

IN THE PUBLIC EYE

OHIO'S "SECOND M'KINLEY"



C. HARRIS & EWING

"The second McKinley," as his friends call him, Frank B. Willis, the new governor of Ohio, is a product of the farm. While he is not "self-educated" in the sense that Lincoln was, Willis toiled hard to help pay his way through school and college. His entire life has been one of toil and endeavor, the conservation of energy not being one of his cardinal virtues.

Willis is a Buckeye through and through. He was born in Lewis Center, Delaware county, December 28, 1872, and worked on his father's farm while attending the common school at Lewis Center and while going through the Galena high school in the same county.

Willis is one of the big men physically in Ohio politics. His friends take pride in declaring that he has the loudest voice in the state, is a prize hand-shaker and laugher, and that he is absolutely clean in his private life. In congress Willis, while not classified as a reactionary, has been regular in his party allegiance. In fact, he is regarded as a most cautious man when it comes to questions arising in his own party. It is recorded that as a congressional nominee, seeking re-election from the Eighth district in 1912, he went through the entire campaign without declaring himself as between Roosevelt and Taft.

Willis' home life has been ideal. His wife has accompanied him on many of his political errands through his district, and is almost as well known to his constituents as he is himself. She has been a great help to him in furthering his career, as she, too, is a born politician. She was Miss Allie Dustin and was married to Willis in 1894.

Fundamental Principles of Health

By ALBERT S. GRAY, M.D.

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MANUFACTURE OF MALT.

The more we investigate the causes which have made each individual what he is today the more we become convinced that every being has affluities which link him with the whole past; that there is a continuity of germ plasma and also of protoplasm which goes back to the very beginning of life on this globe; and that if we could only know all the factors which are concerned in producing any single organism, however simple it might be, in all its relations and proportions, we could explain the universe from top to bottom and evolve an infallible remedy for all our ills.

Consequently the study of the beginning of life in any organism is immensely interesting and illuminating to such of us as are not egotists and do not insist on learning in the most expensive of all schools—that of personal experience. Hence, the open minded study of the manufacture of malt should be most suggestive and instructive.

Any live seed or grain can be malted; and barley, oats, rice, wheat, rye and maize are used, but because of its flavor and other important qualities barley is the prime favorite for this purpose. The average time required to malt barley is 12 days. The operation is started by "steeping" or soaking the barley corns in tanks of water for about forty-eight to seventy hours.

Steeping the grain does not consist merely in the taking in of a certain amount of water, but is necessary in order to bring about germination, and to do this the water must remain within the corns for a certain length of time. It is quite possible to force the necessary amount of water into the grain in less time than the forty-eight to seventy hours given to the steeping process; but the grain is not "steep-ripe" until certain changes initiated by the water have taken place, and it requires a definite amount of time to bring these changes to completion. When "steep-ripe" the corns contain about sixty per cent water; at the same time about 1.5 per cent of matter has been removed from the grain in the water drawn off, and the total volume of the seeds has been increased about twenty per cent as the result of the water absorbed.

After the barley is removed from the steeping tanks it is made up into rectangular heaps sixteen to twenty inches deep known as position No. 1, or the "couch," the object of this being to enable it to gather heat and start active germinating. It usually remains in couch twelve to twenty-four hours, or until the interior of the heap registers a temperature of 60 degrees Fahrenheit. At this point the barley is moved to position No. 2, or "young floor," and there thinly and evenly spread in order that it may be controlled. When germination begins enzymes are secreted and these act on the reserve material, starch and proteins of the endosperm, converting them into simpler compounds, capable of diffusing to various parts of the growing germ.

But the limited germination which constitutes the malting process retains all the soluble compounds in the finished malt. Starch and the proteins are reformed, the former being deposited in the tissues of the germ and the cells of the scutellum which previously were almost free from starch; the protein matter deposited in the latter disappears to a considerable extent and the protoplasmic content of the cells constituting the root which protrudes from the base of the grain.

After the first rootlet has broken through the ends of the sheath it is followed by others until there are perhaps five or more. The cotyledonary sheath, or seed leaf, begins to elongate on the third or fourth day of germination and ruptures the true covering of the grain; it then grows upward between the husk and the aleurone layer, or "spine" of the maltster. The temperature during six or seven days is kept down to about fifty degrees by turning or plowing the grain about every six hours.

About the eighth day the grain is moved to position No. 3, known as "old floor," where it is spread thinly and slowly allowed to dry for the purpose of withering its roots. At this stage the acrospire should be about three-fourths the distance up the corn. The treatment now requires thickening the piece up to about ten inches. The rootlets now having withered and died off, the temperature increase resulting from thickening the grain pile is accompanied by little if any increase in the growth of the acrospire, the action being confined chiefly to the mellowing of the grains by the enzymes. Under normal conditions the temperature in "old piece" is allowed to rise as high as about seventy degrees during the six hours previous to loading it into the kiln. At this stage the moisture content is about forty per cent and it is easily possible to break down the corn between the thumb and finger; the grain is soft, mealy and soluble; it is mostly digested. The next stage consists in loading the malt into the kiln and there thoroughly drying it to stop all further digestion, then roasting it for the desired flavor.

Just why water produces these profound metabolic changes in raw grain, releasing the energy stored therein; by the sun and causing it to follow in orderly manner step by step the many stages necessary to repeat the evolution of the ages in another plant life.

We do not know what is as much a mystery to us as is the development of life in an egg by the heat from a kerosene lamp, or the birth of a human individual. But we do know that the same principles are involved in all three forms of life, the only difference being one of degree. We do not know why or how these phenomena take place, but we do know that the slightest interference with the normal process prevents the completion of the evolution.

Animal life is but a continuation of plant life, a part of a cycle, but a cycle in which the animal is dependent on the plant, not the plant on the animal. Animal life cannot exist without plants. Therefore, in consuming deficient plant food, we are cutting our life chain.

In this fact will be found the reason for the effectiveness of malt tonics in low states of vitality. Containing practically all these vital elements, malt supplies in part what our food has been deficient in, and is exceedingly valuable as an emergency food.

HORMONES.

Taken from the Greek language and meaning to arouse or excite, the word "hormones" is intended to designate a series of chemical bodies manufactured within the cells of one organ and entering the circulation to excite or stimulate distant organs into activity.

It has generally been supposed that the digestive functions were carried on solely under reflex nerve control. But Edkins in 1906 carried out a series of experiments to determine whether a chemical mechanism may not also account for the secretion of gastric juice, which is excited by the introduction of substances into the stomach. In a series of carefully controlled observations it was proved that the mere introduction of a neutral solution into the stomach caused no secretion of gastric juice and that there was no absorption of the solution, the fluid removed at the end of an hour having the same bulk and the same neutral reaction as the solution originally introduced.

The injection of pepsine, of acid, of broth, or of dextrin, into the blood stream produced no secretion of gastric juice, but if in the course of the hour during which the fluid was allowed to remain in the stomach a solution made by boiling mucous membrane from the pyloric end of a stomach with water, or with acid, or with pepsine, was injected into the blood stream at intervals of about ten minutes, then the fluid withdrawn from the stomach at the end of the hour was found to be distinctly acid and to have protein digestive powers—that is to say, it now contained hydrochloric acid and pepsin.

Similar solutions made from the cardiac end of the stomach will not produce any secretion of acid and pepsin, and this is held to prove that the pyloric end of the stomach produces a substance which is absorbed into the blood stream and carried to all the glands of the stomach, where it acts as a specific excitant of their secretory activity. This substance has been called the gastric "secretin"—it is what Starling named a "hormone." This substance is produced in that portion of the stomach where the process of absorption is most pronounced, and it stimulates into activity that portion of the stomach which is under direct nerve control.

Normal gastric secretion appears to be due to two co-operating factors. The first and most important, is the secretion arising from nerve impulses produced through the pneumogastric nerve and originating in the idea of food in the higher parts of the brain, from the sight of food and by the stimulating of the mucous membranes of the mouth. The second factor provides for the continued secretion of gastric juice long after the mental effects have disappeared. This is chemical and depends on the production in the cells at the pyloric end of the stomach of a specific stimulant or hormone, which being absorbed into the blood is carried to all parts of the body, where it acts by exciting all the various glands concerned in the digestive act.

The researches of Pawlow and others seem to indicate that the quantity and the properties of the secretions vary with the character of the food eaten. The quantity of the secretion varies also, other conditions being the same, with the amount of food to be digested.

On a given diet the secretion assumes certain characteristics and Pawlow is convinced that further work will disclose that the secretion of the stomach is not caused normally by general stimuli affecting it all alike but by specific stimuli contained either in the food or produced during digestion from the food contents of the action of which is of such a kind as to arouse reflexly the secretion best adapted to the particular food ingested. Undoubtedly this is due to the hormones in the general circulation.

Another significant hint of this action is furnished by the experiments of Starling and Lane-Clayton on the mammary glands. These investigators found that the extracts made from the body of the fetus when injected repeatedly into the blood stream of a virgin rabbit caused a genuine development of the mammary glands, closely simulating the growth that normally occurs during pregnancy. Similar extracts made from ovaries, placental and uterine tissues had no such effect; hence, they conclude that a specific chemical substance, a hormone, is produced in the fetus itself which being absorbed into the maternal blood acts upon the mammary gland, stimulating it to growth.

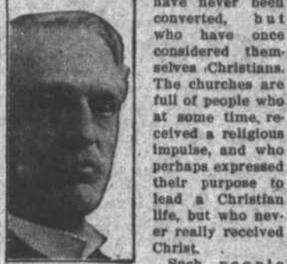
There is indisputable evidence of the existence of similar bodies which determine the secretory activity both of the liver as well as of the intestinal glands. Obviously these substances must be derived from the general food supply, and, therefore, it is easy to grasp the significance of Funk's statement that the vitamins, those complex nitrogenous molecules contained in the germ and the bran coats of seeds and grains, are the mother substance of the hormones.

How to Help Backsliders

By REV. HOWARD W. POPE, Superintendent of Men, Moody Bible Institute, Chicago

TEXT—I will heal their backsliding, I will love them freely.—Hosea 14:4.

Backsliders may be divided into three classes.



1. Those who have never been converted, but who have once considered themselves Christians. The churches are full of people who at some time received a religious impulse, and who perhaps expressed their purpose to lead a Christian life, but who never really received Christ.

Such people must be shown in a kind and loving way that they have been mistaken or they will never be willing to make another trial. It is well to point out some of the evidences of the new birth, and let them see that they have never experienced it.

Romans 8:1 shows that the Christian is delivered from the guilt of sin. Ask them if they have ever been wholly free from a sense of guilt, and for what reason. I John 3:14 proves that we have passed from death unto life because we love the brethren. I John 3:21, 22 shows that an obedient Christian will have answers to prayer. I John 4:13 insures the fellowship of the Holy Spirit. Test a person with such passages and he will soon recognize his true position.

NEWS and GOSSIP OF WASHINGTON



When the President Meets the Correspondents

WASHINGTON.—Although it has been definitely decided that there shall be no social affairs at the White House this winter, one form of social affair will continue to maintain its hold within the White House precincts. Every Tuesday morning at ten o'clock President Wilson receives the newspaper men and while "information business" is supposed to be the basis of procedure the gathering in a sense is a social one.

President Wilson has a sense of humor. Somebody has said that it is the Scotch sense of humor which manifests itself foggy at times, but it is humor nevertheless, and the president seems to enjoy bearing his share in its creation. When some correspondent, a little bolder than his brethren, asks a point-blank question demanding a direct answer on some matter concerning which the correspondents are on tiptoe, the president is likely to laugh and to tell a story in answer, the story always having some kind of a moral intended to point up the fact that it is not always wise to answer questions until the mind has been fully made up as to what the answer should be.

When President Wilson meets the newspaper men in conference he stands behind a desk in his circular office room while his visitors form three-quarters of a circle about him. Questions are fired at him all along, or, rather, all around, the line. He parries some of them, answers more of them directly and turns some of them away, as has been said, with a story.

Ordinarily about thirty correspondents are present at this Tuesday morning gathering. They are all men, save one, a clever newspaper woman, Mrs. George F. Richards, who is the correspondent of some New England papers. Mrs. Richards is the only woman who holds membership in the press galleries of the two houses of congress. Her husband, who died some time ago, was a member of the gallery. After his death she took up his work and has followed it ever since.

Hard to Keep Visitor's Elbows Off the Railings

THERE is an unwritten law that the guest in the gallery of the house or the senate shall not put his elbows, his hat, coat, gloves, guide book, muff, or fan on the railing of the gallery. Indeed, if he but lets his fingers rest ever so lightly on the balcony, as he leans forward to listen to the debate, the patient, vigilant doorkeeper comes creeping down the aisle and taps him on the shoulder.

Invariably the guest so accosted has an awful sensation of being called to account for some mystery in the past, or all but faints under the certain knowledge that there has been an accident in which someone near and dear to him has been killed. He always turns crimson or white, and looks up with a jerk. "Sit back, please," is all the doorkeeper says; or "Please take your elbows off the railing;" or, "No coats allowed to hang over the balcony."

Not long ago some one of the doorkeepers, well up in the advantages of labor-saving devices, had cards printed with instructions to guests to keep everything, themselves included, off the railing of the gallery.

The cards have been pasted to the capping of the gallery railing of the senate, and on the broad mahogany look like place cards at a banquet. But they do not entirely serve the purpose for which they were intended. Only the other day one was intensely amused watching the patient, vigilant doorkeepers of the senate gallery creep down the aisles and ask people to take their elbows off the cards, and read what was written thereon.

As yet no cards have been placed around the gallery of the house. Perhaps it cannot be done, because, whereas the railing of the senate gallery is mahogany, that in the house is marble, and it is possible the cards cannot be made to stick in the usual process of pasting.

Rare Collection of Fans in the National Museum

IN THE National museum is a small but rare collection of fans loaned by the late Mrs. James W. Pinchot, Mrs. Theodore Roosevelt and other women well-known in Washington and New York society. In this collection are excellent examples of different periods in the art and style of fan decoration, which, in different countries, seemed to adapt itself to the exigencies of the period in which they were used, largely depicting the dress and tastes of the people, unless the subject was allegorical or mythological.

For example, during the revolution in France, the decorations were republican in idea, such as figures of Liberty, triangles, the letters "R. F.," standing for Republique Francaise, phrygian caps on the figures and the costumes of the revolutionists. While in the time of Louis XVI, the period immediately preceding, fans were elaborately decorated with shepherds and shepherdesses and all the exquisite detail which characterized the court of Marie Antoinette.

There are several beautiful fans of the Louis XVI period, with wonderfully carved ivory and pearl sticks, and painted with fascinatingly foolish and well-bred looking shepherds and shepherdesses, dispersing themselves under sliping mounds of green. Some of these fans have dainty vases to lady's eyebrows or reticulate nose interwoven with the design.

This mock pastoral style was inherited from the Louis XV period, and was soon superseded by elegant and equally absurd-looking ladies and gentlemen, dressed in the costumes of the court. The bouffant skirts and towering head-dresses brought into vogue by the ill-fated Marie Antoinette were painted on the parchment leaf, and the sticks, often of tortoise shell, gilt and replete in carving, became the fashion.

Washington's Most Used Church May Be Restored

THERE has been some talk of "restoring" old St. John's church, on Lafayette square. The structure as it shows today is not quite as when built about one hundred years ago. It seems that it did not then, as now, have the pillared portico in front. The church is not much in the way of architecture, and it is a great pity that it was not beautifully designed, for the Wren churches were still the fashion when it was built. It has since become famous as the president's church, though not all presidents have worshipped there, the church being Episcopalian. But it has had many famous worshippers.

Its services, because of the historic character of the church, are always sure of a large congregation. There is difficulty at times in filling the pews, as they are owned outright, after the fashion of 100 years ago.

The church is fashionable for many things, and especially for weddings and funerals, and particularly of these latter for generals and admirals, the final rites for whom are most frequently said in Washington. So it is no surprise, in going by the church, which is neighbor to the White House, to see awnings proclaiming a wedding or lines of sailors from the navy yard or soldiers afoot or on horseback stationed upon the streets by the church. No other church in Washington seems so much used.

Really Healthy Person

The healthy person is one who uses all his powers of mind and body to their full capacity, and this is what brings happiness as well as sense of power. The emphasis should not be upon what one hears so much about—relaxation; but upon keeping this normal health of every organ and every function. This requires activity, exercise and always a pure and noble life.

Adversity

A high character might be produced, I suppose, by continued prosperity, but it has very seldom been the case. Adversity, however it may appear to be our foe, is our true friend; and, after a little acquaintance with it, we receive it as a precious thing—the prophesy of a coming joy. It should be no ambition of ours to traverse a path without a thorn or a stone.—Charles H. Spurgeon.

SOCIAL FAVORITE TO WED

One of the most interesting announcements made in Washington society this season was that of the engagement of Margery Colton and Randall Hagner. Both of them are so thoroughly identified with Washington and have such a wide circle of friends that congratulations were simply showered on them.

Miss Colton is the daughter of the late Col. Francis Colton, and though she has lived a good deal abroad and in the Orient, it has been mostly because her father, or her brother, or whichever member of her family she happened to be living with, was stationed in some far-away post. The Coltons are all army people, and between while Margery has always come "home" to Washington.

Mostly she has made her home with her brother, Col. George R. Colton, U. S. A., and as he was stationed in Manila for several years, and was governor of Porto Rico for a while, Margery, who was chaperone of his establishment at both these posts, has moved around considerably. Lately she has been living with her brother-in-law and sister, Commander and Mrs. Archibald Davis (the navy this time, instead of the army) and it is they who make the announcement of the engagement. But whoever she's living with, everyone in Washington knows Margery Colton.

No date has been set for the wedding, but it is announced that it will take place during the winter, and it is bound to be a big affair.



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JIMMY SLOAN PROMOTED



C. HARRIS & EWING

James Sloan, Jr., head of the secret service force at the White House, has been promoted to become chief operator of the Detroit headquarters, one of the most important fields in the service. Mr. Sloan is famous throughout the country for his personal attendance upon Presidents Roosevelt, Taft and Wilson.

"Jimmy" Sloan, who has traveled in every state, and almost every country, in the United States, as the guardian of three presidents, was assigned to duty at the White house 12 years ago. President Roosevelt once said of him that if he had a regiment made up of men like Sloan he could whip several regiments of men. Colonel Roosevelt was so fond of Sloan that he wanted to make the secret service man United States marshal of the Danville district of Illinois, but "Uncle Joe" Cannon, then a power in the house, had someone else he wanted for the job. Secretary Tammulty paid Sloan the tribute of saying that no accident has happened to a president of the United States during Sloan's connection with the service, and that he deserves the promotion he has received.

Sloan accompanied Colonel Roosevelt on all the long walks and rides he took around Washington, and has always kept in fine physical condition, so as to be prepared for any emergency that might come up. He has arrested hundreds of cranks around the White House and has handled these people, some of them bad characters, so easily that no disturbance has ever followed.

RUSSIA'S LEADING SOLDIER

Grand Duke Nicholas, who is giving such a good account of himself as commander in chief of the Russian armies in the war with Germany and Austria, is a second cousin of the emperor of Russia. He was born in St. Petersburg fifty-eight years ago and since his youth has been conspicuous in the Russian army. He presents a striking contrast in every respect to his father, who was a notorious profligate. The present grand duke is universally respected. In 1907 he was married to Princess Anastasia of Montenegro.

The grand duke has often been employed on special missions by Emperor Nicholas, who has always reposed the utmost confidence in him.

As in the case of nearly every prominent member of the Russian imperial family, the grand duke has been the victim of several attempts at assassination.

For a number of years Grand Duke Nicholas has been recognized as the foremost cavalry leader of Russia, if not of Europe. He is very tall and a superb horseman. On several occasions during the war between Russia and Japan the emperor was urged to appoint him to the supreme command of the Russian troops in Manchuria, in the place of General Kuropatkin, and the military authorities in Berlin, London and other European capitals have more than once expressed the opinion that the Russian army would have made a far better showing if the emperor had listened to this advice.



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