really simple. The whole system of culture may be summed up as the reverse of nature's method. It really consists, not in the survival of the fittest, but rather in the survival of the unfittest. A poor, weak seed is usually chosen and planted. As soon as it has attained some growth the leading shoot is trimmed off. The little plant then grows two other shoots, and these are carefully watched. When one shoot exhibits a strength and vitality greater than its fellow, it is at once cut off, and the weaker shoot is untouched in order to form the future dwarf tree's main stem or trunk. This system of trimming and cutting is followed punctiliously. Water is seldom used—only in very small quantities to keep the little plant actually alive. The tree is kept in a pot too small for its full development, and the roots are constantly pruned. The shoots are carefully trained and bent to follow the growth of a large tree. All this requires great patience, but the Japanese never tire watching the growth of the tree from day to day, week to week, and month to month. When the tree has been growing for about five years, it can then be practically left to take care of itself. It has become accustomed to its training, and its surroundings, and, like force of habit, follows the course laid out for it. In this manner some very magnificent specimens of dwarf trees are produced which in their miniature beauty and majesty compare favorably with their big brothers in the untrained forests.

How to Retrieve Stamp.

Most people do not know that an unused postage stamp which has been attached to a letter that it is decided, later, not to mail, can be very easily separated from the envelope it cleaves to—without the troublesome soaking in water that takes time when one wants to use the stamp in a hurry. And most people do want a stamp in a hurry.

The trick is simple enough; Simply tear the envelope from the stamp instead of trying to wrest the stamp from the envelope. Cut the envelope away from the stamp, leaving just a margin of paper for thumb and finger to grasp; then with the stamp turned away from you and the paper toward you, begin to peel away the paper at one corner of the stamp, then another, then another. Presently the paper will be loose at all the edges and a little care will get it quite off the stamp at the center. Try this, next time you want to use an already pasted-down postage stamp and see how easy it is!

How to Clean a Clock.

Take off the pointers and face; also take off the pendulum and its wire. Remove the ratchet from the "tick" wheel, and the clock will run down with great velocity. Let it go—the increasing speed wears away the gum and dust from the pinions, the clock cleans itself. Put the least bit of sperm oil on the axles. Put the machine together, and nine times in ten it will run just as well as if it had been taken to the shop. If instead of a pendulum, the clock has a watch escapement, this latter can be taken out in an instant, without taking the works apart, and the result is the same. It takes about 20 minutes to clean a clock and saves the bill for repairing.

How to Clean Tarnished Silver.

Silver is readily tarnished by sulphur, either from eggs, or from rubber bands or elastic, or sometimes from the sulphur compounds in the illuminating gas. The sulphur of silver thus formed is in color from grayish to black. Silver thus tarnished should be rubbed with moist common salt before washing, thus forming a chloride of silver, which may then be washed in ammonia, in which it is soluble.

WHY

Mistletoe Checks Certain Hemorrhages

There is a brand new medicine, just discovered in France; it is the extract of our old friend the mistletoe. Dr. Charles Greene Cumston, the Swiss correspondent of the New York Medical Journal, in reporting it to that paper says, however, that the American mistletoe will not do, as its effects are different from its French sister.

The new preparation is called viscum album. It was discovered by Dr. Guttier, and he and Dr. Doyan have had great success with it in checking certain forms of hemorrhage. It is given either in the form of pills or injections into the veins. Its effect is to dilate the blood vessels by paralyzing the vasomotor centers of the nervous system; to increase the systolic energy of the heart and slow the heart beats; to cause contraction of the unstriped fibres of the muscles.

Intestinal hemorrhage due to typhoid fever is checked by it, and it is called admirable for use in hardening of the arteries.

COAL EASILY PROVED VALUE

Why Wood-Burning Locomotives Were Superseded on the Railroads of the Country.

The days of the wood-burning locomotive were practically numbered as a result of experiments made about sixty years ago on the Providence & Worcester railroad. For twenty years and more transportation on land had been undergoing a great change with the building of a number of railroads in the eastern section of the country, and wood had been used exclusively as a steam generator. The officials of the New England railroad were satisfied that they had not only secured a good substitute for the old-time and unsatisfactory method of hauling trains, but they proved their contention by placing a wood-burner and a new engine fitted with a boiler adapted to the use of coal at work under identical conditions. It was found that the saving in fuel in favor of the coal-burning engine in eight days was $103.

Then it was figured that for a year the saving would be $8,774. On the twelve engines with which the road was equipped this, according to the company experts, after making all the deductions for losses, would amount to $93,288, and on the same number of engines for twelve years, which was the life of an engine, the total amount in favor of the experiment was found to be $1,119,456. This was a startling revelation.

Wood-burning engines continued in use on the Morris & Essex and other railroads for a few years, and a number of citizens will recall the hazardous progress of the train when making upgrades over shaky tracks, with a strong wind. Showers of sparks flew about the landscape like a myriad of firefles, landing on shingled roofs and elsewhere.—Newark News.

Why Some Knowledge Is Handy.

A knowledge of practical chemistry and physics can be used to good advantage in the home when methods for removing stains and cleaning household articles are to be utilized. One must exercise care in the choice of agents to see that they do not injure the article to be polished or cleaned.

Borax, added to water, greatly aids in the removal of dirt, and most readers are familiar with the use of ammonia for this purpose, says a writer in Electrical Experimenter. All polished wood surfaces, except those finished with wax, may be cleaned with a weak solution of ammonia, but they never should be treated with a strong alkaline solution. Kerosene or turpentine may be used as solvents for grease, and painted surfaces, especially white, may be cleaned with whiting.

Leather may be kept bright or clean with kerosene and occasionally a little oil; marble may be scoured with sand-soap and alcohol is used extensively to clean delicate glass. As a substitute for dangerous gasoline one may use carbon tetrachlorid, which is noninflammable.

Why Dahlia Was Peeved.

L. W. Liermann, a machinist, 188 John street, has discovered that teasing a dahlia makes it white. Liermann had a red dahlia bush at his house. He decided to experiment with it. He fed it plant food, cuddled it in a hothouse and did a lot of kind things for it. The dahlia paid no attention to him, but went on blooming as usual. Then Liermann started out to annoy the bush. He left it out in the cold. He took away its dinner. He waked it several times during the night and turned it around so it would lose all sense of direction. Finally the bush grew peeved. In a burst of wrath one flower bloomed out white.—Oakland Correspondence San Francisco Chronicle.

Why Green Vegetables Are Good.

Though green vegetables and fresh fruits have little food value, they are universally desired by mankind. The Journal of the American Medical Association says this is explainable by the fact that they seem to be a safeguard to health. The recent studies of C. B. Osborne and L. B. Mendel on the properties of green leaves show that these contain large quantities of the vitamines which, though not food, are necessary to health. According to these investigators spinach contains far more of the vitamine that promotes normal growth than do whole wheat, soy beans, eggs, meats, milk or potatoes.

The Scrap Book

ADVANTAGE ALL WITH DAVID

Modern Military Men Have Figured That Goliath Never Had a Chance to Win.

Popular sympathy has always been on the side of David in his little bickering with the Giant Goliath. It ought to be quite the other way, because there never was a minute when Goliath had a chance against an agile antagonist who could choose his own position and distance, and who was equipped with a long-range weapon.

This is a problem which has been thoroughly worked out by modern military men and naval tacticians. A fight of the kind can have only one result.

We are accustomed to think of the sling as an old-world weapon, but there is no question of the fact that it was in common use among the natives of Mexico, Central America and Peru long before Goliath and David were born.

Dr. Philip A. Means has been looking up the subject for the Smithsonian institution, and he says that the early Spanish conquerors in America found the sling a formidable weapon in the hands of the aborigines.

A Spanish historian, Del Castillo, describing a battle with Mexican natives, writes: "As we approached with our army they shot from above so many stones that they covered the ground. They had slings and plenty of stones, and they shot arrows and stones so fast that they wounded five of our foot soldiers and two horsemen."

In Peru have been dug up many ancient vessels that bear paintings illustrative of combats in which slings were used.

Xeres, another Spanish historian, describing the capture of a Peruvian city, says of the native troops: "In the van of their army came the slingmen, who

Ancient Peruvian Painting Showing Use of Sling in Battle.

hurled pebbles from slings. These slingmen carry shields made from narrow boards, very small. They also wear armor jackets made of quilted cotton."

Many of the actual slings used by early and even prehistoric Americans have been obtained from graves or otherwise recovered. They are made of various materials, including human hair, wool, llama hair and vegetable fiber.

Men Say Women Are Curious.

Men say women are "curious"—that to get a woman's curiosity aroused is a sure way to start something. Yet, says a bulletin that has been issued by the Associated Advertising Clubs of the World, thousands of men sent money recently to a Texas man who advertised some literature "for men only." Men wrote from everywhere. They fairly swamped the advertiser with mail.

And what did they get? They got stung, just as they so richly deserved. They got a bunch of pictures of men riding wild western horses—innocent pictures, such as a man, woman or child would enjoy.

It might seem poetic justice to allow a man who would answer such an advertiser to continue to get the stinger, but the post office department, as soon as the matter came to its attention, issued an order against such an use of the mails.

Wild Race Is Promised.

The Nomad learns that one of the features of the coming out of the New England Amateur association, to be held at Salem Willows, will be a toad race. F. H. Sidney's two homing toads will be carried from Wakefield to the Willows by auto and liberated there. The two toads are "Teddy," the homing toad that hopped from Charlestown to Wakefield in a single night, and "Pete," who has just returned from France, where he spent 21 months as a mascot of the Fourteenth engineers. Someone will be on hand to time the winner when he reaches the Sidney home at Valley View, Wakefield, on top of the hill in Wakefield park.—Boston Transcript.

The Reform of a Poet.

Harry Kemp, "tramp poet," who left Kansas university ten years ago to figure in many escapades in the East and finally to become a successful poet and playright in New York, has advertised in a Lawrence paper a request asking his creditors of earlier days to get together their old bills that they may take them to a dinner he will give there shortly. After the dinner he promises to pay all his old debts. As the old hymn has it: "While the lights hold out to burn, sinful poets may return."—Detroit Free Press.

His Occupation.

"They put the returned soldier at the clockmaker's to putting figures on the dials."

"Then he must have felt at home marking time."

WONDERFUL ANIMAL, THE GNU

And Voice Would Seem to Be Not the Least of His Remarkable Qualities.

Few people know what a satisfactory animal is the gnu. Quite a number of hoofed animals, like the ibex and the sacred ox, are mere tiresome combinations of Burbankism, but the gnu has qualities all his own. His head is homely as an unpainted barn—flat nose and very broad mouth and ears misshapen and uncouth. His body is that of an exceedingly powerful pony, with strong neck and rakish tail. His galvanic energy puts to shame the glorious abandon of a cat on a tin roof.

When I arrive before his inclosure he has usually retired to the shed in which he sleeps and stands in the doorway with far-away eyes. Efforts to entice him forth are futile. I turn at last as if to go, and as I move he bursts forth with the most heathenish cry that ever clattered from an animal throat. If it resembles anything, it is the trench klaxon that warns of an impending gas attack—a series of staccato shrieks which would shake the teeth from a band saw. I don't see how he can stand the noise he makes. Arm a rabbit with the voice of a gnu and lions will slink from his path.

Reaching the bars of his inclosure in three or four astounding leaps, the gnu halts, with head averted and feet wide apart, ignoring me literally. When I move to right or left he remains motionless until 15 feet are between us; then he closes the distance with a bound, shrieks terribly twice or thrice, and once more affects to be utterly oblivious of my presence. When finally I leave him the clatter of his fearful voice pursues me for hundreds of feet, drowning all other sounds.—Atlantic Monthly.

HONOR HELD BY QUAKER CITY

First American Edition of the Hebrew Scriptures Was Put in Type in Philadelphia.

The first American edition of the Hebrew Scriptures was put in type at Philadelphia by William Fry.

The first translation of the Scriptures into English by a Jewish scholar in America was that of Isaac Leeser of Philadelphia in 1853, and the first English version prepared by a group of Jewish scholars is that of the Jewish Publication society of America, Philadelphia, 1917.

One of the most important and widely used revisions of the Rheims-Douay version was that of Archbishop Kendrick of Philadelphia, 1851-62.

Ben Franklin didn't think the language of the King James version sufficiently up to date to suit the literati of his time, and he tried his improving hand on the Book of Job with this result:

"And it being levee day in heaven, all God's nobility came to court to present themselves before him; and Satan also appeared in the circle, as one of the ministry. And God said to Satan: You have been a long time absent; where were you? And Satan answered: I have been at my country seat, and in different places visiting my friends."

In the Philippines.

In 1917 the Philippine islands experienced two typhoons, while one hundred and fifty earthquakes were reported from different parts. The damage done was slight and the casualties few. They were not so fortunate in Formosa, where two destructive typhoons were experienced in July and August, and two in Japan in October. The appearance of the water hyacinth is reported from several places in the Philippines, and the secretary of agriculture reports that, unless legislation provides for its destruction wherever found, all still or sluggish waters will soon be impassable to craft or logs and even river steamers. The necessity for increasing the working establishment in the forests of the Philippines, if forest produce is to be preserved, is becoming an urgent necessity, and it is pointed out that in Java, Japan and British India forest officers are employed to a much larger extent than in the Philippines.

Keep Up the Morale.

The big thing in life's battles is the morale. You may have the men and the guns, but if the men lack the ginger they are impediments to attainment. It is easy to do things when you are on the winning side. The trouble begins to brew when things go wrong. Anybody can go with the current. It's breasting the tide that shows where strength lies, and muscular strength is the least side of it. When the brain is right and nerve control dependable you can make machines do muscular tasks. There are few things that man's ingenuity has not submitted to mechanical control. So the problem of today is to keep the head right. It means more than keen thinking. There are men of the keenest intellect who need the constant urge of right morale.

Plant All Animals Hate.

A most interesting plant is the Virginia wild ginger. There are several other species, as far south as Florida and northward to Connecticut. The plant grows in very hilly and wooded places, says the American Forestry Magazine, and is easily recognized by its kidney-shaped leaves and curious purplish brown flowers. These flowers grow one to a stem. No living thing will eat the bitter leaves, and you rarely see the flower unless you hunt for it, for it hides itself out of sight if possible.

An Encyclopedia of Catholic Information

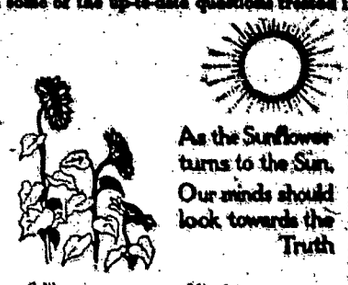
The Catholic's Ready Answer

By REV. M. P. HILL, S.J.

will enable Catholics to remember and impart the truths of their religion whenever the occasion presents itself. The *right* answer at the *right* time has converted many.

We mention some of the up-to-date questions treated in this book:

Agnosticism, Apes and Men, Blessed Virgin, Boycotts, Bible and Geology, Bible Myths, Bible Reading, Catholic and Protestant Countries, Celibacy of Priests, Chance and World's Origin, Church, The, Cremation, Christ, Divinity of, Creation, The, Chastity, "Christian Science", Confession, Divorce, Darwinism, Existence of God, Eve and the Serpent, Evolution, Kaposias, Faith, Flood, The, Free Love, Free Masonry, Free Thought, Free Will, Galileo, Geology and the Bible, Hell, Idolatry, Indulgences, Infallibility of the Pope, Labor Unions, Lourdes, Luther, Marriage and Divorce, Miracles, Missions, Catholic and Protestant, Mixed Marriages, Morality of Bible Heroes, Original Sin, Pantheism, Parochial Schools, Public Schools, Pauperization Theory, Pope, The, Purgatory, Reason and Faith, Religion and Morality, Religious Orders, Reorganization of the Bible, Science Witnessing to a Creator, Science and the Bible, Scientific Research Open to Catholics, Secret Societies, Sin, Original, Socialism, Soul, Spirituality of, Spiritism, Spontaneous Generation, Stolen, Superstition, Theosophy, Tradition and the Bible, Transubstantiation, Trinity, The Blessed, Unions, etc., etc.



8vo, cloth, 490 pages, net, $2.00

Will be sent postage paid on receipt of $2.20

The Most Popular Catholic Prayer-Book

MY PRAYER-BOOK

HAPPINESS IN GOODNESS

By REV. F. X. LASANCE

Happiness! That is the keynote of Father Lasance's theme. He teaches by precept, poetry and prayer how to secure the happiness which all men seek, but which mistaken search leads so few to find.

It is indeed a prayer-book that is "different." It takes prayer and meditation into the bracing air and sweet sunshine of God. Happiness and holiness are brought together and shown to be fit partners for each other.

Size, 5½ x 4 inches

Imitation leather, red edges	$1.00
Imitation leather, gold edges	1.10
American seal, limp, gold edges	1.60

Book will be sent postage paid on receipt of price

A New Novel by Isabel C. Clarke

The Greatest Catholic Novelist of Today

THE ELSTONES

Cloth, net, $1.50

Will be sent postage paid on receipt of $1.65

Looked down upon, almost hated by, Lady Elstone, Magali Arnold, the heroine, nevertheless soon has the nobleworman's sons madly in love with her.

Magali is a distinctively new type in fiction and is one of the finest characters Miss Clarke has given us.

OTHER BOOKS BY MISS CLARKE:

Sunice—The Deep Heart—Only Anne—Where Nought is Legion—Children of Eve—The Rest House—Fire Clay—The Secret Citadel—By the Blue River—Prisoners' Years.

Each novel, net, $1.50. Postage paid, $1.65

Address all orders to Catholic Journal, Rochester, N. Y.

C&B LINE DAILY BETWEEN BUFFALO & CLEVELAND

3 MAGNIFICENT STEAMERS

The Great Ships "SEASIDE" — "CITY OF ERIE" — "CITY OF BUFFALO"

BETWEEN

BUFFALO — Daily, May 1st to Nov. 15th, — CLEVELAND

Rochester American Lumber Co.

GET OUR PRICES

142 Portland Avenue — 883 Clinton Avenue S.

Both Phones, Home 1895, Bell 1295

Send us your Job Printing