

CHEMISTRY OF BODY IS BEING STUDIED

Novel Field of Research at Pennsylvania "U."

Philadelphia.—A new field of scientific research is being developed by the psychological clinic of the University of Pennsylvania.

The introductory course in the new study, called "metabolism and behavior," was completed recently by a class of 30 students under the direction of Dr. Henry E. Starr in the department of psychological chemistry and toxicology in the medical school of the university.

"Metabolism and behavior," a statement given out by the university states, includes a study of the chemical changes taking place in the body, which determine the emotional makeup, efficiency and even the philosophy of life of the individual. The course presented a survey of the field, emphasizing research rather than attempting to lay down any premature dogmatic correlation.

During the last few years Doctor Starr has conducted a number of biochemical investigations of psychological problems in co-operation with Prof. Lightner Witmer and Prof. Edwin B. Twitmyer of the department of psychology. What is said to have been the most striking work of the chemical changes is saliva characteristic of fatigue and emotional excitement.

In the course of this research, Doctor Starr said he discovered that, under psychologically controlled conditions, the saliva of an individual may serve as an index to his emotional stability and resistance to fatigue. With the co-operation of Doctor Twitmyer, director of the clinic for the correction of speech defects at the university, this method was applied to the study of the metabolic etiology of stammering, involving the examination of 296 individuals.

The findings have been of great value, indicating, it is said, the curative measures to be employed in the treatment of stammerers thus examined.

Doctor Starr believes that, as a method of investigation, physiological chemistry has proved of inestimable value to the physician, and should be of equal value to the psychologist. With this thought in view, the psychological clinic of the University of Pennsylvania is developing biochemical research of psychological problems under its own direction.

Holy Year Pilgrims Make Rome Polyglot Capital

Rome.—The linguistic attainments of policemen, taxi chauffeurs, hotel employees and other workers who have to cater to the needs of Italy's vast tourist population have been severely taxed this year by the influx of holy-year visitors.

Hotel managers, porters and valets who once were able to satisfy their clients by a passing acquaintance with Italian, French and German now are frequently reduced to conversation by eloquent gestures.

Hotel notices and other tourist information posters which until this year had been printed in three or four languages now in some cases boast of as many as six or seven.

Recently taxicabs and cabs were provided with booklets setting forth the scale of prices in Italian, French, German, English, Spanish and Polish.

And even the expert philologists who boast of being able to make themselves understood in Russian, Serbian, Rumanian, Hungarian and all other central and northern European languages are often confronted with a more baffling difficulty by the presence here of peasants from remote sections of their native lands, particularly Italy and Germany, who know no tongue other than their respective regional dialects.

Robbing Church

New York.—Mrs. Charlotte Leman was caught robbing a contribution box in St. James' pro-cathedral, Brooklyn. When searched \$1,170 was found in her clothing. The box contained but a few small coins.

A charge of burglary was preferred against the woman, who said she was twenty-seven years old.

Cattle Free of Disease

London.—Restrictions imposed by the ministry of agriculture in connection with foot-and-mouth disease in the counties of Warwick, Cheshire and Northampton have been withdrawn. There are now no restrictions in force in Great Britain for the first time since the widespread outbreak of 1923.

Great Painter's Sad Fate

Murillo, the great Spanish painter, died from the effects of a fall from a scaffold from which he was painting in the Church of the Capuchins in Seville. His death occurred in his sixty-sixth year.

Plants That Protect Coasts From the Sea

In the struggle to defend our coasts from sea encroachments, seaside authorities have no better allies than the hardy tamarisk and shrubby sea blite. These useful plants are as effective in protecting the lonely stretches of our shores as stout sea walls and far-flung groynes, says a writer in London Tit-Bits. Take, for example, Shoreham, on the Sussex coast. This town was seriously affected by the incoming tides until it was found that the loose shingle that fringes the sea could be bound into a resisting mass by the extensive planting of tamarisk, a hardy little plant whose only real enemy is severe frost.

On the Norfolk coast the same method is adopted, but there the shifting shingle is bound with shrubby sea blite, which grows waist high and covers large areas of the coast. The more this plant is ill-treated the stouter it flourishes. Occasionally a violent storm will result in the shrubs being completely embedded in fresh shingle thrown up by the waves. This, in reality, is an advantage, as the plant puts forth new shoots that bind the fresh stones, still further strengthening the land rampart.

"Sports" a Century Ago Not of Highest Order

Public entertainments in London a hundred or more years ago were more of a sporting than of a dramatic or musical type. In the Observer of a date of 1825 appeared a full report of a dog fight, at the Westminster pit, at which "fifty personages of rank" were among the spectators, and whereas also his grace, the king's rat catcher, entered the arena with a cage containing ninety rats that a dog named Billy killed seriatim in seven minutes and thirty seconds.

Another article recorded that Mr. Wombwell, the proprietor of a lion named Nero, had built a den, ten feet high and fifty-seven feet in circumference, in which a contest a outrance between his pet and six dogs was to take place in June. Still another chronicled the melancholy fact that "John Smith, who was matched to eat a pair of men's shoes in fifteen minutes at the Half-Moon tap, Leadenhall market, has broken down in training, having been seized with indigestion."

School Has One Pupil; Teacher Is Her Mother

Middletown, N. Y.—A novel situation exists in School District 5 of the town of Forestburg, Sullivan county. There is only one class in the school and only one scholar in the class. The teacher is Mrs. Mary Hickey and the scholar is her daughter, Anna.

The purchase of farm lands in the district by the Mogaup Falls Power company for the purpose of constructing a supplementary dam has caused the rare condition. A short time ago the school had twenty-five pupils.

Confess—But What?

He was consulting his lawyer, more in a personal than in a professional way. "I don't know what to do, John," he said. "My wife has received an anonymous letter exposing some things I was mixed up in before we were married." The lawyer spoke from much experience. "Bill," he said, "there's only one thing to do—confess." "That would be all right, John," said the worried husband, "if she would let me take a look at the letter or tell me what's in it. As it is I don't know what to confess."

Right to Salute Bride

Kissing the bride appears to have been an old Scottish custom, according to which "the person who presided over the marriage ceremony uniformly claimed it as his inalienable privilege to have a smack at the lips of the bride immediately after the performance of his official duties," for it was cannily believed that the happiness of every bride lay involved in the pastoral kiss.—Doris Blake in Baltimore Sun.

Average Life 56

The average length of life in the United States now is fifty-six years, an increase of fifteen years since 1870, according to a recent report of the United States public health service. In the sixteenth century human life averaged only between eighteen and twenty years.

Coney Island Cannibalism

When daylight came and the sun woke the sleepers, Surf avenue was as busy as on an ordinary night. Throgs surged into the restaurants, and after eating those who were not in suits went to the bathhouses to get rooms for the day.—New York Times.

HOW

HIGH ENGLISH AUTHORITY TRACES RACIAL TYPES.—In a recent book, "The Mongol in Our Midst," Dr. F. G. Crookshank, an English medical authority, advances many novel and ingenious arguments to prove that all mankind is divided into three racial types—the Mongol, negro and white—which originated separately from the three great anthropoid apes, the orang-utan, gorilla and chimpanzee. Doctor Crookshank places considerable emphasis on the natural posture assumed by human beings when their muscles are relaxed.

The Mongol instinctively seats himself with his legs crossed horizontally in front of him. Whites and negroes usually find this posture very uncomfortable. In fact many people are physically incapable of seating themselves in this manner. Both the negro and the white man are likely to adopt a sitting posture with the legs arranged perpendicularly. In the case of the negro most of the weight is placed on the buttocks. The Caucasian is apt to lean forward more on his feet.

Curiously enough these postures have their counterparts in the sitting postures assumed by the three great anthropoid apes. The orang assumes the oriental posture, the position which an American usually associates with the status of Buddha. The gorilla sits in the negro fashion, while the chimpanzee follows the custom of the white man. Doctor Crookshank thinks that this similarity of sitting position indicates a separate origin of the three great classes of human beings from the three great species of apes. Since the American Indian sits like a Mongol it is presumed by Doctor Crookshank's theory that he is an offshoot of the orang. Whether this novel theory contains anything of permanent scientific value will depend on further studies in comparisons. We publish it merely for what it is worth.

How Types of Insects Attract Their Mates

The field cricket, having disposed of his rival, smartens himself up before going out to meet his bride. He puts the finishing touch to his toilet by waxing his mustache. He hooks his antennae down with one of his claws, moistens them with saliva and spends a long time putting a satisfactory curl in them, says London Tit-Bits.

The large gray robber fly gyrates in the air while his lady flirts, sitting upright on a leaf or petal a few inches away, throws out her wings and hums at regular intervals, beating time to his movements.

To certain other insects dancing makes a special appeal. During his courtship days the scorpion performs a minuet, grasping his partner by the "hands," or feelers, and marching to and fro in a stately, solemn way, repeating over and over again a series of well-defined steps.

The bee is a busy worker, but he believes that "all work and no play make Jack a dull boy." He likes an occasional evening's merriment, and if you are observant you may discover him putting his theory into practice.

Toward dusk he may be seen clinging to the stem of a thistle flower. He has probably been there for some hours, imbibing his nectar greedily. This flower has the curious effect upon him of producing a state of intoxication.

If you touch him to remind him of the lateness of the hour he does not move, but merely waves a leg, as much as to say he is well aware of his condition, and when he has recovered sufficiently will go quietly home.

How to Cover Wood Floor

A permanent covering for the pine-wood floor may be had by the use of paper, a covering that will last indefinitely and that may be treated like ordinary hardwood floors. The process is as follows: First, the floor is planed smooth; so that there is not even the suspicion of a splinter or rough spot anywhere. Next there is laid down builder's paper of medium weight. This is stuck to the floor with a mixture of flour paste and glue. Mottly flour serves very well for the purpose. In case the various strips of paper do not fit perfectly it is necessary to cut down the length of a section. It is of great importance that the various strips fit to a nicety. When the paste has dried—a matter of probably two or three days—the paper must be saturated with linseed oil. When the oil has been absorbed the final step is to apply a coat of paint. The whole process requires care, as the purpose is to make the paper waterproof.

WHY

Parents Are Responsible for Children Lying.

Lying is—well, all men are liars. I hear parents lying to their children every day of my life, writes A. S. Nell, in the London News. "Don't touch that. Here's the policeman coming!" "Nice children don't ask for a third helping."

Quite a lot of child lying is imitation of the parents. I blame the parents every time a child lies. If he lies because he is afraid to tell, the parents know nothing about children. Free children never lie; at least they never tell cowardly lies. The egotistical lie, "I saw 16 funerals today, mummy," is an attempt to make oneself important. When we grow up we adopt other methods—write articles for papers, sing, act and wear loud clothes. All are mostly childish lies in their essence—but dear things to us. The child who lies through phantasy is no more a sinner than a novelist is.

Long experience has forced me to the conclusion that it is our out-of-date system of educating children that makes our children neurotic and difficult. When parents cease to try to mold the character of their children a new era for children will arrive. I marvel at the daring of parents. Which of us is good enough to tell a child how to live? I think of our generation and what it has done. We still have wars and slums and crime and hate and scandal—and we dare tell a child how to live. I would smile if the results were not so tragic.

Why Indians Scalped Their Fallen Enemies

Roger Williams, writing of the tribe of Narragansett Indians, in 1643, says: "Timequassin: To cut off or behead—which they are most skillful to do in fight: For whenever they wound and their arrow sticks in the body of their enemy, they (if they be valorous, and possibly may) follow their arrow, and falling upon the person wounded and tearing his head a little aside by his Locke, they in the twinkling of an eye fetch off his head though but with a sorry knife."

Scalping was occasionally performed as an act of torture, but was commonly merely the taking of the whole or a part of the hair and skin of an enemy's head as a trophy to show that the possessor had slain a foe, remarks the Detroit News. It was only necessary to take the little part on the crown where the hair radiates, the "cowlick." This part was demanded, because there is only one such place on any given head, and therefore cheating was eliminated.

Why Fish Meal Is Valuable

Fish meal that can be used for cattle food is one of the uprising by-products of the great fisheries industries that center at Grimsby, England. As in all canning and packing centers, there accumulate great quantities of offal, as well as of discarded fish unfit for food. These are sent to garbage reduction plants that extract oil, glue, isinglass and fertilizer, and convert the better class of scrap into a fine fish meal. This is used for chicken food, and it has also been discovered that cattle will relish and thrive on a certain proportion of this meal mixed with their other feed. It is believed that this is the only case so far on record of cattle becoming carnivorous.

Why Turquoise Was Valued

In Europe it was once believed that the word turquoise meant victorious, or fortunate. Because the turquoise frequently changes color, turning from a sky blue shade to a paler greenish hue, people fastened a superstition to it, saying that the stone shone when the air was pure, but became dim when ill fortune was about. Turquoises, when worn, were considered insurance against a person's being struck by lightning or being drowned.

Why Grade Crossings Last

On first-class railroads alone there are in the United States 256,363 grade crossings. To eliminate these would cost on the average of \$75,000 each, or a round total of \$19,000,000,000, a sum on which the annual interest charges would be almost \$1,000,000,000.

Why Girdling Kills Trees

A girdled tree dies because the inner bark and living sapwood are severed. Vital connection is thus cut off between the roots, which take up water and raw food material, and the leaves which transform water and raw material into plant food.

Why Castor Bean Is Unsafe

It is unsafe to have castor beans where there are children about; two seeds contain enough ricin, the poisonous principle of castor beans and the deadliest compound in the world, to kill a child.

Spot That Made History

The bridge over the River Adda at Lodi, Italy, is famous as the scene of a terrible contest between the French under Bonaparte and the Austrians under Beaulieu, May 10, 1796. The Austrians were strongly entrenched on the opposite bank of the Adda and their formidable artillery swept the bridge, but Bonaparte, charging at the head of his grenadiers, bayoneted the cannoneers at their guns and drove the defeated Austrians into the mountains of the Tyrol. As a result of this victory, Milan capitulated to Bonaparte a few days later. This battle is frequently spoken of as the "Terrible Passage of the Bridge of Lodi." It was Bonaparte's first important victory over the Austrians, and, as he afterward declared, kindled the first spark of his ambition.—Kansas City Star.

The Fly Flew

An art critic, speaking of the virtues of this painting and the faults of that one, finally came to a picture in the gallery and said: "Now, you see in this picture the artist has not learned his trade—it lacks technique and understanding. His trees seem to have no form; they do not stand up; the grass has no roots. His clouds look like bits of paper stuck on the canvas. And here you see he has resorted to a trick to catch the public eye and has attempted to paint a fly. Now, I would not object to the fly, had he been able to draw better and make it look like a fly. This fly looks like a lump of mud and has not the character of a fly."

At this point the fly, having tired of the critic's rambling, took wing and flew away.

Nature of Pinchbeck

This is the name of an alloy of copper and zinc and was so called from its inventor, a London watchmaker who died in 1732. Pinchbeck made cheap jewelry from this alloy which had the appearance and luster of gold, although the counterfeit could easily be detected by its weight being less than that of gold and its want of resonance. The most common pinchbeck consists of about 10 or 15 per cent of zinc and the remainder copper—although tin is sometimes also added. The word "pinchbeck" is frequently applied to anything which is counterfeit or spurious. For instance, Anthony Trollope says: "Where in these pinch beck days can we hope to find the old agricultural virtue in all its purity."—Exchange.

There Were Others

The young man hesitatingly entered her father's presence. With a preliminary clearing of the throat and a nervous twitch of his fingers, he said: "I have come to ask you if I may marry your daughter, Gettrude."

"You may," said the father, promptly, as he passed the cigars. "And now that you're in the family, may I take you into my confidence?" "Why—?" exclaimed the happy man.

"Well, my boy," said his future father-in-law, "I just want to say that as you pass around among your friends I wish you'd get some of them excited about Margaret, Dorothy, Bella and Nancy. And put a couple of cigars in your pocket."

Old Superstition

Much quaint, mythical superstition centers around ancient Dover, castle, which overlooks the English channel. It is unique among English castles in more respects than one. No other ancient fortress in this country has maintained its practical usefulness so long and no other has been accredited to the industry of the devil. According to the Bohemian Leo von Rotemital, "it was built by evil spirits and is so strong that in no other part of Christendom can anything be found like it." It is easy to see the reason for this ascription. Foreigners casting covetous eyes on this gateway to the rich lands of England may well have found something diabolical in this fortress frowning down on them.—London Mail.

How Bureau Cut Expense

A report of the tuberculosis eradication division of the United States Department of Agriculture shows increasing economy in the work of eradicating bovine tuberculosis from the country. The average cost of a tuberculosis test made during the year ended June 30 was 30 cents. The previous year the average cost was 35 cents. This reduction in two years of approximately one-third was accomplished by confining activities more largely to circumscribed areas. Much time and expense was thus saved by reducing the need of travel.

How Silk Is Weighted

Silk frequently contains iron and tin compounds. These serve not only to fix the dyes, but also to increase the weight of the fabric. Sometimes silk is so "loaded" as to be three times its original weight.

Cheap for \$1,200

A western young man visiting New York city thought it would be fine to buy his sweetheart's engagement ring there. Entering a Fifth avenue store he was waved from one lordly clerk to another down a long aisle and at last reached the counter where there was a personage who sold engagement rings. "Here are some rather neat rings," said the distinguished one. "Small, of course, but in good taste." Our young friend liked their looks, but was pained to learn they ran from \$3,500 to \$5,000 apiece. He admitted, in some confusion, that he wished something a little cheaper. Then the mighty one reached into a bin and brought up a handful of sparklers. "Take your pick," said he, politely repressing a yawn, "\$1,200 each." The home-town jeweler sold that ring.—Capper's Weekly.

Too Good to Live

A jury condemned the philosopher Socrates to death, but it is not recorded that they were influenced in this by his statement, in the course of his defense, "While a soldier in the Greek army I went through the snows of a winter campaign barefoot, and no one ever saw me cross a street in Athens in the summer to get into the shade." The mind of Socrates was never much on the weather. He believed that one would suffer less and accomplish more if he did not bother his brains about the temperature, and what it might do to him. That is still very good philosophy.—Detroit News.

Why Eye Trouble Abounds

At a meeting of the American College of Surgeons a warning against excessive reading was sounded by Sir Henry Lindon Ferguson of New Zealand, one of the speakers. "Eyes were not meant for reading," he said, "but were intended for use in the jungles in looking out for wild animals and searching for food. It is only within the last 200 years that reading has become a matter of course for the general public and is largely responsible for the great amount of eye trouble today."

How Success Is Achieved

It isn't so much how many times a man is knocked down as it is how often he gets up and goes at it again. It's the man who does not get up who is out of the game for all time. So, if you are down, don't stay down—come back.—Grit.

How Insects Hibernates

Injurious plant insects survive the winter in the trash and weeds along fence rows and ditch banks. This trash should therefore be cleaned up thoroughly in the fall.

Commercial Fertilizer Encourages Big Yields

The continued use of commercial fertilizer over a series of years will encourage the production of large yields and it may be at the end of such a period it will be found impossible to raise as good a crop without the use of fertilizer. However, this is not due to any injurious effect of the fertilizer itself, but rather to the fact that the fertilizer has stimulated the crop, and caused it to remove from the soil even more plant-food elements than are supplied by the fertilizer. But if either large or small amounts of fertilizer are used in connection with a good system of cropping, and every care is taken to return all the manure to the land, there will be no reduction of yield due to soil depletion. The fact is, commercial fertilizers have a very definite value, more especially when proper use depends on such factors as crops, soils, rotation systems, etc.

Do Not Sow Clover and Sudan Grass Together

Do not sow sweet clover and sudan grass together. You will get a very poor stand of sweet clover and if the season continues dry there will be practically no sweet clover. From 20 to 25 pounds of sudan grass seed is required per acre. Sweet clover may be sown alone at any time during the summer up until the middle of August if a good, moist seed bed is provided. It may also be sown in corn at the last cultivation or with soy beans but the chances of getting a good stand by seeding with these crops are greatly reduced depending upon the weather during the remainder of the season. If there should be plenty of rain the sweet clover may make a good stand but if it should be unusually dry the stand is sure to be poor.

Facing a Problem

A British army officer in India was awakened one morning by feeling the native servant of a brother officer pulling at his foot. "Sahib," whispered the man, "sahib, what am I to do? My master told me to wake him at half-past six, but he did not go to bed till seven."

SUCCULENT CABBAGE HAS LONG HISTORY

Its Origin Lost in the Mists of Antiquity.

Should the history of the cabbage ever be written, it may prove to be unexpectedly thrilling. Remarkable facts concerning that humble vegetable have been discovered by Prof. Rugles Gates, the botanist:

"Cabbages, kale, cauliflowers and brussels sprouts," says the professor, "all originated in the wild cabbage, a native of the coast and the south of England. The cabbage as we know it was the first development of the wild plant, and from it appeared the cauliflower and the sprout."

"The origin of the species is lost in antiquity, but the Romans appear to have cultivated it. The remarkable thing is that each type entered more or less suddenly into the vegetable garden."

"A gardener in these ancient days may have planted a cabbage on a certain spot and have wakened up some morning to find a cauliflower or a stalk of sprouts in its place."

"There was no gradual development. It happened spontaneously. In the case of the cauliflower, there was an inflorescence, and the green flower became white, succulent and fleshy, though not to the degree that we know it today."

"The sprout was the result of the cabbage, instead of confining its efforts to the attainment of one large bloom, determining to multiply itself into a numerous clump of tender heads."

"It is in this way that we now think evolution has taken place—the production of new and marked varieties with fully developed characters."

"What causes the transformation? Interesting developments may result from the experiments. Why not, for example, a 'cauliflower' from the parent cabbage, or perhaps a 'carnip' from the carrot or the turnip?"

"As a food the cabbage has a long and honorable career," says the commissioner of health, New York city, "It has graced the tables of kings. The favorite dish of Emperor Pompey was cabbage. I have no doubt that many another ruler, if he admitted the truth, would confess a yearning for corned beef and cabbage. It must be terrible to live on ambrosia and nectar!"

"The cabbage is a valuable food because it is rich in lime and potash. Humans require roughage, coarse indigestible material, just as animals do. Every farmer can testify to the necessity of such foods for his stock. Every dietary expert agrees that roughage must be supplied if we are to be healthy."

"Cabbage is important, then, because it supplies lime and because it furnishes roughage. When it is served with delicious dressing it makes a fit dish for any table."

"In Scotland the oatmeal is cooked in the cabbage water, making a dish called 'kale brogue.' In this way the mineral elements are saved."

"Almost everybody can eat raw cabbage, but the cooked vegetable disagrees with many. As a matter of fact, too, when the cabbage is boiled much of its valuable material is carried away. Steaming, instead of boiling, guards against the calcium loss."

—Cleveland Plain Dealer.

London Wants More Color

London is showing signs of revolt against white or red brick house facades, the color scheme of the English capital for centuries, perhaps. Buff and brown may be added to red and white to relieve the situation. George Topham Forrest, architect to the London County council, who recently spent several months inspecting buildings in this country, said there was something monotonous in a long series of dingy gray houses and, having noticed in the United States an attempt had been made to relieve this monotony by the use of colored materials, he intended to follow suit.

On the council's Becontree (Essex) estate, some 8,000 houses will be erected, in which the American idea of mixed colorings will be adopted.

Dental Motor Car

The Pennsylvania state department of health has planned in operation a plan by which it hopes to have every child in Bedford, Somerset, Tioga, Potter and Wyoming counties physically fit when he enters school next fall. A health and dental motor car, in the charge of experts, left recently to visit these counties this summer. Field workers have mapped out the itinerary and will notify parents of children of school age when the health clinic will be able to examine their children. After the children's physical defects have been diagnosed, they then will be turned over to the home community physician for treatment.

Fatle

Faith without works is as futile as a genius without a press agent.—Boston Transcript.