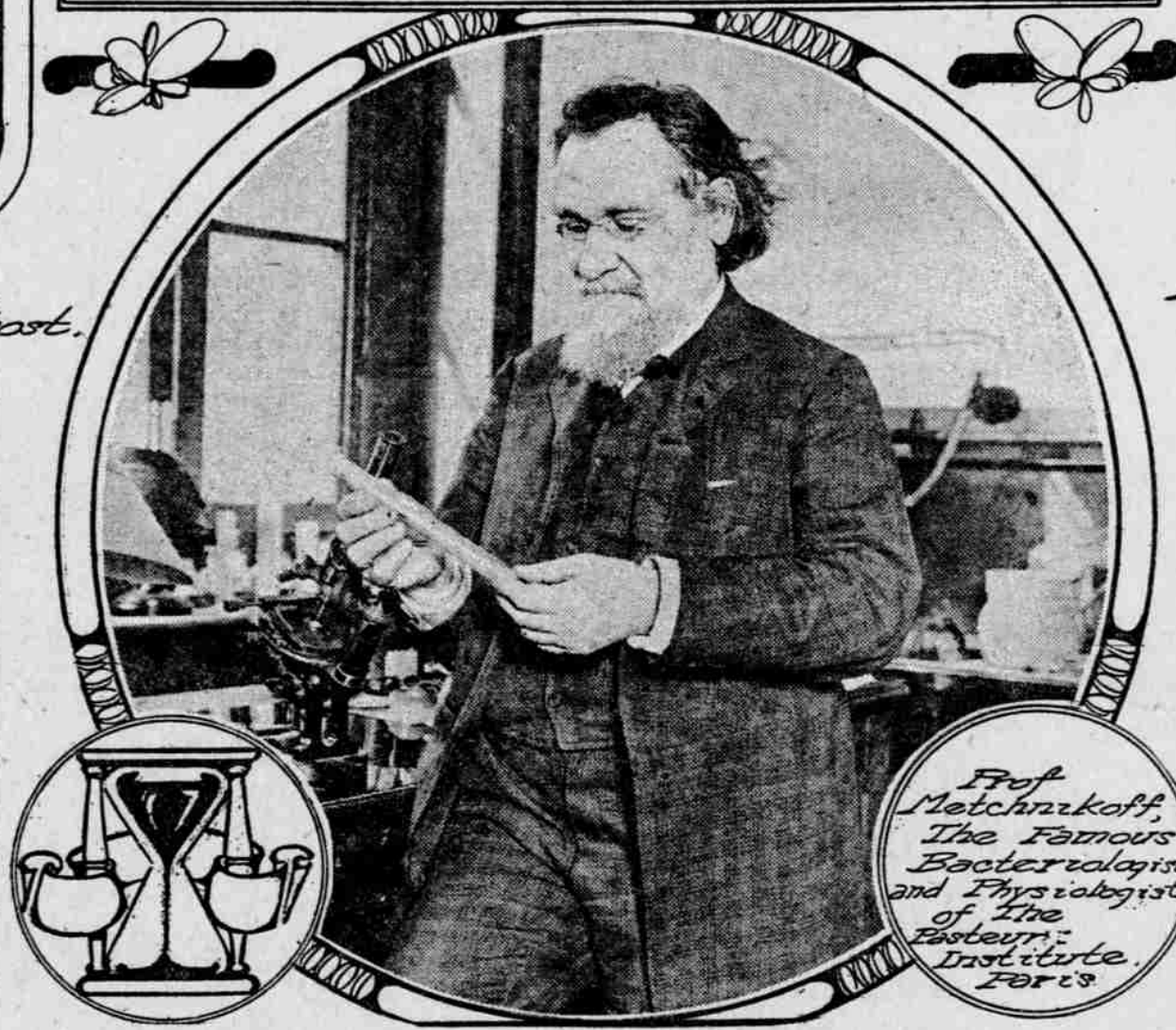


Has Secret of Longevity at Last Been Discovered?

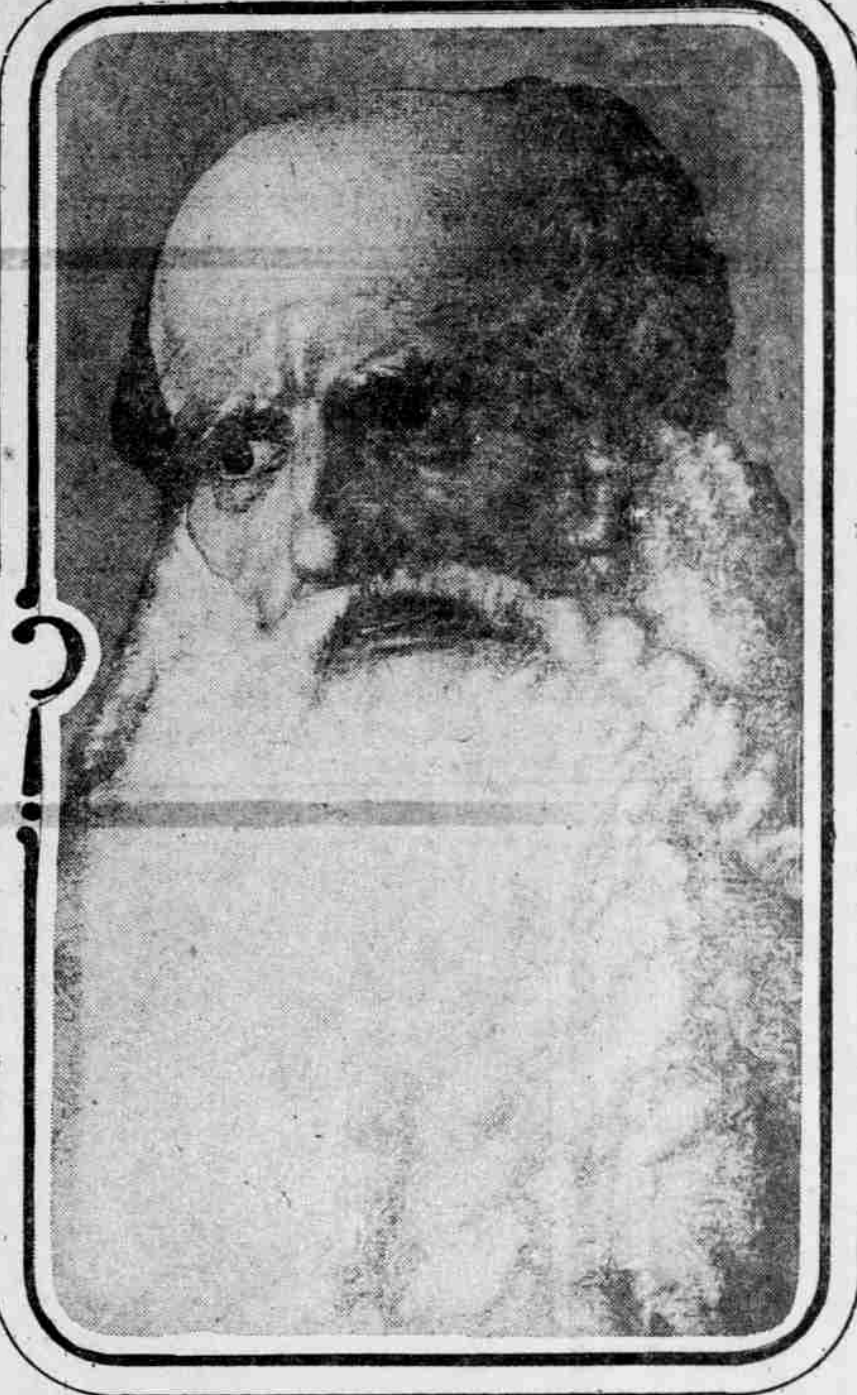
Mechnikoff, Paris Scientist, After Years of Patient Research, Finds a Microbe Which Fights the Slow and Insidious Old Age Poisons—140 Years Declared to Be the Normal Age of Man in Biblical Times.



Prof. Mechnikoff, The Patriarch Bacteriologist and Physiologist of the Pasteur Institute, Paris



The Patriarch Isaac, by Michael Angelo. At the Age of 180, Isaac Gave Up The Ghost.



The Patriarch Abraham, by Albert Dorer. Abraham Lived 175 Years.

PARIS, July 22.—(Special Correspondence.)—Mechnikoff does not tell all.

The illustrious discoverer of the glyco-bacter has been so misrepresented and so jealous that he no longer wears his heart on his sleeve.

"Of course, the glyco-bacter will not give eternal youth," he said wearily to the reporters, "but it will reduce the discomforts of advancing years."

Both statements are perfectly true, yet they perfectly conceal Mechnikoff's real thought.

Mechnikoff's real thought, today as yesterday, is that man is to live 140 years. When he is among friends, sure not to have his words garbled in a gross report, he tells how he began the great search in which the world is so painfully interested.

"Up to recently science had not occupied itself at all with the phenomena of old age," says Mechnikoff on such occasions. "Old age seemed natural. Everyone accepted it. Then one day, it struck me that there might be interesting matter for investigation in the subject, and you will see that I was not deceived. It came to me from this reflection—life being a function like any other, if we should die normally we ought to die with joy, with the desire to die. When we have eaten, we are no longer hungry; after the labor of the day, we wish to sleep. How is it that old men, with rare exceptions, cling to life? Because, generally, we are forced to go before the instinct to die is weakened in us. Death either takes us too soon, or else old age weakens us to the point of not permitting this desire for death to bloom in us."

"OLD men" go off from "old age" at 70. Queer kind of old men, says Mechnikoff.

You have never seen a real old man, says Mechnikoff; though, as will appear, Tokarski met one, 105 years old, who rejoiced at death and "felt the need of it." But imitation old men, dying at 85 or 90, are really sick men; and Mechnikoff has invented a name for their disease—pathological old age.

Real old men "full of days" lived in old Bible times. Abraham, having lived 175 years, died in a good old age, an old man and full of years or days. At the age of 180 Isaac gave up the ghost, being old and full of days. Job lived 120 years after his trial and died old and full of days.

That "full of days" is not a common

formula is proved by the fact that the Old Testament writers do not employ it when death occurred under the age of 140 years. Ishmael lived 137 years, lost his forces and simply died, and the lack of the formula is particularly significant in the cases of Moses and Aaron, cut off at 120 and 123 respectively because they had trespassed at the waters of Meribah-Kadesh. Though his eye was not dim nor his natural force abated, Moses was told to go up in the mountain and die.

What is this mysterious "fulness of days?" Professor Mechnikoff declares it to have been the now lost "instinct of death" which man ought to but has rarely attained because of certain disharmonies of his nature inherited from his first rational ancestor, who was the freak child of an antipoid ape.

Up to the ape, nature went slow and sure. After the ape, intelligence grew faster than bodily adaptability—and the Tree of the Knowledge of good and ill is but its allegory.

WHEN Mechnikoff gets started on organic disharmonies, it is a long talk. Man has hair on his legs; wisdom teeth which cause plegmons and jaw-carries; a vermiform appendix, useless since the rabbit; a stomach that is not essential; and, in particular, a great intestine which is a veritable death-trap. In man's herb-eating ancestors (as the horse and cow), the great intestine, swarming with its microbes capable of digesting cellulose, was essential. In man it is a mortally dangerous waste-basket, a veritable den of putrefaction; and constipation causes an extra re-absorption of the poisons elaborated by its microbes.

What has all this to do with old age?

Everything. An old man is tough, as you know. "Pathological old age—the wrong kind of old age—is distinguished by a general hardening," says the great physiologist, "and we properly compare the tough meat of old animals to sole leather, because the latter is composed of connective tissue—exactly the framework material which, in the skeleton, or hardening of old age, comes more and more to take the place of the cellular elements which make the organ. In the brain the nerve-cells—intellectual, sensitive, commanding movements, etc.—give place to the connective tissue of the nerve centers. In the liver, the hepatic cells are

replaced by like framework. In the kidneys the same tissue chokes the tubes that are indispensable for ridding us of a quantity of substances."

It is all the fault of the great intestine, swarming with innumerable microbes—according to the latest researches of Strassburger they amount to 128,000,000,000,000 per day!

They produce slow poisons, in particular the aromatic series, such as indols and phenols, resulting from putrefaction caused by these noxious germs, and quite unnatural, as they are not found in babies nursed by their mothers.

These slow poisons—in particular the indols—cause the hardening, or sclerosis of so-called or imitation old age, in analogy to that of certain chronic maladies in which the brain, kidneys and liver are poisoned by alcohol, lead, mercury and the virus of certain diseases.

THE old Biblical patriarchs—like tables nursed by their mothers—escaped the indols and phenols.

Abraham, 175 years old, and Isaac, 180, living among their flocks, in tents,

ate cheese, milk products, sweet dried figs and dates and quantities of fruits. The earth was less crowded, and bad microbes lived less close to man—who kept moving when a spot got dirty.

How imitate them—and live to be 140 years old?

We cannot all keep moving in tents; and Professor Mechnikoff points out that the exceptionally favorable conditions under which the early patriarchs attained physiological old age in their tents and among their flocks did not endure after the settling of the Jews in the cities of the land of promise.

"We cannot all cut out our great intestine," says Professor Mechnikoff. "Perhaps in a far-off future it will be accomplished, but in spite of the immense progress of surgery, we cannot at present dream of thus relieving each citizen. No, the rational course is to fight the great intestine's mass of microbes."

WE who live in Paris and know some of Professor Mechnikoff's friends are imitating the regime he sets them—and hope to live to be very old indeed.

No joking. Those who have been following the

regime for the past 10 years appear to keep the spring and flush of middle life beyond their fellows.

Is it difficult?

First, beware of all uncooked products of the microbe-infested earth—salads, artichokes, strawberries, melons, onions, cucumbers, radishes and so forth. Unless thoroughly cooked (to destroy their microbes with intense and continued heat) do not touch them on your life.

Raw fruits—always technically dangerous—must be immersed a few moments in bubbling, boiling water, before eating.

Take frequent Turkish baths, followed by tepid douches turning cold. They are best and cheapest done in a home sweat-box and bathroom. They clear the system of a mass of vague toxins and relieve the stomach, kidneys and liver of extra work.

Mechnikoff is not a vegetarian; but his patients must always be great eaters of well-cooked vegetables, less for their nutrition than to furnish the great intestine with the large quantity of waste matter which its healthy working requires.

And "sour milk." We see American head-lines: "Sour Milk Good—But Don't

Better." Nothing has angered Mechnikoff more. The particular lactic microbes which fight against putrefaction may, certainly, be found in sour milk all right—but are regularly accompanied by so many "wild yeasts" that colic and sour stomach are to be expected.

No; the Bulgarian bacillus which Professor Mechnikoff imports so continually and with such care, is not a wild but a "domestic" yeast, cultivated through centuries by the grazing, flock-tending populations of the Balkan Peninsula, whose way of living and longevity recall the Biblical patriarchs.

Only a Mechnikoff would dare do it. His disinterestedness has been proved a hundred times. He might take enormous fees for treatments, yet refuses all. Rich for Pasteur Institute research in the millions of the Osiris bequest, he is content with a clerk's income for his simple private life.

On its side, the ferment company binds itself to furnish Mechnikoff and the world with fresh lacto-bacilline in two forms, salt callie, or curdled milk, in sealed glass jars, and dry compressed tablets of the living yeast in tin boxes. Doubtless the "curdled milk" is the surest. It is a perfect field of culture; while on several recent occasions in Paris the bacilli of the dry tablets have been found dead or dormant. One chemist discovered living ferments only in four tablets out of an entire box.

Mechnikoff made a great row with the company, whose experts were as troubled as himself. The boxes had been kept too long by retail druggists. In the future there will be some disinfecting device. For the rest, it is easy to tell by the lack of results if the bacilli be dead. After a two weeks' course of taking, a general feeling of "facility" and freedom in the entire human tube is manifest. Faithful renewals of the flora during several years, obviously relieve the patient of pimples, blotches, obesity and constipation.

Shall we continue to take lacto-bacilline after the glyco-bacter ferments come on the market? Doubtless by some simple trick of diet and hygiene, which the Jews lost in cities. Part of it may have been the sugar of their dried figs

and dates; but we have not their active outdoor life to burn up so much rapidly absorbed sugar. Little of it reaches the great intestine; nevertheless Mechnikoff found that white rats fed on dates, figs and other sugar foods were free from "old age poisons"—this because numerous microbes transform sugar into acids which prevent putrefaction. If we could start a sugar factory in our great intestine, all might be well.

Here comes in friend glyco-bacter—a microbe found in the intestinal flora of the dog and whose activity makes sugar from potato starch without decomposing the albumenoids. Evidently the patient must eat plenty of potatoes.

Not every dog is a glyco-bacter dog. It happens by accident. There is nothing to do with it. You can follow a \$250 prize collar half a day with a dustpan and brush, yet reap no reward; while the common hound-dog may produce veritable treasures. And note, the glyco-bacter are no use to the dog in the public street. The dog cannot profit by them, for one reason in many, because he does not eat potatoes.

CERTIFIED glyco-bacter dogs will, in time, come to be highly saleable to ferment companies; because it is notorious that to obtain full-sized lively microbes and bacilli, frequent recourses must be had to the natural sources which they petar out in size and activity.

The glyco-bacter will put on the market in a syrup and a compressed tablet—the syrup the surest.

The glyco-bacter will transform our potatoes into sugar. Other microbes, always on the spot, will transform that sugar into acids. And those acids will prevent putrefaction, forming of indols and phenols, those slow, insidious "old-age" poisons. And the few trillions of putrefaction microbes which escape will be eaten by the lactic bacilli—whose supply we shall continue to renew in us from time to time. So we shall be fresher, springier and freer from pimples, constipation and obesity—while awaiting the great result of years to come, in prolonged vigor.

Complicated? "Yes, more complicated than the patriarchs' trick of diet and hygiene may some day be rediscovered. Mechnikoff thinks that the vast ceremonial of Leviticus and Deuteronomy he rushed at a panic drag-net for the lost secret.

"By the old Levitical law 'We marry the Indian to the squaw.' Inter-racial marriages may have something to do with it.

But Mechnikoff is still seeking. With the glyco-bacter, he is "warm." He will not quit until man lives 140 years.

FROM HERO TO ZERO — The Tale of a Fight and Its Outcome.

JULIAN GORDON, six feet two and an athlete from the ground up, had come to Brockport as instructor in athletics at the Y. M. C. A. As he stepped off the train he suddenly felt the pressure of an unseen hand on his shoulder, and a timid voice greeted him with:

"Excuse me, sir, don't you want to fight?"

Turning upon his questioner, Gordon's look of puzzled surprise quickly gave way to a smile. Before him stood a well-dressed, mild-mannered little man, whose face seemed gentle and kind. Believing the man to be intoxicated, Gordon tried to avoid him, but as the stranger drew nearer it became evident that his condition was normal.

"I meant no offense, my dear sir," he continued with a friendly smile. "I just asked it as a gentlemanly question, that's all. Don't you ever fight?"

"Why, I have been known to do such a thing," replied Gordon good naturedly.

"Good for you," exclaimed the stranger greatly elated. "My name is Lovejoy—Jeremiah Lovejoy. You look as though you'd do a fellow-man a favor. Will you fight?"

"I don't make a practice of fighting," "No, of course you don't. I understand that, but you believe in being accommodating, don't you? Were you going to the hotel?"

me? We never met before, so you cannot have anything against me."

"Not the first thing, my dear sir, nothing at all, but that isn't the point. Fighting makes a man of a fellow. It develops the body, strengthens the nerves, and imparts grace and flexibility to the intellect. Before I met you I asked a dozen chaps to stand up before me. But you know how it is. The world is brimful of weak-kneed self-dissaters, and not one of them would accommodate me. Now the minute my eye lit on you I said to myself 'there's a Christian gentleman. I'll bet my life he'll fight me.'"

"Isn't it unbecoming in a Christian gentleman to fight?"

"Unbecoming your grandmother! Why, my dear sir, the hardest blows in the world have been struck by Christians, and for 10,000 years the fighting man has been crowned as a Hero while the fellow who handed out the milk of human kindness was downed as a Zero."

"So I suppose you are fighting for a front seat in the Hall of Fame?" queried Gordon.

"Exactly, and I expect to win, for God loves a hard hitter."

"How do you make that out?"

"How do I make that out? Let me ask you a question. Is the Lord lading out 'Love Taps' when he hands us the Cyclone, the Tidal Wave, and the Bolt of Lightning? Hardly. Don't these solar-nexus swings teach us that the fighting spirit flourishes on high?"

"Are you a professional?" continued the instructor of athletics.

"Oh, no! I never took a boxing les-



"Excuse me, Sir, Don't You Want to Fight?"

son in my life. I fight for the benefit of my health and to set a good example to others. It's the one real joy of my life."

"Do you generally win out?"

"Well, I don't always get the worst of it, but then I don't care a continental about that. Every man should be unselfish enough to help along a good cause."

The two had by this time reached the hotel.

"Well, sir, what do you say?" resumed the little man, familiarly inviting Gordon to a seat, after the latter had registered his name. "Will you fight?"

"I would rather not this morning."

"Why?"

"Because I don't feel well."

"But a rousing good fight will bring you around all right. I am sure of it. For goodness' sake don't disappoint me now that you have raised my hopes. I haven't had a fight for a week."



Near Midnight Gordon was Suddenly Awakened by Loud Knocking on His Door

got any grit. Now, I'll tell you what I'll do. I never fight for money, but I'll give you \$25 if you will stand up before me for half an hour. What do you say?"

"I don't believe I care to, today."

"How about tomorrow?"

"I'll think about it. How do you fight? I mean under what rules?"

"Any old way, jab, jolt, punch or elbow. Any style that comes handy. But gives each fellow a square deal. You understand. Now, what do you say? Is it a go?"

"If you don't clear out I'll knock you into the middle of next week," shouted Gordon.

"Excuse me, sir, I don't want to be disagreeable, but I've taken a liking to you and I ask it as a favor."

"All right, I'll fight you tomorrow. Now, go and make your will."

"Good! That's a bargain! I knew you were made of the right stuff," came in

stratful notes from the intruder, as he made his way downstairs. "I'll be around bright and early."

But he wasn't. For right here fate stepped in and Gordon saw nothing of Lovejoy the following day. In the evening, wondering what had become of him, he inquired at the hotel office.

"Oh," answered the clerk in surprise. "We thought you knew. Mr. Lovejoy is at the hospital."

"Why, did some one do him up?"

"No. It was an accident. Long before breakfast this morning he asked us to send his card to your room. Not wishing to bother you at that hour we told him you had gone out, whereupon he rushed at the door, exclaiming that he had an important engagement with you. Just as he was about to pass out he stumbled and fell, striking his head on the marble steps. When we reached him he was unconscious, so we sent him to the hospital."

"Have you heard how he is getting on?"

"Yes, he regained consciousness at noon and is doing well. The fall seems to have proved a blessing in disguise for him."

"What do you mean?"

"Why, it's the most curious coincidence. Two months ago Mr. Lovejoy, while quietly passing through our front door with a friend, fell in exactly the same spot and became unconscious. The moment he regained consciousness the notion took hold of him that he wanted to fight every man he met. Up to that time he was a most peace-loving citizen."

(Continued on Page 8.)