## McGonigal's

## Worm

It had happened—no question of it. Now how could it be made to unhappen?

WHEN it happened, it happened unnoticed. Though it affected all chordata on Earth (with a possible exception to be noted in a moment), nobody knew of it, not even the Prince of all chordata, Man himself. How could he have known of it so soon?

Though his lifeline had suddenly been cut, it was a long lifeline and death would still be far off. So it was not suspected for nearly twenty-four hours, nor accepted even as a working theory for nearly three days, and not realized in its full implications for a week.

Now, what had occurred was a sudden and worldwide adynatogenesis of all chordata, not, however, adynatotokos; this distinction for many years offered students of the phenomenon some hope.

And another hope was in the fact that one small but genuine member of chordate was not affected: an enteropneustron, a balanoglossida of the oddest sort, a creature known as McGonigal's Worm. Yet what hope this creature could offer was necessarily a small one.

The catastrophe was first sensed by a hobbyist about a

day after it occurred. It was just that certain experiments did not act right and the proper results were not forthcoming. And on the second day (Monday) there were probably a hundred notations of quite unusual and unstatistical behavior, but as yet the pattern was not at all suspected.

On the third day a cranky and suspicious laboratory worker went to a supply house with the angry charge that he had been sold sterile mice. This was something that could not be ignored, and it is what brought the pattern of the whole thing into the open. with corroboration developing with explosive rapidity. Not completely in the open, of course, for fear of panic if it public. reached the throughout the learned fraternity the news went like a seismic shock.

When it did reach the public a week later, though, it was greeted with hoots of laughter. The people did not believe it.

"THE cataloguing of evidence becomes tiresome," said Director Concord of the newly originated Palingenesia Institute. "The facts are incontrovertible. There has been a loss of the power to conceive in sea squirt, lancelet, hag fish, skate, sea cat, fish, frog, alligator, snake, turtle, seal, porpoise, mouse, bat, bird,

hog, horse, monkey, and man. It happened suddenly, perhaps instantaneously. We cannot find the cure. Yet it is almost certain that those children already in the womb will be the last ever born on Earth. We do not know whether it is from a natural cause or an enemy has done this to us. We have, for ten months, tested nearly everything in the world and we have found no answer. Yet, oddly enough, there is no panic."

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"Except among ourselves," said Appleby, his assistant, "whose province is its study. But the people have accepted it so completely that their main interest now is in the world sweepstakes, with the total sums wagered now in the billions."

"Yes, the betting on the last child to be born in the world. It will prove one point, at least. The old legal limit on posthumous paternity was a year and a day. Will it be surpassed? The Algerian claimant on all evidence has nearly three months to go. And the betters on the Afghan have not yet given up. The Spanish Pretender is being delayed, according to rumor, medically, and there are some pretty angry protests about this. It is not at all fair: we know that. But then a comprehensive set of rules was never drawn up to cover all nations: Spain simply chose not to join the pact. But there may be

trouble if the Spanish backers try to collect."

"And there is also a newly heard of Mexican claimant."

"I give little credit to this Juanita-Come-Lately. If she was to be a serious contestant, why was she not known of before?"

The Algerian claimant, however, was the winner. And the time was an unbelievable three hundred and eighty-eight days. So the last child on Earth, in all likelihood, had been born.

There were now about thirty institutes working on the problem, most of them on an international basis. Thirteen years had gone by, and one hope had died. This was that those already in the womb at the time of catastrophe might themselves prove to be fertile. It was now seen that this would not prove so, unless for some reason it was to be quite a delayed fertility.

The Cosmic Causes Council had by no means come to a dead end. It had come to so many live ends as to be even more bewildering.

"The point," said Hegner in one of his yearly summaries, "is not whether sterility could have been caused by cosmic forces. Of course it could have been. It could have been caused in twenty ways. The miracle is that fertility had ever been possible. There must have been a shield built in for every danger. We know

but scantily what some of them are. We do not know which has failed or why."

"And could the failure have been caused by an enemy?" asked an interlocutor.

"It could have been, certainly. Almost by definition we must call an enemy anything that can harm us. But that it was a conscious enemy is something else again. Who can say what cosmic forces are conscious? Or even what it means to be conscious?"

**TIOWEVER**, the Possibility ■ Searcher Institute had some spotted success. It had worked out a test, a valid test. of determining whether an individual yet remaining had the spark of possible fertility. And in only a few million tests it had found one male shrew, one male gannet, no less than three males of the yellow perch, one female alligator, and one female mud puppy, all of whom still possessed the potential. This was encouraging, but it did not solve the problem. No issue could be obtained from any possible pairing of these; not that it wasn't tried.

And when the possibility test was run on all the humans of the Earth, then it was that incredible and unsuspected success crowned the efforts of the institute. For, of a bare three billion persons tested, there were two who tested positive; and (good

fortune beyond all hoping), one was male and one was female.

So then the problem was solved. A few years had been lost, it is true, and several generations would be required to get the thing on a sound footing again. But life had been saved. Civilization could yet be transmitted. All was not lost.

Musha ibn Scmuel was an Arabian black, an unthrifty man of tenuous income. His occupation on the cardex was given as thief, but this may have been a euphemism. He was middle-aged and of full vigor, a plain man innocent of shoes or subtlety. He was guilty neither of the winehatred of the Musselman nor the garrulousness of the Greek. He possessed his soul in quietude and Port Said whisky and seldom stole more than he needed. And he had a special competence shared by no other man in the world.

Cecilia Clutt was an attractive and snooty spinster of thirty-five. She was a person of inherited as well as acquired wealth, and was an astute business woman and amateur of the arts. She did have a streak of stubbornness in her, but seldom revealed it unless she was crossed.

So, the first time she said no, it was hardly noticed. And the second time she said it, it was felt that she did not quite understand the situation. So it was Carmody Overlark, the silky diplomat, who came to reason with her.

"You are the sole hope of the human race," he said to her. "In a way, you are the new Eve."

"I have heard the first one spoken badly of," said Cecilia. "Yet her only fault was that she could be talked into something. I cannot."

"But this is important."

"Not really. If it is our time to disappear, then let us disappear with dignity. What you suggest is without it. It would leave us a little less than human."

"Miss Clutt, this is a world problem. You are only an individual."

"I am not only an individual. There is no such thing as only an individual. If ever a person can be spoken of as only an individual, then humanity has already failed."

"We have tried reason. Now by special emergency legislation, we are empowered to employ compulsion."

"We will see. I always did enjoy a good fight."

Those who read the State Histories of the period will know that it did not come off. But the reasons given there are garbled. "Unforeseen circumstances" cover a multitude of failures. But what really happened was this.

Musha ibn S. had been tractable enough. Though refusing to fly, he had come on shipboard readily. And it was not till they were out of the Inland Sea and on the Atlantic that he showed a certain unease. Finally he asked, reasonably enough, to be shown a picture of his bride. But his reaction on seeing it was not reasonable.

He screamed like a dying camel. And he jumped overboard. He was a determined swimmer and he was heading for home. A boat was put out and it gained on him. But, as it came up to him, he sounded. How deep he dived is not known, but he was never seen again.

On hearing of this, Cecilia Clutt was a little uncertain for the only time in her life. Just to be sure, she asked for

a copy of the picture.

"Oh, that one," said Cecilia. "It is quite a nice picture, really. It flatters me a little. But what an odd reaction. What a truly odd reaction."

THERE were repercussions ■ on the economy. The primary schools were now all closed, except for a few turned over to retarded children. In a year or two the high schools would close also. The colleges would perhaps always be maintained, for adult education and for their expanding graduate schools. Yet the zest for the future had diminished, even though the personal future of nobody had been abridged. New construc-

tion had almost ceased and multi-bedroom homes became a drug on the market. In a very few years there would be no additions at all to the labor force. Soon there would be no more young soldiers for the armies. And soon the last eyes ever would see the world with the sudden poetic clearness that often comes with adolescence.

There had been a definite let-down in morals. Morals have declined in every generation since the first one, which itself left something to be desired. But this new generation was different. It was a tree that could not bear fruit. a hard-barked, selfish tree. Yet what good to look at it and shudder for the future? The future had already been disposed of.

Now there as a new hobby. a mania that swept the world, the Last Man Clubs, millions of them. Who would be the last person alive on Earth?

But still the institutes labored. The Capsule Institute in particular labored for the codification and preservation of all knowledge. For whom? For those who might come after. Who? Of what species? But still they worked at it.

And the oddest of the institutes was the Bare Chance Transmission Society. In spite of all derision and mockery, it persevered in its peculiar aim: to find some viable creature that could be educated or adapted or mutated to absorb human knowledge and carry on once more the human tradition.

What creature? What possible strain could it be from? What creature on Earth was unaffected?

Well, the largest of them was the giant squid. But it was not promising. It had shown no development in many millions of years; it did not seem capable of development or of education. And, moreover, there are difficulties of rapport with a creature that only can live in the deep sea.

There were the insects. Bees and ants were capable of organization, though intelligence has been denied them. Spiders showed certain rugged abilities, and fruit flies. Special committees were appointed to study each. And then there were the fleas. Old flea-circus grifters brought out of retirement and given positions of responsibility and power. If fleas could really be taught, then these men could teach them. But though fleas can be taught to wear microscopic spectacles. they cannot be taught to read. It all seemed pretty futile.

AND there were the crayfish, the snails, the starfish, the sea cucumber. There were the fresh-water flat worm and the liver fluke. There were the polyp, the sponge, the cephalopod. But, after all, none of them was of the main line. They were of the ancestry that had failed. An 'what of the noble genealogy that had succeeded, that which had risen above all and given civilization, the chordata? Of that noble line, was there nothing left? What was the highest form still reproducing?

McGonigal's Worm. It was discouraging.

But for the careful study of M.W., as it was now known, a great new institute was now created. And to the M.W. Institute was channeled all the talent that seemed expedient.

And one of the first to go to work for the Institute in a common capacity was a young lady of thirty-odd named Georgina Hickle. Young lady? Yes. Georgina was within months of being the youngest woman in the world. She was a scatterbrained wife and disliked worms. But one must work and there were at that time no other jobs open.

But she was not impressed by the indoctrination given in this new laboratory.

"You must change your whole way of thinking," said the doctor who briefed them. "We are seeking new departures. We are looking for any possible breakthrough. You must learn to think of M.W. as the hope of the world."

"Oog," said Georgina.
"You must think of M.W. as

your very kindred, as your cousin."

"Oog," said Georgina.

"You must think of him as your little brother that you have to teach, as your very child, as your cherished son."
"Oog, oog," said Georgina,

for she disliked worms.

Nor was she happy on the job. She was not good at teaching worms. She believed them both stupid and stubborn. They did not have her sympathy, and after a few weeks they seemed to make her sick.

**D**UT her ailment was a mys-D terious one. None of the young doctors had ever seen anything like it. And it was contagious. Other women in the bright new laboratory began to show similar symptoms. Yet contagion there was impossible, such extreme precautions had been taken for the protection of the worms.

But Georgina did not respond to treatment. And Hinkle's Disease was definitely spreading. Sharper young doctors fresh from the greatest medical schools were called in. They knew all that was to be known of all the new diseases. But they did not know this.

Georgina felt queer now and odd things began to happen to her. Like that very morning on her way to work, that old lady had stared at her.

"Glory be," said the old lady, "a miracle." And she crossed herself.

And Georgina heard other comments.

"I don't believe it. It isn't possible," a man said.

"Well, it sure does look like it," said a woman.

So Georgina took off at noon to visit a psychiatrist and tell him that she imagined that people were staring at her and talking about her, and what should she do. It made her uneasy, she said.

"That's not what is making you uneasy," said the psychiatrist. Then he went with her to the laboratory to have a look at some of the other women suffering from this Hickle's Disease that he had been hearing about. After that, he called the young doctors at the laboratory aside for a consultation.

"I don't know by what authority you mean to instruct us," said one. "You haven't been upgraded for thirty years."

"I know it."

"You are completely out of touch with the latest techniques."

"I know it."

"You have been described accurately, I believe—as an old fogy."

"I know that too."

"Then what could you tell us about a new appearance like Hickle's Disease?"

"Only that it is not really

new. And not, properly speaking, a disease."

THAT is why, even today, there are superstitious persons who keep McGonigal's Worms in small mesh cages in the belief that they insure fertility. It is rank nonsense and rose only because it was in the M.W. laboratory that the return of pregnancy was first noticed and was named for one of the women working

there. It is a belief that dates back to that ancient generation, which very nearly became the last generation.

The official explanation is that the Earth and its solar system, for a period of thirtyfive years, was in an area of mysterious cosmic radiation. And afterward it drifted out of that area.

But there are many who still believe in the influence of McGonigal's Worm.

## AFTER NATURE—WHAT?

One of the roughest problems a science fiction writer has to solve is what aliens might look like, and function, and why. All we can go by—at least so far—is the life on our own planet. However, that is better than none, and even here the ingenuities of nature often make us kick

ourselves for not having thought of them ourselves.

It is generally accepted that the minimum weight of intelligent life would be about 40 pounds. No arbitrary estimate, this—it's based on how large a brain must be to contain X number of neurons, synapses, reasoning and memory centers and the like, and how heavy a body would be to support and feed a brain of that size. But nature gets around that by forming a body politic rather than be limited to a body. For instance, and a very familiar one, there are the hive intelligences like the ants, termites and bees, and the fearsome Portuguese man-of-war is in this category: a colony of small animals uniting to form a sea monster that can fish as much as 60 feet below the surface, grabbing and devouring creatures that would make canapes of its voting members.

Hive intelligences aren't really intelligences? Not in our terms, true, but they combine to a total intelligence far greater than that of their individuals—and so does ours! Examine that statement carefully. However versatile a human genius may be, our society is more versatile, containing knowledge and skills he neither possesses nor can use. In more ways than he or others might concede, he is as much a dependent

or consumer as the rest of us less gifted citizens are.

Various indeed are the ways of nature. Light-sensing organs became eyes; scales, skin and hair and feathers and fur; fins, limbs and wings. Skeletons are outside or in, depending on need. Furthermore, our civilization requires not only an irreducible minimum population to function, but an irreducible number of bacteria, enzymes, earthworms, insects and plants, or we couldn't raise and digest food or control pests—or breathe.