



JULES VERNE'S TOMBSTONE AT AMIENS
PORTRAYING HIS IMMORTALITY

AMAZING STORIES

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Our Cover

this month depicts a scene from "The Malignant Flower," in which the evil, gigantic flower has caught Sir William Armstrong with its sucking arms, lifting him by the shoulder, higher and higher, preparatory to drawing him within its calyx, and closing its petals.

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In Our Next Issue:

AROUND THE UNIVERSE, by Ray Cummings. If you love interplanetary stories—and who doesn't—here is a story that will do your heart good. It is written in an entirely different vein, and yet contains excellent science all the way through. Incidentally, the astronomy contained therein is most excellent as well as correct, and gives you an insight into the wonders of the universe that perhaps few other "space" stories can boast. We know you will greatly enjoy this story. It is a classic.

TREASURES OF TANTALUS, by Garret Smith (A Serial in 2 Parts). Here is one of the most daring and exciting stories which we have ever read. Now that we have television, the idea of the author's *Telephonoscope*, by which it is possible to spy upon people and see what is happening right in their own homes and offices is of tremendous interest. How one man succeeded in practically controlling the entire world thereby, is told in inimitable style by this famous and well-known author, who has also written "After A Million Years"—"On The Brink of 2,000," and other famous scientific tales. THE WINGED DOOM, by Kenneth Gilbert. Now that aviation has come to the fore again, through the exploits of our American flyers, this story gives you a peep into the future, and you see what may happen when a powerful nation is about to invade this country. Here we have aviation to the *nth* degree, and yet, as you read on, you will become convinced of the possibilities contained in the story.

HICKS' INVENTIONS WITH A KICK (The Hicks' Hydraulic Bank Protector), by Henry Hugh Simmons. Being a true inventive genius, Mr. Hicks, despite his luckless demonstrations, bobs up once more with a more marvellous invention than ever. This time it is a contrivance for the absolute protection of banks against any and all robbers. High water pressure plays an effective part here—too effective in this demonstration, in fact.

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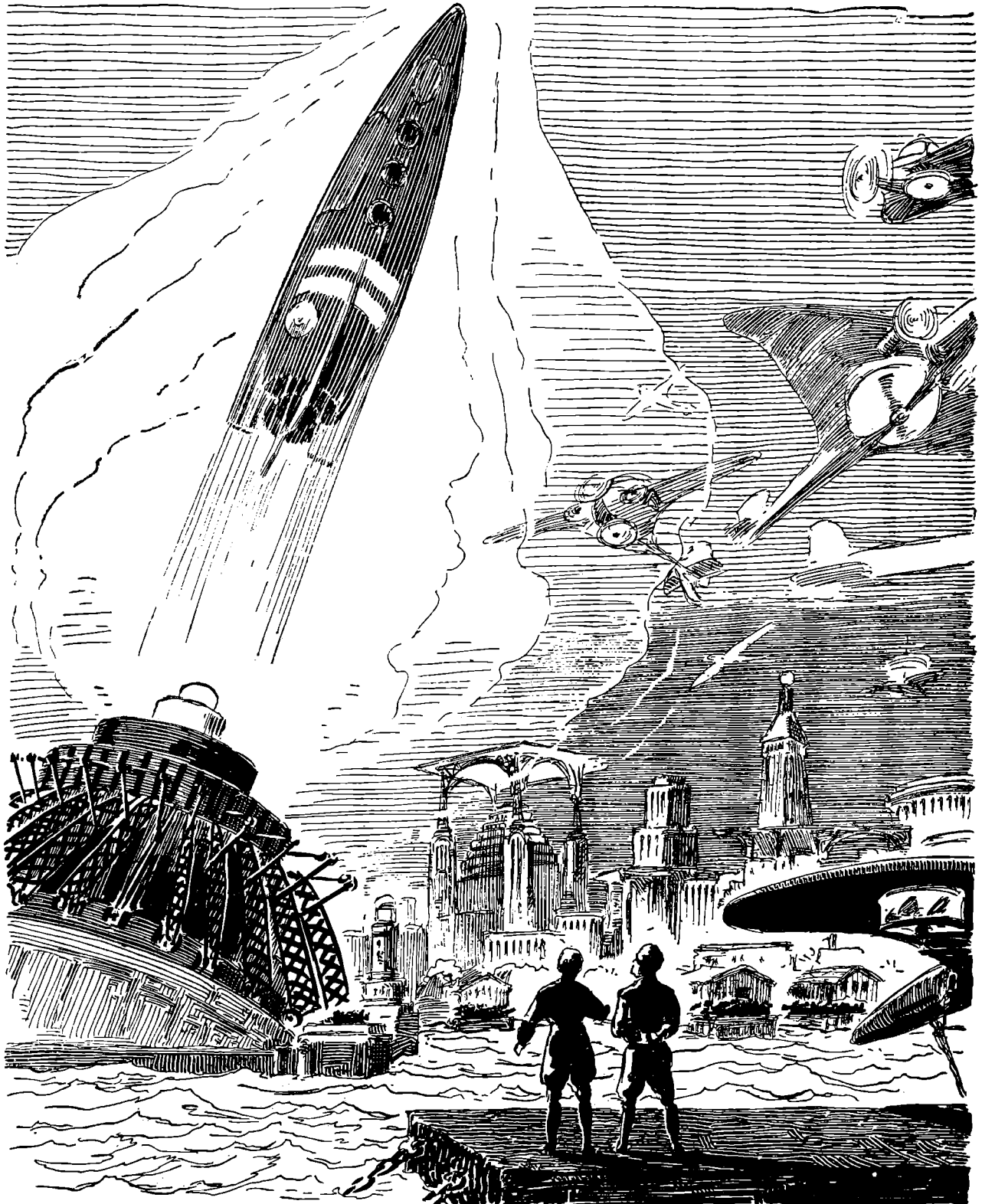
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The TIDE PROJECTILE TRANSPORTATION CO.

By *Will H. Gray*

Author of "The Star of Dead Love"



Even in this age of wonders, people still turned aside, or came out of their houses to witness the start of Number Two, just as two hundred years before, people had looked up whenever an airplane buzzed overhead.... With a tremendous jar and shriek of parted air, the huge projectile was hurled nearly on the vertical into the blue sky...



THE gigantic spring of the air gun that hurled the passenger and mail projectiles from the Pacific to the Atlantic had not been compressed so tight since its construction seven years before. A combination of the highest tide of the year, and a big westerly gale had raised the mile long pontoon many feet above high water spring tide mark. The fifty-six great, steel lever arms that resembled bridge spans ground and murmured as the unaccustomed bearing surfaces came into play; and no wonder, for this tide was higher than anything the engineers of two hundred years ago had figured upon, when they constructed the piers and wharves where in days gone by the ocean liners of a slow and tedious age had tied up after their ten day journey from the Orient. To-day the water was lapping over these piers long since deserted in favor of Lake Washington, where the huge helicopters came and went in a never ending procession.

A light, two seater machine that looked as simply constructed as a birch bark canoe buzzed slowly down from over the city, and hovered above the pontoon.

"How about looking over the bearings first?" suggested Max Norman, the more youthful of the two men who rejoiced in the title of District Assistant Superintendent of the Tide Projectile Transportation Co.

"Perhaps we'd better," replied Fowler, the senior man on the Pacific Coast, "then I want to take a look 'round to see how much rubbish and stuff have gone afloat. If it isn't cleared up, it may be fouling some

of the small tide motors up and down the harbor."

The little machine, lifted by two propellers, and navigated by two more, buzzed along from girder to girder like a humming bird, while the engineers leaned out, and examined the twenty-four inch diameter pins on which the great levers pivoted. The propellers made no more noise than an electric fan, so that conversation in ordinary tones could be carried on in the open, boat-shaped hull.

"I hope the pilot of Number Two takes more than a casual glance at the tension gauge this morning," remarked the chief turning to his assistant.

"If he doesn't, he'll find himself dropping half way across the Atlantic. Then there'll be trouble."

"I should think one air blast from the rear end would almost take him all the way this morning. If he lets off the second, goodness knows where it'll take him."

"Personally, I think those projectiles are so protected that the pilots are inclined to become criminally negligent. Surely the barometrically operated, automatic air blast from the nose for land descents along with the shallow diving vanes, ought to be suf-

ficient. With these new radio earth reflection and vibration releases, you might as well dispense with the pilot entirely."

"I think we shall be able to do so in a year or two," said Fowler thoughtfully. "The new springs that they are trying out at Schenectady are almost unaffected by heat or cold; that leaves only wind and atmospheric pressure to be conquered after making allowances for the tides." He paused to think, and then continued:

"The human element is holding us up more every day; the people of the last couple of centuries applied their science to everything but themselves. Everything was thought except— There's the whistle settle down on the pontoon; I don't like to be buffeted about in the air pockets when Number Two leaves."

The little, varnished, boat-shaped affair with the two light masts surmounted by humming, lifting wheels, settled as gracefully as a piece of thistle-down on the flat surface of the pontoon. The two men stepped out, and strolled along eastward. The sky was full of machines, big and little, clumsy freight-

ers, and swift official machines. Two minutes after the whistle, a rocket shot into the clear sky, and broke into a large puff of bright smoke. This was the final warning to all, that the Atlantic projectile was about to be launched. It was noticeable now, that the incoming and outgoing machines steered to right and left of the enormous steel cylinder whose piston was dragged down against that mighty spring by those fifty-six lattice-girder

levers. The cylinder was at the base of the great air gun which gave the projectile an initial velocity of sixteen thousand five hundred feet per second.

EVEN in this age of wonders, people still turned aside, or came out of their houses to witness the start of Number Two, just as two hundred years before, people had looked up whenever an airplane buzzed over head, and before that again, the daily train was the occasion for everyone in the small town to congregate at the depot.

"Five seconds more," murmured Max Norman, and both came to a standstill.

With a tremendous jar and shriek of parted air, the huge projectile was hurled nearly on the vertical into the blue sky, where it disappeared almost at once. The pontoon on which the two men were standing slowly rose two feet, with the relaxing of the enormous spring when the air had left the cylinder.

"She went quite fast," remarked the chief, watching the air ships being buffeted about in the disturbed atmosphere.

HOW would you like to fly from San Francisco to New York in about 17 minutes? Impossible! you will doubtless say, but the thing is not half as impossible as it sounds. There is no question but that our transportation means will increase in speed as time goes on. If you had told your great-grandfather that some one would fly from New York to Paris in 33 hours, you probably would have been called a lunatic, or worse. Yet Lindbergh flew only at the rate of about 110 miles an hour, whereas airplanes have raced as fast as 266 miles per hour. Thus, in the present story, you will find a really excellent amount of science in such superabundance as is seldom found even in the best of scientific stories. New ideas seem to tumble all over each other at such a fast rate that it leaves you, at times, bewildered. We have asked Mr. Gray to write a sequel to it, which we hope to publish soon.

"Faster than ever I've seen," Max assured his chief. "I hope the pilot isn't asleep," he continued, "for there was to be five pounds of radium aboard, going east, and there'll be a fuss if it goes astray."

"Just call headquarters, will you please?" exclaimed Fowler, "and find out who is piloting Number Two."

The junior engineer took from his pocket a little, square case about the size of a match box. He turned a small dial and pressed several buttons before making the inquiry in an ordinary tone of voice. Out of the instrument came the reply at once.

"So it's the lady pilot," mused the chief. "We are up against the human element again. I've had the thought-recording machine on her twice now, and each time I got a negative graph. It just means that she is thought resistant to these old type recorders. Several times I've asked the directors for one of the newest machines. But you know how hard it is to persuade the heads of these big companies to keep abreast of the times. In fact they said that any one who had sufficient intelligence to resist the old machine, either didn't need watching, or was too good for the job, and should be promoted. They forget that it was a thought-resister who put Number Three in the bog, out of which it took us seven days to get it. It was a partial thought resister who lost Number Four six years ago."

"Funny it has never been found."

"Well, I was only a student at the time, but I always had the idea that they should have looked further afield. You see, they just assumed that it fell somewhere between here and New York, within fifty miles or so on either side of the direct course."

"It couldn't very well happen again," exclaimed Max Norman. "With the new recorders, we know to half a mile where they are at any time."

"Yes, but it's a nuisance digging them out of holes, and fishing them out of the sea, and there's always a chance that some one may get hurt, and then of course there's an inquiry and a lot of fool questions and still more foolish suggestions for the future by old fogies who have never in their lives travelled faster than five hundred miles an hour.

"I feel sorry for this girl pilot, because she is of abnormal intelligence. She ranks in the eighty-seven zone, and when you remember that there are only seven hundred people on the earth who have reached the ninetieth, you see how she is wasting her talents piloting for us."

"Well, why is she doing it, when she might be doing much better work?"

"That's just the trouble. Unfortunately for her, she is of the matrimonial type, and wants to have children. A century ago when eugenics were first brought into use, we tried to breed infant prodigies and mathematical marvels, but through our mistakes, we got instead a crop of lunatics; now we limit the combined intelligence to one hundred and ten, and get splendid results. Therefore the poor girl must choose a man of the twenty-third degree of intelligence or less—corresponding to the clever men of nineteen-ten to nineteen-twenty. Can you blame her for not

wanting to tie up with such a man? He would be "too slow to catch cold"—an expression used in those far-off days.

"It seems a pity that our brainiest people should be denied a family if they desire one, but people of such intelligence should be far too busy to even think of such things."

"Did you hear the whistle announcing the safe landing of Number Two? That whistle is only a survival of the times when projectile travelling was considered an extra risk, and we had actually to insure the passengers specially."

"No, I didn't hear it. Just call the head office again, please, and ask if they arrived safely."

Again Max Norman took out the little instrument, and called the office. Both men stiffened up, and looked serious as the spoken words came rather haltingly from the tiny loud speaker. "No, Number Two has not landed in New York."

"What does the recording chart say?" shouted Fowler impatiently.

"Well, Sir, the chart—the chart ran out of ink as the projectile passed Chicago."

THE movements of the chief were incredibly swift.

His first outburst of language was also incredible. The people in that office responsible for the instrument's running out of ink got the same old blowing-up, only a hundred times more cutting, more sarcastic, as the people who made stupid mistakes two centuries before. From his pocket, Fowler took a larger, more complicated instrument and called every large city over which the projectile had travelled and many of the air liners under its high path through the rarefied air, where the meteor dust whirls endlessly around the earth.

There was just a slight clue, and it carried an ominous message. When approaching New York, the projectile pilot had asked for position, stating their finder had been jarred out of order. Here was the wretched, double contingency that was always upsetting things. Two minutes and forty seconds later, the projectile had sent an S. O. S. call that was never finished. Now where was the projectile? When they were given position they were at a very great height, and they still had velocity to carry them a thousand miles. The pilot had the means of steering anywhere—even doubling back on her course, if need be. They also had the means to communicate from the air, from under water, from two hundred feet deep in the earth. There was a dead silence from the projectile. The reserve spring, kept compressed for emergencies, hurled the two engineers to New York in a shade over seventeen minutes. Even during the trip, they had engaged the very best brains of the world to help in the search.

When Miss Henrietta Morgan—to give her her simple name devoid of letters and numbers denoting her qualifications—entered the pilot house of Number Two projectile, she was not thinking of high tides, or gauges, or meters, or complicated direction finders, or the dozens of other intricate instruments that lined the little steel compartment. She was thinking how

nice it would be to have a little home of her own, in the country, with a garden and happy children around her. But the husband? That was the sticking point. She could not reconcile herself to the idea of a husband with a mentality of only twenty-three out of a possible hundred units of intelligence. Her beauty was most striking in spite of the severity of dress demanded by the strenuous, mechanical age, and many men had looked at her and regretted the barriers.

She pressed the button that showed that she was all ready, and immediately the starter, below in his office, pulled the trigger. A slight jar was the only effect of that gigantic air blast, so well did the shock absorbers and antigravitators do their work. These shock absorbers depended on the wonderful resilient qualities of rubber foam, a substance similar to, but many times lighter than, rubber-sponge. The inner casing of the projectile rested on many layers of this aerated material; each succeeding layer taking up the pressure when the preceding ones had been pressed almost flat. Thus the action really resembled that of a man jumping off a very high building into a succession of blankets, each absorbing its share of the shock before letting him go through into the next. Besides these appliances there were cushions several feet deep in which the occupants sank completely out of sight when the gun was fired, and then came slowly up again.

Henrietta Morgan had not bothered to look at the tension gauge before entering the projectile; nor was she aware of any difference, as the great shell hurtled up into the blue sky, leaving the world many miles beneath, a dull, blue surface, with no clear detail visible.

The first and second air blasts from the rear end to increase the velocity, went off at their appointed times before she realized that conditions were abnormal. Suddenly she noticed that the hands of the velocity gauge were jammed against the end of the scale. Her first thought was that it was broken, but a glance at the altitude and temperature gauges convinced her that they were far higher up than usual. She switched on the position indicator, only to find that it was out of order. Glancing back into the passenger compartment, she saw that she had two women and three men in her charge, besides the registered mail. Bending again to her switchboard, she turned the miniature wheels that, by remote control, actuated the resistance rings that projected through slots in the shell out into the cold, rarefied air. Pressing some little buttons, she called New York and Chicago, and asked for position; the answer astonished her.

She was already over New York, three minutes ahead of time.

Viciously she shot out two inches of resistance ring, all round. A whirring shriek was followed by a grinding tear as the vanes were carried away. There were emergency vanes of course, and she turned the spare dial. There was no response; the emergency vanes were stiff from neglect. The human element again! They could still be turned out by a hand wheel in the passenger compartment: "Please turn that wheel quickly." Alas for her peremptory

intonation! Human nature was much the same, after two hundred years.

"Young lady, if you are in such a hurry, come and turn it yourself." She had disturbed the man just at the climax of a good yarn, when no man likes to be interrupted. Jumping into the saloon, she twisted the big wheel with might and main. Glancing out through the forward port hole of quartz glass, she was horrified to see water where blue sky should have been. The projectile was heading earthward with frightful velocity. The broken vane had done it. Springing back with lightning agility, she hit two buttons simultaneously. One operated the forward air blast to check the speed, the other an S. O. S call. A fraction of a second later, they struck the water with an ear-splitting crash, and dived to the bottom, where they glanced sideways off a great rust and weed encrusted object, and continued their journey a hundred feet into the mud of the Atlantic bottom.

THE big, rusty object rolled slowly, first to port and then to starboard. The writhing coil of an ancient telegraph cable fell away from its propellor, where it had held it fast so many years. A few bubbles rose; and slowly at first, but with increasing speed, the great object came to the surface.

A ray of sunshine shone through a heavy, glass porthole that had been kept clean for two hundred years by the little sea snails industriously licking the slime off the glass. The light flickered on the gray face of a man in uniform, who had lain there for two centuries in a state of suspended animation. His friends had known him as Roger Wells, back in the year nineteen seventeen when the Great War was in full swing.

He opened his eyes, sat up, and jumped to his feet. As he did so his clothes fell off him in rags. His features twitched with pain. Damn his old enemy, the rheumatism! Twenty-five out of forty years at sea had put lines of care about those clean cut features. The Great War culminating in his swift dive to the bottom to avoid being rammed, had ended his career, so far as that age of strife was concerned.

How he and his imprisoned crew had worked to free the submarine from that all-embracing, telegraph cable wound tightly around the propeller and over the conning tower! It was only after several days that he had swallowed the deadly narcotic given to him by a doctor friend in reserve for such a time. The doctor had never tried the effect of hydrogen on this new drug. The escaping fumes from the battery of the submarine mingled with the gas in the man's lungs formed a new substance akin to that isolated in the bodies of tiny rotifers by a scientist of nineteen seventy five. These little wheel animalcules had long puzzled the world by their power of remaining dormant in a dried up state for years, and blossoming into full, active life when placed in a drop of water under the microscope.

Lieutenant Commander Roger Wells put his hand to his brow and looked puzzled. He sat down, and surveyed the pile of rags that had been his clothes. He picked up a handful of the crumbly material of

which the gold lace alone remained intact. He was fully awake and conscious now. Groping his way to the conning tower, he saw, in the dim light, the chart protected by a sheet of glass that he had kept marked up to the very last, and the final resting place where he had written "finish" in small letters. He remembered now how he had looked up at the picture of one of the world's powerful rulers, and saluted, uttering the famous words of the gladiators of ancient Rome when they greeted Caesar in the arena before fighting it out to the death for his amusement. "Ave, Caesar! morituri te salutamus." "Hail, Caesar, we who are about to die, salute you." Then he had gone to his cabin, and taken the drug. Now he was alive, and the submarine was heaving up and down gently on the surface of a calm, late autumn sea.

He could not understand the dreadful corrosion and decay. He touched a gauge; it fell to pieces a mass of rust and verdigris. He tried to open the manhole leading out on deck; it was rusted fast. Getting a sledge hammer, he knocked off the fastenings, and the fresh tang of the sea air greeted him in his dungeon, and put the color back into his gray cheeks.

Coming out he looked around in utter astonishment. "We must have been down there nearly a year, by the look of things," he muttered, walking along the slippery deck among the weeds where strange sea monsters stuck out their heads at him, and wriggled back under cover.

Towards the stern was a great dent in the hull, and the metal plates were clean and bright.

"Looks as if we'd been in collision lately," he remarked to himself, "I must see about it."

Groping his way inside again, he felt all around the indentation until a spurt of water confirmed his fears.

"Well I'm glad I'm on the surface where I have a run for my money," he mused. "I never did like being sealed up like a sardine in a can."

He thought of the canvass folding boat, but it, too, had crumbled to dust, and the life belts were in the same condition.

"I can swim for two hours or more if the sharks don't get me, and this old craft is good for quite a while yet.

His eyes were getting accustomed to the strong light, and suddenly his gaze became fixed on something in the heavens.

"Looks like a zeppelin, but the shape isn't quite the same; however they've probably improved them while I've been down below in this tin fish. I wonder if the old war is still on, and who's winning."

Presently he went below again, and spent an hour in the dark, trying to plug the leak with the remains of his clothing. When he came up again there was a small pleasure yacht, of a design he had never seen before, within half a mile. He waved, and the people aboard saw him. He scrambled for the chart house, where he wildly searched for something to wear.

Now he stood on the sinking submarine, clothed in a chart.

"Did you see anything of Number Two projectile from the Pacific?" called out a short stout man in yachting costume, who appeared to be the owner of the yacht.

"I'm afraid I didn't, but can you lend me some clothes?" was his reply.

THE people on the yacht were astonished at his story, accustomed as they were to strange happenings. He learned that it was a common practice to suspend animation in criminals who could not be reformed, and leave them to be judged and dealt with by a future and less prejudiced generation. To him, his present situation seemed absolutely incredible. Two hundred years; Impossible! They must surely be movie actors on this ship, covered with inventions and innovations of which he, a leader in his own age, knew nothing. The things that he now saw were just a beginning, for in less than an hour, in answer to the ship's broadcast, they were surrounded by airships of every type. No one seemed to bother about Roger Wells, the old world man, except a medical health officer who tested his mentality, and innoculated him against every known disease. A little later, while he stood leaning over the rail of the yacht, a great projectile hurtled down with a roar like a thunderbolt not a hundred yards away, and pulled itself up so that it only went about twenty feet under water. It bore an eminent engineer direct from Italy.

The dent in the rusty submarine had been noticed by those on the yacht, from a distance, and they had unerringly come to the right conclusion. The chart helped them considerably, for with so many wrecks scattered about the ocean floor, it meant time wasted to examine each, for their instruments only indicated a mass of metal and not its shape or size with any degree of accuracy.

"Tell me about this projectile, and how it works?" inquired the ancient young man of his host, as they stood watching the preparations for what promised to be a stupendous task.

"It's really very simple. These projectiles are hurled up into the rarefied air by an air gun, the spring of which is compressed by the tide, or other means, to the required tension; then a couple of air blasts from the rear end will take it almost anywhere. They are only partly automatic, so far, and each one must have a pilot to steer it, and stop it, and communicate with the outside world in case of trouble."

"To my old fashioned notions it seems a far riskier job than the one from which I had been so miraculously saved. How often do they go wrong and get lost like this one?"

"Bless you! It hasn't happened for several years. You see the pilot of this one is a lady, and it appears she must have let her mind wander a bit, because her recorded course as far as Chicago indicates that she had done nothing up to then to retard the projectile, although travelling over three miles per second, and far higher than usual."

"SURELY you cannot pilot the course of a projectile through the air like you can a ship at sea?"

"Of course we can, only more accurately. I believe wireless direction finders were beginning in your day. Is it not natural that we should have improved them? We use two recording charts, one for the vertical, and the other for the horizontal course. The triangulation is automatic, and makes a dot on the chart that indicates the position every half mile. In this particular case, the chart indicates a smooth, regular curve with two humps where the air blasts were let off, just as it would in the case of an unguided projectile. At Chicago, as you know, the double pen-inker ran dry, and that ends the record. Usually these charts show slight ups and downs, so that even the characteristics of the individual pilot can be recognized, just as the flight of a certain pilot could be told on your day."

"All this is clear enough now that you explain it, but I cannot conceive anyone quick enough to turn on the air blast that shoots out of the nose of your projectiles at the exact instant that will check it as it touches the ground."

"Intelligence and practice, nothing else. If you hadn't the intelligence you couldn't do it; after that practice is all that is necessary. Why, man! In your day they had jugglers who could do feats of conjuring too quickly for the eye to follow. But besides all that, there are automatic controls that turn on the front air-blast at the exact time required to counteract the velocity. I am told that the pilots do not consider it good form to use the automatic controls except in emergencies."

"What went wrong with this projectile?"

"Ah well, you see a woman is still an unknown quantity. I'll admit they are much more brainy, but for dependability and consideration, I prefer the man. This woman pilot has missed her vocation, because she is too clever. In this age very clever people are seldom matrimonially inclined. Miss Morgan is the exception. She wants to marry and have a family."

"Then why doesn't she do it?"

"Because she is too intelligent."

"What in the name of heaven has that to do with it?"

"I'm afraid you do not understand these matters yet, but if she married a man of her own intelligence, the chances are her children would be fools or abnormal in some way."

"Well, then what's to stop her marrying a man of less intelligence?"

"She ranks in the eighty seventh division, and as the maximum for husband and wife is one hundred and ten, you see she would have to marry a man of twenty three units or less. How could you expect a pretty, highspirited, clever girl to be willing to do that?"

"Twenty-three? That visiting doctor of yours tested my brain with all sorts of contrivances and tests, and finally put me down at twenty-one."

"Oh, I never thought. I beg your pardon! But you belong to a different age, and the standards are not the

same. In most ways you should be at least fifty units; I'm forty eight myself. Naturally enough they can't quite place you yet, but probably they will re-grade you when they see how you respond to modern ways of life. If in your day, for instance, some of those Egyptologists had discovered a Pharaoh still alive under a pyramid, where would they have placed him in your society? He might have wanted to kill every one he didn't like, or take somebody's wife, or do a hundred things that weren't done in your day. Many changes have been effected since your time, so you musn't mind being regarded with suspicion until you are better known."

Roger Wells was secretly much amused at his host's confusion. He thought it a great joke that he should be regarded as a sort of savage resurrected from the middle ages.

"I don't mind it at all, so long as they don't put me in the zoo or exhibit me on the stage, or dissect me in the medical school," he laughingly replied.

The old world man relapsed into silence and deep thought as to what he was to do in this strange new world, where he had no friends or equals and so very little in common with this new, intellectual race.

"A general broadcast news bulletin," exclaimed his host, taking out the little communicator and adjusting the dial until an orange spot appeared. Presently the voice of the announcer came clear and sharp from the miniature instrument:

"Number Two projectile from the Pacific is at last in communication with the outside world. It appears that the glancing blow when it struck the sunken submarine caused a sideway shock that was not wholly taken up by the shock absorbers, consequently several of the instruments were smashed, including the communicator. Miss Morgan, the pilot, being an exceptionally clever young woman, at once set to work rebuilding the broken equipment. Considering her tools and lack of spare parts, her skill in repairing the sending set is considered a very clever piece of work. The projectile contains oxygen for five days and food tablets for a month, beside the chemical in the medicine chest for suspending animation in case of necessity. The noted engineers now assembled have calculated that three days will be sufficient to complete the rescue."

MISS Henrietta Morgan had been told all about the old world man and his survival in the long lost submarine. Since she had been the unconscious cause of his deliverance, she expressed a desire to speak to him. To his surprise and delight, he was conducted to a small dark room on the yacht, hung with black velvet curtains. Here he not alone heard her, but he saw her projected in the air from a series of lenses arranged in semicircle. At first, he thought he had really been transferred to the projectile in some extraordinary way. But when he stood up to shake hands with her, he realized that it was only reflected light in perfect perspective. He knew that she could not see him, for she was looking directly at her transmitter as she talked. She was very beauti-

ful, and there was a softness about her features that reminded him of girls he once had known. To him she seemed a link to the past.

They found they had several things in common. Like many sailors, his ultimate desire was a home, a garden in the country, to say nothing of a wife as well. He gave her a sketch of his career, and she told him quite frankly of her thwarted ambitions. He was just a little surprised, until he learned that this was an age of plain speaking, which left no room for mock modesty or simpering coyness. He thought it would be wise, however, to withhold from her his intelligence-rating. If she knew, she would be looking for signs of imbecility, he thought.

Soon an enormous pontoon was constructed of small, boat-like units that fitted together into the shape of a huge doughnut nearly a mile in outside circumference. Tons and tons of pipe were laid down by freight airships, and men and machinery assembled the pipe in the enclosed lake in the centre of the pontoon. These pipes were in a ring almost touching, and reached to the bottom of the ocean. More pipes formed an inner ring. Now a hundred refrigerating ships lit down on the pontoon, and coupled up with the pipes. After several hours, there was a wall of ice fifty feet thick enclosing a circular space of three hundred feet and extending right to the bottom. Was the space in the middle pumped out? No, two beams of electrical energy were directed into it from the sky, and the water left the great ice tube in huge columns of vapour. Machines hovering above fanned away the steam, so that it would not fall in a drenching, tropical rain on the operators.

All this time Roger Wells, the ancient man, watched and observed and grew accustomed to all these strange, new wonders.

His host in the pleasure yacht was very kind. He even sent to the New York zoo, and had some animal flesh sent out for his guest to eat. However Roger decided to turn vegetarian when he noticed the horror of his host's children when they saw him eat 'dead animal,' as they put it.

He was able to grasp his true position when he tried to match his wits with these children of eight, ten, and twelve. After showing the youngest how to play chess with an improvised set, he was able to beat him twice, but never again. The doctor had rated him at twenty-one units of intelligence; now he wondered if that was not too high.

Spectators had come from all over the world to witness the rescue of Number Two projectile. The work was well in hand, and since twenty-four hours had not yet passed since the disaster, there was no alarm felt for the safety of the prisoners.

All that night the sky was bright as day with searchlights. Toward morning the men in charge became anxious, for a great storm was brewing over the north pole, and in spite of the fact that a fleet of airships were trying to head it off by every known method, it continued to swirl southward. Hence the feverish activity to complete the work before the storm broke.

By noon the next day the storm raged while these super-men stood by, helpless.

The greatest shock of all came when Miss Morgan sent out a message informing them, that, for some reason, the medicine chest was not aboard, and therefore they were without the chemicals that would suspend animation when the oxygen supply was gone.

The last chance had failed. They could not possibly be rescued in the remaining time before the oxygen was exhausted.

Now, for once, the old-world man saw consternation on the faces of these modern marvels. Death from accident was more or less common, but the thought of a lingering death from suffocation was something that seemed to upset them completely.

UP to the present he had simply watched, and tried to absorb all that he saw. In this overwhelming emergency his brain began to function constructively again, for quick thinking is second nature to a submarine officer.

His thoughts ran along many lines. Why could they not run a pipe down to supply air? Not with such a sea running, and even if they could, the boring and joining to the chilled steel projectile would be almost impossible under such pressure. Then he thought of the air blast. Surely the blast of air capable of stopping the projectile would be able to blow it backwards until it reached the water, and floated to the surface. All in vain. The compressed air had all been used in a final effort to stop the projectile on its fatal plunge.

All this time the little pleasure yacht had been suspended in mid air by a powerful air tug which had picked her up at the first signs of bad weather. This seemed a very unnautical proceeding to the old world man, in fact, as unnautical as steam to his grandfather who had commanded a frigate in sailing days.

"Surely," he thought, "there must be some way out with the marvellous inventions and equipment available. Could it not be blasted out with one of his rusty old torpedoes?" No, reason told him that it would blow the people in the projectile to pieces, if it reached them at all.

He called Miss Morgan from the little room where he could see and talk to her as privately as if they were really alone together. She spoke with regret that she would never meet him in the flesh, or even see his picture, for the projectile was not fitted for receptive vision. Then they talked long and earnestly of the might-have-beens of life, always working around to the house and garden in the country where happy children laughed and played. "Goodbye," he said at last, "we have missed happiness in this world by a hair's breadth, perhaps we shall gain it in the next world."

Down on the storm-tossed ocean, the engineers still fought the elements with dogged perseverance. Tons and tons of oil had been poured on the troubled waters, more ice barriers had been frozen, but time was slipping by, and they were making little headway.

After he switched off from talking to Miss Morgan, the ancient man sat with his head in his hands thinking of the lottery of life: one day up, the next down. One day free as air, the next confined in the deepest

dungeon. "Eat, drink, and be merry, for to-morrow we die," yes, that was it, "In the midst of life we are in death," "Like a flower in the field—" What was that fleeting thought that seemed to break in on his reverie?

Radium! Radium! why had he not thought of it before? Were there not five pounds of it aboard the projectile? Would not five pounds of radium let loose, disintegrate enough water into gas to blow the projectile to the surface, or to kingdom come?

"Miss Morgan! Miss Morgan!" he called frantically into the little transmitter. "Can't you get some of that radium into your air blast compression chamber and some water along with it? There ought soon to be enough pressure to blow yourself out backwards?"

"I never thought of it," she exclaimed. "I'll just call up the Radium Institute, and ask them the best way to use it."

Within an hour Miss Morgan had let off the first blast, which shot the projectile fourteen feet backwards and that much nearer freedom. Breathlessly the world waited for the result of the next blast.

A wave of rejoicing spread over the earth when the next shot indicated twenty seven feet nearer liberty.

All eyes were fixed on the little patch of comparatively calm water in the centre of the great raft. Those standing on its heaving surface could feel the dull thuds as blast after blast was fired in the depths beneath. It was fortunate, indeed, that this projectile was shuttle shaped and rounded at the rear end, otherwise it might not have kept its direction, and it is very doubtful if Miss Morgan could have done anything in the way of steering, as the vanes would almost certainly have been torn off by its pressure through the mud and shale of the sea bottom.

At last the projectile shot to the surface with a mighty rush, and leaped fifty feet into the air. As it did so Miss Morgan left off a final blast that shot it up backwards several miles. Then, to the astonishment of all the watchers, and most of all the old world man, the great projectile came swooping down in a graceful curve, and turned up again as if to skim over the yacht suspended from the great air tug above. Would it actually go between the supporting cables? It did. The pilot lit on the deck of the yacht with her great weight of tempered steel without even displacing a deck chair. The yacht and air tug sank two hundred feet before the pilot speeded up his lifting propellers sufficiently to counteract the extra weight.

Real emotion now broke loose. Brilliant rockets were fired off in thousands, and countless, coloured balloons of every shape and size were thrown from machines doing the most extraordinary gyrations in the air. They were able to act together in perfect unity just as trained armies do after several years of drill and practice. A hundred machines acting together represented a great wheel rolling slowly across the sky. Others would rush into the sky in a group, and then suddenly spread out like a bursting rocket.

All this was performed above a roaring, tumbling sea that in the old days would have driven everything to shelter, if it could be reached, save the largest ocean ships.

WHEN Miss Morgan swung open the balanced steel door and stepped out, the old world man was the first to grasp her by the hand. In the flesh, she was even more beautiful than her projected picture showed her to be. It was a case of love at first sight. Later, she explained many puzzling things to him. The transmission of power—mostly tide and water power—could be directed through space by means of a sort of beam wave concentrated on the receptive point and kept there by a whole series of delicate relays. Of course, storage of electricity had greatly improved, liquid electrolyte having long been displaced by a heavy gas impregnated with radium salts; the grids were of the finest metal gauze. Every airship had not one but several sources of reserve power, so that they could travel for days independently of the central station. There was still another source of reserve power in everyday use that astonished the old-world man by its simplicity—just the ordinary coil spring that drove the watches and clocks and phonographs, and pressed up the street car trolley poles when they slipped off the wire. Even the children of this new age had little clockwork helicopters that when wound up at a free winding-station would carry them a couple of miles. They seemed to be perfectly safe, for when the spring ran down, they came slowly to the ground.

It was evening, the storm had died away, and the yacht was again floating on the slightly heaving surface of the ocean. The owner and his family had retired, and the ship was heading leisurely south for Bermuda. In the moonlight Miss Morgan and Roger Wells slowly paced the deck. They were not talking very much, but they were thinking a great deal. He was wondering if men proposed and got married in this age as they had in the beginning of the twentieth century. She was feeling the old rebellious feeling against the powers that made the laws. Here was a man whom she could really like, but she supposed he was rated at least in the fortieth division or higher.

At last she turned to him and said: "Have you been rated by the doctor yet?"

His face fell, for he felt that his answer would mean the end of their friendship. The words of his host came forcefully back to him, "How do you expect a clever, high spirited girl to marry a man rated below 23?" And he was rated only twenty-one units of intelligence out of a possible hundred. And she had eighty-seven!

She saw the look of misery cross his face, and felt glad. "He must like me," she thought, "for he is sad that our combined intelligence stands between us."

At last he replied with a deep sigh: "Twenty-one units."

She gazed at him in bewildered astonishment, and then—: "In that case there is nothing to stop us getting married at once," she replied.

"Nothing," he agreed, "if you can stand a husband of such low mentality."

She laughed joyously, "Intelligence tests and rating may be necessary in this age, but they have very little to do with real love. However we must hurry, for I feel sure that they will realize that a mistake has been

made; then they will send another doctor, or appoint a commission to go into your case thoroughly. If they give you a much higher rating all our lovely plans will be destroyed.

"I have an idea," she exclaimed a few minutes later. "As you know, we will be in Bermuda in a couple of days, and there will be a great reception. I have yet to give my official account of the accident; then there will be many people to see you, and," she laughed, "you will be lucky if they don't put you in the museum!"

"I don't care so long as they mount you on the next pedestal," he smilingly replied.

"You must be serious," she exclaimed, "while I explain, for we cannot risk our happiness now; I could not live without you."

"Nor I without you," he vowed, holding her closely.

"My plan is to leave at once for the mainland, and get married quietly at some little place. Once married they cannot separate us without our consent."

"How can we leave the yacht?" he questioned; "we could not row to land."

"Take one of the flying life boats" she explained. "We won't be missed until morning."

"I hardly like to do it," he explained, "our host has been so kind and considerate, I am even wearing some of his clothes at the present moment."

"I will leave a note explaining it all to him, and he'll understand. We might even return to the yacht after we are married, and proceed to Bermuda."

"That would be splendid," he exclaimed.

WITH the greatest caution they undid the fastenings of the little lifeboat. A glance into the pilot house where gyrocompass, depth indicators, fog warnings, and many other instruments made it quite unnecessary to have an officer on constant duty, assured them that they could slip away unseen and unheard.

With just a faint humming they shot off into the darkness, and headed due west. She taught him how to manage the little craft, and then lay down to sleep while he remained at the controls. Presently the sun came up out of the sea behind them bathing the distant land ahead of them with rosy light. It seemed a glorious prospect for the crowning event in the lives of these two who had been kept apart by centuries and by land and water, and still had to use all their ingenuity to accomplish their purpose.

Gently he woke her, and she navigated the little craft to a perfect landing near a small town. Here he saw many of the wonderful things he had been told about. The registrar was not yet in his office, so they repaired to a restaurant for breakfast.

"How do we pay?" he asked feeling awkward because he had no money.

"We just give our numbers," she said, "and the State settles our food account, for everyone is entitled to three meals a day. Other things that we buy are charged to our accounts which can be verified almost instantly. The luxuries that we enjoy are in propor-

tion to the service we perform for the good of the public. We will just inquire how you stand."

Using her pocket communicator she was soon in touch with the right department, and was informed that Roger Wells, late lieutenant commander of the submarine U5 had been duly registered as a world citizen, and credited with one thousand units pending his entry into a suitable vocation. As a further token of appreciation for his suggestion for recovering Number Two projectile the Government would present him with any airplane or flying machine he chose up to five thousand horse power.

"How splendid," she exclaimed, "just the thing for our honeymoon."

"Will it cost much to run?" he asked anxiously.

"Oh, no! You are allowed a reasonable amount of power free. I think it will be half a million miles a year for a five thousand horse machine."

"It sounds too good to be true," he rejoiced.

A few minutes later they stood before the registrar.

"So you wish to be married at once?" he inquired.

"Yes, at once," They both answered him.

"I'll just call up the chief registry department, and verify these particulars."

They waited a little nervously for the result.

"I think it would be better to postpone your marriage," he said at last. "Your rating, Miss Morgan, is very high, and the authorities tell me that Roger Wells will probably be rerated very shortly. His new rating added to yours might bring your combined rating above the allowable maximum."

"You have the particulars before you, and you have verified them; we insist on being married at once."

"It is your right, if you insist," he agreed.

"We do insist," exclaimed both together.

In a few minutes the simple ceremony was over, and they were pronounced man and wife, "for as long as you both desire it," following the custom that marriage is an earthly arrangement and useless when it becomes repugnant to the parties concerned.

Their very first act was to call up the yacht, and tell the astonished owner what they had done. He had only just missed them, and had been wondering what he should do. Their return would make everything right, and they could continue to Bermuda just as everything had been planned. Soon they were on their return journey, and Roger Wells expressed the utmost astonishment when his bride of an hour switched on the automatic recording chart which not alone marked their course, but that of the yacht, so that to have missed them would have been impossible.

Great was the rejoicing on board that evening when they returned. News of their marriage was broadcast.

Later a message came from the Government saying that Roger Wells had been appointed to assist the Historical experts of the National Library in going over the records of his period.

Now, as he faced this new world, he did not feel lonely any more, for all the dreams of his life were coming true, and his beautiful and gifted wife was radiant with joy.