

THE ETERNAL WALL

by RAYMOND Z. GALLUN

"SEE you in half an hour, Betty," said Ned Vince over the party telephone. "We'll be out at the Silver Basket before ten-thirty. . . ."

Ned Vince was eager for the company of the girl he loved. That was why he was in a hurry to get to the neighboring town of Hurley, where she lived. His old car rattled and roared as he swung it recklessly around Pit Bend.

There was where Death tapped him on the shoulder. Another car leaped suddenly into view, its lights glaring blindingly past a high, upjutting mass of Jurassic rock at the turn of the road.

Dazzled, and befuddled by his own rash speed, Ned Vince had only swift young reflexes to rely on to avoid a fearful, telescoping collision. He flicked his wheel smoothly to the right; but the County Highway Commission hadn't yet tarred the traffic-loosened gravel at the Bend.

Ned could scarcely have chosen a worse place to start sliding and spinning. His car hit the white-painted wooden rail sideways, crashed through, tumbled down a steep slope, struck a huge boulder, bounced up a little, and arced outward, falling as gracefully as a swan-diver toward the inky waters of the Pit, fifty feet beneath. . . .

Ned Vince was still dimly conscious when that black, quiet pool geysered around him in a mighty splash. He had only a dazing welt on his forehead, and a gag of terror in his throat.

Movement was slower now, as he began to sink, trapped inside his wrecked car. Nothing that he could imagine could mean doom more certainly than this. The Pit was a tremendously deep pocket in the ground, spring-fed. The edges of that almost bottomless pool were caked with a rim of white—for the water, on which dead birds so often floated, was surcharged with alkali. As that heavy, natronous liquid rushed up through the openings and cracks beneath his feet, Ned Vince knew that his friends and his family would never even see his body again, lost beyond recovery in this abyss.

The car was deeply submerged. The light had blinked out on the dash-panel, leaving Ned in absolute darkness. A flood rushed in at the shattered window. He clawed at the door, trying to open it, but it was jammed in the crash-bent frame, and he couldn't fight against the force of that incoming water. The welt, left by the blow he had received on his forehead, put a thickening mist over his brain, so that he could not think clearly. Presently, when he could no longer hold his breath, bitter liquid was sucked into his lungs.

His last thoughts were those of a drowning man. The machine-shop he and his dad had had in Harwich. Betty Moore, with the smiling Irish eyes—like in the song. Betty and he had planned to go to the State University this Fall. They'd planned to be married sometime. . . . Goodbye, Betty. . . .

The ripples that had ruffled the surface waters in the Pit, quieted again to glassy smoothness. The eternal stars shone calmly. The geologic Dakota hills, which might have seen the dinosaurs, still bulked along the highway. Time, the Brother of Death, and the Father of Change, seemed to wait. . . .

"KAALLEEE! Tik! . . . Tik, tik, tik! . . . Kaallee! . . ."

The excited cry, which no human throat could quite have duplicated accurately, arose thinly from the depths of a powder-dry gulch, water-scarred from an inconceivable antiquity. The noonday Sun was red and huge. The air was tenuous, dehydrated, chill.

"Kaallee! . . . Tik, tik, tik! . . ."

At first there was only one voice uttering those weird, triumphant sounds. Then other vocal organs took up that trilling wail, and those short, sharp chuckles of eagerness. Other questioning, wondering notes mixed with the cadence. Lacking qualities identifiable as human, the disturbance was still like the babble of a group of workmen who have discovered something remarkable.

The desolate expanse around the gulch, was all but without motion. The icy breeze tore tiny puffs of dust from grotesque, angling drifts of soil, nearly waterless for eons. Patches of drab lichen grew here and

there on the up-jutting rocks, but in the desert itself, no other life was visible. Even the hills had sagged away, flattened by incalculable ages of erosion.

At a mile distance, a crumbling heap of rubble arose. Once it had been a building. A gigantic, jagged mass of detritus slanted upward from its crest—red debris that had once been steel. A launching catapult for the last space ships built by the gods in exodus, perhaps it was—half a million years ago. Man was gone from the Earth. Glacial ages, war, decadence, disease, and a final scattering of those ultimate superhumans to newer worlds in other solar systems, had done that.

"Kaallee! . . . Tik, tik, tik! . . ." The sounds were not human. They were more like the chatter and wail of small desert animals.

But there was a seeming paradox here in the depths of that gulch, too. The glint of metal, sharp and burnished. The flat, streamlined bulk of a flying machine, shiny and new. The bell-like muzzle of a strange excavator-apparatus, which seemed to depend on a blast of atoms to clear away rock and soil. Thus the gulch had been cleared of the accumulated rubbish of antiquity. Man, it seemed, had a successor, as ruler of the Earth.

Loy Chuk had flown his geological expedition out from the far lowlands to the east, out from the city of KarRah. And he was very happy now—flushed with a vast and unlooked-for success.

He crouched there on his haunches, at the dry bottom of the Pit. The breeze rumbled his long, brown fur. He wasn't very different in appearance from his ancestors. A foot tall, perhaps, as he squatted there in that antique stance of his kind. His tail was short and furred, his undersides creamy. White whiskers spread around his inquisitive, pink-tipped snout.

But his cranium bulged up and forward between shrewd, beady eyes, betraying the slow heritage of time, of survival of the fittest, of evolution. He could think and dream and invent, and the civilization of his kind was already far beyond that of the ancient Twentieth Century.

Loy Chuk and his fellow workers were gathered, tense and gleeful, around the things their digging had exposed to the daylight. There was a gob of junk—scarcely more than an irregular formation of flaky rust. But imbedded in it was a huddled form, brown and hard as old wood. The dry mud that had encased it like an airtight coffin, had by now been chipped away by the tiny investigators; but soiled clothing still clung to it, after perhaps a million years. Metal had gone into decay—yes. But not this body. The answer to this was simple—alkali. A mineral saturation that had held time and change in stasis. A perfect preservative for organic tissue, aided probably during most of those passing eras by desert dryness. The Dakotas had turned arid very swiftly. This body was not a mere fossil. It was a mummy.

"AALLEEE!" Man, that meant.

Not the star-conquering demigods, but the ancestral stock that had built the first machines on Earth, and in the early Twenty-first Century, the first interplanetary rockets. No wonder Loy Chuk and his co-workers were happy in their paleontological enthusiasm! A strange accident, happening in a legendary antiquity, had aided them in their quest for knowledge.

At last Loy Chuk gave a soft, chirping signal. The chant of triumph ended, while instruments flicked in his tiny hands. The final instrument he used to test the mummy, looked like a miniature stereoscope, with complicated details. He held it over his eyes. On the tiny screen within, through the agency of focussed X-rays, he saw magnified images of the internal organs of this ancient human corpse.

What his probing gaze revealed to him, made his pleasure even greater than before. In twittering, chattering sounds, he communicated his further knowledge to his henchmen. Though devoid of moisture, the mummy was perfectly preserved, even to its brain cells! Medical and biological sciences were far advanced among Loy Chuk's kind. Perhaps, by the application of principles long known to them, this long-dead body could be made to live again! It might move, speak, remember its past! What a marvelous subject for study it would make, back there in the museums of Kar-Rah!

"Tik, tik, tik! . . ."

But Loy silenced this fresh, eager chattering with a command. Work was always more substantial than cheering.

With infinite care—small, sharp hand-tools were used, now—the mummy of Ned Vince was disengaged from the worthless rust of his primitive automobile. With infinite care it was crated in a metal

case, and hauled into the flying machine.

Flashing flame, the latter arose, bearing the entire hundred members of the expedition. The craft shot eastward at bullet-like speed. The spreading continental plateau of North America seemed to crawl backward, beneath. A tremendous, sad desert, marked with low, washed-down mountains, and the vague, angular, geometric mounds of human cities that were gone forever.

Beyond the eastern rim of the continent, the plain dipped downward steeply. The white of dried salt was on the hills, but there was a little green growth here, too. The dead sea-bottom of the vanished Atlantic was not as dead as the highlands.

Far out in a deep valley, Kar-Rah, the city of the rodents, came into view—a crystalline maze of low, bubble-like structures, glinting in the red sunshine. But this was only its surface aspect. Loy Chuk's people had built their homes mostly underground, since the beginning of their foggy evolution. Besides, in this latter day, the nights were very cold, the shelter of subterranean passages and rooms was welcome.

The mummy was taken to Loy Chuk's laboratory, a short distance below the surface. Here at once, the scientist began his work. The body of the ancient man was put in a large vat. Fluids submerged it, slowly soaking from that hardened flesh the alkali that had preserved it for so long. The fluid was changed often, until woody muscles and other tissues became pliable once more.

Then the more delicate processes began. Still submerged in liquid, the corpse was submitted to a flow of restorative energy, passing between complicated electrodes. The cells of antique flesh and brain gradually took on a chemical composition nearer to that of the life that they had once known.

AT LAST the final liquid was drained away, and the mummy lay there, a mummy no more, but a pale, silent figure in its tatters of clothing. Loy Chuk put an odd, metal-fabric helmet on its head, and a second, much smaller helmet on his own. Connected with this arrangement, was a black box of many uses. For hours he worked with his apparatus, studying, and guiding the recording instruments.

At last, eager and ready for whatever might happen now, Loy Chuk pushed another switch. With a cold, rosy flare, energy blazed around that moveless form.

For Ned Vince, timeless eternity ended like a gradually fading mist. When he could see clearly again, he experienced that inevitable shock of vast change around him. Though it had been dehydrated, his brain had been kept perfectly intact through the ages, and now it was restored. So his memories were as vivid as yesterday.

Yet, through that crystalline vat in which he lay, he could see a broad, low room, in which he could barely have stood erect. He saw instruments and equipment whose weird shapes suggested alienness, and knowledge beyond the era he had known! The walls were lavender and phosphorescent. Fossil bone-fragments were mounted in shallow cases. Dinosaur bones, some of them seemed, from their size. But there was a complete skeleton of a dog, too, and the skeleton of a man, and a second man-skeleton that was not quite human. Its neck-vertebrae were very thick and solid, its shoulders were wide, and its skull was gigantic.

All this weirdness had a violent effect on Ned Vince—a sudden, nostalgic panic. Something was fearfully wrong!

The nervous terror of the unknown was on him. Feeble and dizzy after his weird resurrection, which he could not understand, remembering as he did that moment of sinking to certain death in the pool at Pit Bend, he caught the edge of the transparent vat, and pulled himself to a sitting posture. There was a muffled murmur around him, as of some vast, un-Earthly metropolis.

"Take it easy, Ned Vince. . . ."

The words themselves, and the way they were assembled, were old, familiar friends. But the tone was wrong. It was high, shrill, parrot-like, and mechanical. Ned's gaze searched for the source of the voice—located the black box just outside of his crystal vat. From that box the voice seemed to have originated. Before it crouched a small, brownish animal with a bulging head. The animal's tiny-fingered paws—hands they were, really—were touching rows of keys.

To Ned Vince, it was all utterly insane and incomprehensible. A rodent, looking like a prairie-dog, a little; but plainly possessing a high order of intelligence. And a voice whose soothingly familiar words

were more repugnant somehow, simply because they could never belong in a place as eerie as this.

Ned Vince did not know how Loy Chuk had probed his brain, with the aid of a pair of helmets, and the black box apparatus. He did not know that in the latter, his language, taken from his own revitalized mind, was recorded, and that Loy Chuk had only to press certain buttons to make the instrument express his thoughts in common, long-dead English. Loy, whose vocal organs were not human, would have had great difficulty speaking English words, anyway.

Ned's dark hair was wildly awry. His gaunt, young face held befuddled terror. He gasped in the thin atmosphere. "I've gone nuts," he pronounced with a curious calm. "Stark—starin' —nuts. . . ."

1. JOY'S box, with its recorded English words and its sonic detectors, could translate for its master, too. As the man spoke, Loy read the illuminated symbols in his own language, flashed on a frosted crystal plate before him. Thus he knew what Ned Vince was saying.

Loy Chuk pressed more keys, and the box reproduced his answer: "No, Ned, not nuts. Not a bit of it! There are just a lot of things that you've got to get used to, that's all. You drowned about a million years ago. I discovered your body. I brought you back to life. We have science that can do that. I'm Loy Chuk. . . ."

It took only a moment for the box to tell the full story in clear, bold, friendly terms. Thus Loy sought, with calm, human logic, to make his charge feel at home. Probably, though, he was a fool, to suppose that he could succeed, thus.

Vince started to mutter, struggling desperately to reason it out. "A prairie dog," he said. "Speaking to me. One million years. Evolution. The scientists say that people grew up from fishes in the sea. Prairie dogs are smart. So maybe super-prairie-dogs could come from them. A lot easier than men from fish. . . ."

It was all sound logic. Even Ned Vince knew that. Still, his mind, tuned to ordinary, simple things, couldn't quite realize all the vast things that had happened to himself, and to the world. The scope of it all was too staggeringly big. One million years. God! . . .

Ned Vince made a last effort to control himself. His knuckles tightened on the edge of the vat. "I don't know what you've been talking about," he grated wildly. "But I want to get out of here! I want to go back where I came from! Do you understand—whoever, or whatever you are?"

Loy Chuk pressed more keys. "But you can't go back to the Twentieth Century," said the box. "Nor is there any better place for you to be now, than Kar-Rah. You are the only man left on Earth. Those men that exist in other star systems are not really your kind anymore, though their forefathers originated on this planet. They have gone far beyond you in evolution. To them you would be only a senseless curiosity. You are much better off with my people—our minds are much more like yours. We will take care of you, and make you comfortable. . . ."

But Ned Vince wasn't listening, now. "You are the only man left on Earth." That had been enough for him to hear. He didn't more than half believe it. His mind was too confused for conviction about anything. Everything he saw and felt and heard might be some kind of nightmare. But then it might all be real instead, and that was abysmal horror. Ned was no coward—death and danger of any ordinary Earthly kind, he could have faced bravely. But the loneliness here, and the utter strangeness, were hideous; like being stranded alone on another world!

His heart was pounding heavily, and his eyes were wide. He looked across this eerie room. There was a ramp there at the other side, leading upward in place of a stairway. Fierce impulse to escape this nameless lair, and to try to learn the facts for himself, possessed him. He bounded out of the vat, and with head down, dashed for the ramp.

HE had to go most of the way on his hands and knees, for the up-slanting passage was low. Excited animal chucklings around him, and the occasional touch of a furry body, hurried his feverish scrambling. But he emerged at last at the surface.

He stood there panting in that frigid, rarefied air. It was night. The Moon was a gigantic, pockmarked bulk. The constellations were unrecognizable. The rodent city was a glowing expanse of shallow, crystalline domes, set among odd, scrub trees and bushes. The crags loomed on all sides, all their

jaggedness lost after a million years of erosion under an ocean that was gone. In that ghastly moonlight, the ground glistened with dry salt.

"Well, I guess it's all true, huh?" Ned Vince muttered in a flat tone. Behind him he heard an excited, squeaky chattering. Rodents in pursuit. Looking back, he saw the pinpoint gleams of countless little eyes. Yes, he might as well be an exile on another planet—so changed had the Earth become.

A wave of intolerable homesickness came over him as he sensed the distances of time that had passed—those inconceivable eons, separating himself from his friends, from Betty, from almost everything that was familiar. He started to run, away from those glittering rodent eyes. He sensed death in that cold sea-bottom, but what of it? What reason did he have left to live? He'd be only a museum piece here, a thing to be caged and studied. . . .

Prison or a madhouse would be far better. He tried to get hold of his courage. But what was there to inspire it? Nothing! He laughed harshly as he ran, welcoming that bitter, killing cold. Nostalgia had him in its clutch, and there was no answer in this hell-world, lost beyond the barrier of the years. . . .

LOY CHUK and his following presently came upon Ned Vince's unconscious form, a mile from the city of Kar-Rah. In a flying machine they took him back, and applied stimulants. He came to, in the same laboratory room as before. But he was firmly strapped to a low platform this time, so that he could not escape again. There he lay, helpless, until presently an idea occurred to him. It gave him a few crumbs of hope.

"Hey, somebody!" he called.

"You'd better get some rest, Ned Vince," came the answer from the black box. It was Loy Chuk speaking again.

"But listen!" Ned protested. "You know a lot more than we did in the Twentieth Century. And — well — there's that thing called time-travel, that I used to read about. Maybe you know how to make it work! Maybe you could send me back to my own time after all!"

Little Loy Chuk was in a black, discouraged mood, himself. He could understand the utter, sick dejection of this giant from the past, lost from his own kind. Probable insanity looming.

In far less extreme circumstances than this, death from homesickness had come.

Loy Chuk was a scientist. In common with all real scientists, regardless of the species from which they spring, he loved the subjects of his researches. He wanted this ancient man to live and to be happy. Or this creature would be of scant value for study.

So Loy considered carefully what Ned Vince had suggested. Time-travel. Almost a legend. An assault upon an intangible wall that had baffled far keener wits than Loy's. But he was bent, now, on the well-being of this anachronism he had so miraculously resurrected — this human, this Kaallee. . . .

Loy jabbed buttons on the black box. "Yes, Ned Vince," said the sonic apparatus. "Time-travel. Perhaps that is the only thing to do—to send you back to your own period of history. For I see that you will never be yourself, here. It will be hard to accomplish, but we'll try. Now I shall put you under an anesthetic. . . ."

Ned felt better immediately, for there was real hope now, where there had been none before. Maybe he'd be back in his home-town of Harwich again. Maybe he'd see the old machine-shop, there. And the trees greening out in Spring. Maybe he'd be seeing Betty Moore in Hurley, soon. . . . Ned relaxed, as a tiny hypo-needle bit into his arm. . . .

As soon as Ned Vince passed into unconsciousness, Loy Chuk went to work once more, using that pair of brain-helmets again, exploring carefully the man's mind. After hours of research, he proceeded to prepare his plans. The government of Kar-Rah was a scientific oligarchy, of which Loy was a prime member. It would be easy to get the help he needed.

A horde of small, grey-furred beings and their machines, toiled for many days, on a level area just outside the city.

NED VINCE'S mind swam gradually out of the blur that had enveloped it. He was wandering aimlessly about in a familiar room. The girders of the roof above were of red-painted steel. His

tool-benches were there, greasy and littered with metal filings, just as they had always been. He had a tractor to repair, and a seed-drill. Outside of the machine-shop, the old, familiar yellow sun was shining. Across the street was the small brown house, where he lived.

With a sudden startlement, he saw Betty Moore in the doorway. She wore a blue dress, and a mischievous smile curved her lips. As though she had succeeded in creeping up on him, for a surprise.

"Why, Ned," she chuckled. "You look as though you've been dreaming, and just woke up!"

He grimaced ruefully as she approached. With a kind of fierce gratitude, he took her in his arms. Yes, she was just like always.

"I guess I *was* dreaming, Betty," he whispered, feeling that mighty sense of relief. "I must have fallen asleep at the bench, here, and had a nightmare. I thought I had an accident at Pit Bend—and that a lot of worse things happened. . . But it wasn't true. . . ."

Ned Vince's mind, over which there was still an elusive fog that he did not try to shake off, accepted apparent facts simply.

He did not know anything about the invisible radiations beating down upon him, soothing and dimming his brain, so that it would never question or doubt, or observe too closely the incongruous circumstances that must often appear. The lack of traffic in the street without, for instance—and the lack of people besides himself and Betty.

He didn't know that this machine-shop was built from his own memories of the original. He didn't know that this Betty was of the same origin—a miraculous fabrication of metal and energy-units and soft plastic. The trees outside were only lantern-slide illusions.

It was all built inside a great, opaque dome. But there were hidden television systems, too. Thus Loy Chuk's kind could study this ancient man—this Kaallee. Thus, their motives were mostly selfish.

Loy, though, was not observing, now. He had wandered far out into the cold, sad sea-bottom, to ponder. He squeaked and chattered to himself, contemplating the magnificent, inexorable march of the ages. He remembered the ancient ruins, left by the final supermen.

"The Kaallee believes himself home," Loy was thinking. "He will survive and be happy. But there was no other way. Time is an Eternal Wall. Our archeological researches among the cities of the supermen show the truth. Even they, who once ruled Earth, never escaped from the present by so much as an instant. . . ."

THE TREE THAT GIVES MILK

THERE is a tree in the tropics which contains a milk-like fluid and for this reason has been called the cow-tree. It closely resembles a rubber tree in appearances, but its white liquid is sweet and very delicious to drink. The only drawback is that one must drink the milk just as soon as it is poured from the tree because the sap coagulates upon exposure to air.