

This Week! Science Notes

Character of Cancer—Experiments Lead Scientists to New Theory—Other Notes

First reports on the results of hundreds of experiments in the course of the last few months at the Cancer Research Laboratory, Graduate School of Medicine, University of Pennsylvania...

ENZYMES ARE ACTIVE IN EXTREMELY minute quantities. For example, the enzyme known as the invertase can hydrolyse 1,000,000 times its weight of cane sugar without appreciable loss of activity.

ENZYMES AND THE TUMOR. It was found that some enzymes steadily decrease with the increased growth of the tumor, while other types, shown as arginase, a ferment found in the liver, showed a decided increase after the growth of the tumor had continued for some time.

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Carbon monoxide will always be more or less of a source of poisoning so long as the gasoline engine, illuminating gas and coal-burning appliances are used by man, Mr. Drizine observes. He expresses the hope that the effectiveness of sodium tetrathionate may be given further study and trial by those who are called upon to treat human cases of carbon monoxide poisoning.

The choir of Old Trinity church, New York, first appeared in vestments on Sunday, October 14th, 1860, when the services were attended by Albert Edward, Prince of Wales.

Letters of Queen Victoria

London Press Publishes Correspondence Between Woman Ruler and Gladstone

The Queen and Mr. Gladstone, 1871-1872. Letters edited with a commentary by Philip Guedalla, a twelve extended notice in the London press. One reviewer says: "It is an astonishing drama that is unfolded in this correspondence between the middle-aged Queen Victoria and the middle-aged Gladstone. The most human and engrossing part of the correspondence is that in which Gladstone tries to persuade the Queen to do her duty as a queen and she with a superabundance of declined words explains that she is too broken and ill to do her duty as a Queen."

Letters to Gladstone. Her withdrawal from the public eye after the death of Prince Albert was something with which everyone could sympathize. Her letter about her dead husband, written to Gladstone in 1862, is the sincere utterance of a broken heart. "The Queen struggles and works—and will devote herself to do what her precious husband wished—and to the last and time to do her duty to the last hour of her life—but her faithful servant and kind friends must not deceive him by carrying her on;—for the constant longing—and pining, the void and suffering do never leave her day or night—accompanied by the great amount of work and responsibility which weighs alone upon her is telling very visibly upon her health and strength; she gets much weaker—her health worse and her nerves terribly shattered."

Bought First Copy Of "It's a Long, Long Way to Tipperary"

English Music Hall Singer Tells How Song Achieved Popularity with British Troops

The woman who bought the very first copy of "It's a Long Way to Tipperary," and was the first woman artist to sing it, 21 years ago, has been revealed by a reader's letter to the London Sunday Chronicle. She is Miss Winifred Ray, of Birmingham. "I thought you would like to see the first copy of the song ever sold," she writes.

Foreign Ship Lines New Rules Regulate

London.—A dispatch from Berlin says: The Ministry of Economic Affairs has issued new instructions for the treatment of foreign shipping companies compelling German travellers, even foreign travellers, who wish to pay marks to apply to the foreign exchange control offices for authorization before booking passages "above the low exemption limit" for export money by foreign vessels, is withdrawn.

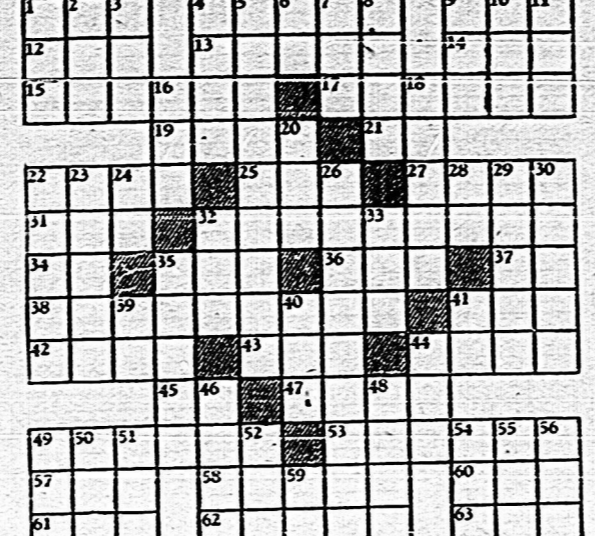
Bans Photographs In Italian Papers

Rome.—Publicity-seekers who make their presence at public gatherings the occasion to get their names and photographs into public print have been called to order by Achille Starace, secretary of the Fascist party. Starace has issued an order prohibiting the publication of photographs and names of persons attending meetings. The order affects Starace himself and all others except Premier Mussolini and a few other Government officials.

Only About Fifth of Roads in Canada Surfaced

There are 354,372 miles of road in Canada, of which only 80,497 are surfaced. Three-quarters of the paved mileage of Canada is in Ontario.

OUR CROSS-WORD PUZZLE



- Horizontal: 1-Footlike part, 4-To try, 9-Held session, 12-Wine cup, 13-To linger, 14-Sheep, 15-To aid, 17-Fropped, 19-Tribute, 21-Comparative ending, 22-Red, 25-Theory, 27-Assistant, 31-Epoch, 32-Gathered, 34-Sloth, 35-Bitter veal, 36-Festive, 37-Prison, 38-Formed with inter-slices, 41-Play on words, 42-Gilded, 43-To soak, 44-Knights, 45-Spanish article, 47-Old pronoun, 49-Great dread, 53-Mountain nymphs, 57-Hall!, 58-Huge, 60-Billard stick, 61-Irrational, 62-Cloys, 63-Mound, 64-Vertical, 1-Dance step, 2-Australian ostrich, 3-Pouch, 4-Porch, 5-Handsome fragrant flower, 6-Conjunction, 7-Globe, 8-Funerary pile, 9-Dry, 10-Fear, 11-To spread, 12-To weep, 13-Poetic: Arabia, 20-Worm, 22-Brings up, 23-Ray window, 24-Symbol for samarium, 25-Large speaking trumpet, 26-Italian article, 29-To hesitate, 30-Gardens, 32-Part of circle, 33-To deface, 35-Duck, 39-Note of scale, 40-Piece of land, 41-Greek letter, 44-To petition, 46-Ship diaries, 48-Whirlwind leavings, 49-Kind of meat, 50-Eggs, 51-Color, 52-Inlet, 54-Performance, 55-Oying, 56-Bishopric, 59-By

Detective Stories Declared Sedative

Tired Business Men Relax Tensed Nerves Reading Thriller

New York.—The psychological reason why great men and others like detective stories is cut—the tales are soothing. They cut the pulse rate, lower blood pressure, and steady motor nerves. Furthermore, women react to them like the men.

The Optimist's Creed

Promise yourself: To be so strong that nothing can disturb your peace of mind. To talk health, happiness and prosperity to every person you meet; To make all your friends feel that there is something in them; To look at the sunny side of everything and make your optimism come true; To think only of the best, to work for the best, and expect only the best; To be as enthusiastic about the success of others as you are about your own; To forget the mistakes of the past and press on to the greater achievements of the future; To wear a cheerful countenance at all times and give every living creature you meet a smile; To give so much time to the improvement of yourself that you have no time to criticize others; To be too large for worry, too noble for anger, too strong for fear, and too happy to permit the presence of trouble.

Princess Runs Hotel

A princess is running a private hotel in Tenerife, Canary Islands. She is Princess Marie Augustine youngest son, who died in 1920. With d'Anhalt, widow of the ex-Kaiser's her second husband, Baron von Loen, she settled in Tenerife, and started the "Pension Augusta."

DAUGHTER HAD CRYING SPELLS "Nerves" Brought On by Worrying

A mother writes:—"Early this spring my eighteen-year-old daughter had a nervous breakdown. She had crying spells and fits of the blues. So I decided to give Kruschen Salts a trial, starting with a large half-teaspoonful in hot water first thing in the morning, and the little daily dose in her tea for lunch and supper. In less than a week the crying spells had stopped and she began to sleep better. That was three months ago. To-day she is full of pep, and sleeps and eats well. She is a different girl. I am still giving her the little daily dose." (Mrs.) M. L.

Kruschen Salts make constipation impossible. They help the liver and kidneys to perform their natural duties in a natural way; they clear away gently, but completely, all poisonous waste matter, and ensure an uncontaminated blood-stream. Therefore, if you keep to Kruschen, you need never know the meaning of melancholy; never feel "nervy" or depressed. Kruschen Salts is obtainable at all Drug Stores at 45c and 75c per bottle.

...SMILES...



"The real marriage," we read from Dorothy Dix, "is when a man finds a beautiful girl and a good housewife." Sounds more like bigamy.

Eloofus—"I wonder why rich folks so often marry rich folks?" Obfuscus—"Because they have so much interest in common."

Try a Cyclone Cellar Husband ("while house-huntin")—"Let's try a bungalow, my dear—then you won't always be hearing burglars moving about down-stairs."

Smoothing Her Plumage Old Aunt (despondently)—"Well, I shall not be a nuisance to you much longer."

Nephew (reassuringly)—"Don't talk like that, aunt; you know you will."

Kink Lady—"And how would you like a nice chop?" Weary Tramp—"That all depends, lady—is it lamb, pork, or wood?"

Too Expensive And then there was the Scottish father of twins, who only had one of them photographed.

Woman—"People sometimes tell me I talk too much, but I always believe in saying what I think." Husband—"Of course, darling—but er—where do you get all the rest from?"

The reason so many of us do not want to learn is because a lot of the facts we'd pick up in the process would be very unpleasant.

Wife (to husband, upon leaving a good eating place)—"I hope you gave the waiter a big enough tip." Husband—"I did, but it wasn't."

Suitor—"Well, since you don't want to marry me, perhaps you will return the ring I gave you." Sweet Young Thing (snapping)—"If you must know, your jeweller has already called for it."

Doctor—"Give up smoking, captain, and you will prolong your life by 20 years." Captain—"But isn't it too late now?" Doctor—"It's never too late." Captain—"Then I'll start in ten years' time."

Trouble really never starts in a family until the time arrives when father and son can wear each other's clothes.

"You have admitted Smith to your club? But he is such a bore." "Yes—we wanted somebody to grumble about."

Grocer—"Do you want white or brown eggs, ma'am?" Pretty Bride—"The kind I want are white with a yellow polka dot in the middle."

Country Doctor (calling to see female patient)—"I suppose you consider me an old hump?" (laughing, as he felt the woman's pulse and trying to put over his very best bedside manner). The Patient (gasping incredulously)—"Well, I never. I had no idea you could ascertain a woman's thoughts by just feeling her pulse."

Blessed is the husband who is an unhandy fellow. He reads his newspaper while his neighbors are mending carpet sweepers.

Tactful Tot Minister (calling)—"And what does you mother do for you when you've been a good girl?" Margery—"She lets me stay home from church."

He'd Never Get Rich Victim (sighing)—"I got that watch from a former employer after I'd been with him ten years." Footpad—"Lumme, Guv-nor, you was slow, wasn't you?"

Homeopathic Recipe Diner—"What on earth is this broth made from, waiter? Surely it isn't chicken broth?" Waiter—"Well, sir, it's chicken broth in its infancy. It's made out of the water the hegs were boiled in."

The Better Day Harsh thoughts, blind angers, and fierce hands, That kept this restless world at strife, Mean passions that like choking sands, Perplex the stream of life.

Pride and hot envy and cold greed, The cankers of the loftier will, What if ye triumph, and yet bleed? Ah, can ye not be still!

Oh, shall there be no space, no time, No century of weal in store, No freedom in a nobler clime, Where men shall strive no more?

Where every motion of the heart Shall serve the spirit's master-call, Where self shall be the unseen part, And human kindness all?

Or shall we but by fits and gleams Sink satisfied and cease to rave, Fretful love but in the rest of dreams, And peace but in the grave?—From Lyrics of Earth by Archibald Lampman.

ISSUE No. 37-33

GOES 1/3 FARTHER Plug Tobacco lasts longer because it burns slower. It's the economy smoke... goes 1/3 farther... lasts 1/3 longer... saves 1/3 on your smoking cost. DIXIE ONLY 20c A BIG PLUG

Snap Shots

The cigarette celebrates its centenary this year. Germans living in Soviet Russia now total 1,500,000.

Horse-riding is so much in favour in Gt. Britain that there are said to be 500 schools now teaching it. It is estimated that of Gt. Britain's total population of 44,500,000 persons, quite half are smokers.

The first gold coins to be used in the British Isles were produced about 1250, when Henry III. was on the throne. Britain's infant death-rate is now one in fifteen. Thirty years ago one child out of every six born died in infancy.

The more ordinary issues of used postage stamps are often sold by weight. Turkish stamps may fetch 18s. per pound, while 6s. will buy five pounds of French stamps.

Britain's annual number of marriages is now somewhere round 310,000, while about 620,000 babies are born every year. The annual consumption of cigarettes in the United Kingdom is 45,895,562,400 a year, women smokers disposing of 4,000,000,000 of these.

Influenza and the common cold together are estimated to cost Gt. Britain at least £10,000,000 a year in time lost, drugs, doctors' fees, etc. America has lost 50,000,000,000 dollars, which is equal to £11,000,000,000 at par, in dropped wages and income since the start of the trade depression.

Whisky can be "matured" in six months by the use of a special carbon until it is similar to the five-year-old spirit; that is the claim of American scientists. Signal lights in different colours replace bells in London's newest house of healing, the Freemasons' Hospital, at Ravenscourt Park. The building cost £335,000.

The guinea, the gold coin which is not now in use, received its name from the fact that most of the gold used for making money in those days came from the Guinea Coast. Textiles dating from the eighth century are now deposited in the State Museum in Moscow. These fabrics were made by an ancient Mohammedan people, the Sassanides.

The first English queen to cover her palace floor with carpet was Elizabeth, but a Spanish bishop was the first man in Europe known to have enjoyed carpeted floors. This was in 1255. Flies will not enter one large English jam factory, although 15,000 tons of jam are stored there in unsealed jars, because the windows are fitted with ultra-violet rays.

Marriage is conducive to long life, according to the investigations of a German doctor, who found that, in the cases of 124 centenarians, only three were unmarried. All the men but none of the women were smokers. Odes on Royal birthdays were formerly expected from the Poet Laureate, who had to read his effusions to the Royal household. The poems were frequently so bad that at last the Royal household pleaded to be spared them. So in the middle of the eighteenth century these odes were discontinued.

Sailors of the British Navy who wish to qualify for warrant rank must pass an educational test, which contains such questions as: What is vulcanite made of? What is the architecture of Hampton Court Palace? What are (1) a shibboleth, (2) the Greek Kalends, (3) the Gordian knot? as well as questions in mathematics, botany, and economics.

Experimental Votes For Women in Santo Domingo

Santo Domingo, Dominican Republic.—President Trujillo promised the women's organization, Accion Feminista Nacional, he would conduct experiments in the coming 1934 elections under which women would be permitted to cast "experimental votes." If they respond to the voting privileges, constitutional reforms will be sought.

High School Boards and Boards of Education

Are authorized by law to establish INDUSTRIAL, TECHNICAL AND ART SCHOOLS With the approval of the Minister of Education

DAY AND EVENING CLASSES may be conducted in accordance with the regulations issued by the Department of Education

THEORETICAL AND PRACTICAL INSTRUCTION is given in various trades. The schools and classes are under the direction of an ADVISORY COMMITTEE. Application for attendance should be made to the Principal of the school.

COMMERCIAL SUBJECTS, MANUAL TRAINING, HOUSEHOLD SCIENCE AND AGRICULTURE AND HORTICULTURE are provided for in the Courses of Study in Public, Separate, Continuation and High Schools, Collegiate Institutes, Vocational Schools and Departments. Copies of the Regulations issued by the Minister of Education may be obtained from the Deputy Minister, Parliament Buildings, Toronto.

Take Lydia E. Pinkham's Vegetable Compound

Wives get tired during these hard times. They are often overworked, and the health of the family. When the husband comes home with less money in his pay envelope... It is the wife who must struggle along and make the best of things.

Protect Yourself Against SKIN TROUBLES Use CUTICUBA Soap 25c, Ointment 25c and 50c.

SOURD ON THE WORLD?—THAT'S LIVER

Wake up your Liver Bile—No Calomel necessary

Many people who feel sour, sluggish and generally wretched make the mistake of taking salts, or mineral water, laxative candy or chewing gum, or roughage which only move the bowels and harm the liver.

What you need is to wake up your liver bile. Start your liver pouring the daily two pounds of liquid bile into your bowels. Get your stomach and intestines working, as they should, once more.

Cartier's Little Liver Pills will soon get you up. Purely vegetable. Safe. Sure. Quick. Ask for them by name. Refuse substitutes. 25c. at all drug stores.