CHAPTER XIII

STRANGE FREAKS OF THE NEBULA

We return to follow the fortunes of Cosmo Versál's Ark.

After he had so providentially picked up the crazed billionaire, Amos Blank, and his three companions, Cosmo ordered Captain Arms to bear away southeastward, bidding farewell to the drowned shores of America, and sailing directly over the lower part of Manhattan, and western Long Island. The navigation was not easy, and if the Ark had not been a marvelously buoyant vessel it would not long have survived. At the beginning the heavy and continuous rain kept down the waves, and the surface of the sea was comparatively smooth, but after a while a curious phenomenon began to be noticed; immense billows would suddenly appear, rushing upon the Ark now from one direction and now from another, canting it over at a dangerous angle, and washing almost to the top of the huge ellipsoid of the dome. At such times it was difficult for anybody to maintain a footing, and there was great terror among the passengers. But Cosmo, and stout Captain Arms, remained at their post, relieving one another at frequent intervals, and never entrusting the sole charge of the vessel to any of their lieutenants.

Cosmo Versál himself was puzzled to account for the origin of the mighty billows, for it seemed impossible that they could be raised by the wind notwithstanding the fact that it blew at times with hurricane force. But at last the explanation came of itself.

Both Cosmo and the captain happened to be on the bridge together when they saw ahead something that looked like an enormous column as black as ink, standing upright on the surface of the water. A glance showed that it was in swift motion, and, more than that, was approaching in a direct line toward the Ark. In less than two minutes it was upon them.

The instant that it met the Ark a terrific roaring deafened them, and the rounded front of the dome beneath their eyes disappeared under a deluge of descending water so dense that the vision could not penetrate it. In another half minute the great vessel seemed to have been driven to the bottom of the sea. But for the peculiar construction of the shelter of the bridge its occupants would have been drowned at their posts. As it was they were soaked as if they had been plunged overboard. Impenetrable darkness surrounded them.

But the buoyant vessel shook itself, rolled from side to side, and rose with a staggering motion until it seemed to be poised on the summit of a watery mountain. Immediately the complete darkness passed, the awful downpour ceased, although the rain still fell in torrents, and the Ark began to glide downward with sickening velocity, as if it were sliding down a liquid slope.

It was a considerable time before the two men, clinging to the supports of

the bridge, were able to maintain their equilibrium sufficiently to render it possible to utter a few connected words. As soon as he could speak with reasonable comfort Cosmo exclaimed:

"Now I see what it is that causes the billows, but it is a phenomenon that I should never have anticipated. It is all due to the nebula. Evidently there are irregularities of some kind in its constitution which cause the formation of almost solid masses of water in the atmosphere--suspended lakes, as it were--which then plunge down in a body as if a hundred thousand Niagaras were pouring together from the sky.

"These sudden accessions of water raise stupendous waves which sweep off in every direction, and that explains the billows that we have encountered."

"Well, this nebular navigation beats all my experience," said Captain Arms, wiping the water out of his eyes. "I was struck by a waterspout once in the Indian Ocean, and I thought that that capped the climax, but it was only a catspaw to this. Give me a clear offing and I don't care how much wind blows, but blow me if I want to get under any more lakes in the sky."

"We'll have to take whatever comes," returned Cosmo, "but I don't think there is much danger of running directly into many of these downpours as we did into this one. Now that we know what they are, we can, perhaps, detect them long enough in advance to steer out of their way. Anyhow, we've got a good vessel under our feet. Anything but an ark of levium

would have gone under for good, and if I had not covered the vessel with the dome there would have been no chance for a soul in her."

As a matter of fact, the Ark did not encounter any more of the columns of descending water, but the frequent billows that were met showed that they were careering over the face of the swollen sea in every direction.

But there was another trouble of a different nature. The absence of sun and stars deprived them of the ordinary means of discovering their place. They could only make a rough guess as to the direction in which they were going. The gyrostatic compasses gave them considerable assistance, and they had perfect chronometers, but these latter could be of no use without celestial observations of some kind.

At length Cosmo devised a means of obtaining observations that were of sufficient value to partially serve their purpose. He found that while the disk of the sun was completely hidden in the watery sky, yet it was possible to determine its location by means of the varying intensity of the light.

Where the sun was a concentrated glow appeared, shading gradually off on all sides. With infinite pains Cosmo, assisted by the experience of the captain, succeeded in determining the center of the maximum illumination, and, assuming that to represent the true place of the sun, they got something in the nature of observations for altitude and azimuth, and Captain Arms even drew on his chart "Sumner lines" to determine the

position of the Ark, although he smiled at the thought of their absurd inaccuracy. Still, it was the best they could do, and was better than nothing at all.

They kept a log going also, although, as the captain pointed out, it was not of much use to know how fast they were traveling, since they could not know the precise direction, within a whole point of the compass, or perhaps several points.

"Besides," he remarked, "what do we know of the currents? This is not the old Atlantic. If I could feel the Gulf Stream I'd know whereabouts I was, but these currents come from all directions, and a man might as well try to navigate in a tub of boiling water."

"But we can, at least, keep working eastward," said Cosmo. "My idea is first to make enough southing to get into the latitude of the Sahara Desert, and then run directly east, so as to cross Africa where there are no mountains, and where we shall be certain of having plenty of water under our keel.

"Then, having got somewhere in the neighborhood of Suez, we can steer down into the region of the Indian Ocean, and circle round south of the Himalayas. I want to keep an eye on those mountains, and stay around the place where they disappear, because that will be the first part of the earth to emerge from the flood and it is there that we shall ultimately make land."

"Well, we're averaging eight knots," said the captain, "and at that rate we ought to be in the longitude of the African coast in about twenty days. How high will the water stand then?"

"My gages show," replied Cosmo, "that the regular fall amounts to exactly the same thing as at the beginning--two inches a minute. Of course the spouts increase the amount locally, but I don't think that they add materially to the general rise of the flood. Two inches per minute means 4,800 feet in twenty days. That'll be sufficient to make safe navigation for us all the way across northern Africa. We'll have to be careful in getting out into the Indian Ocean area, for there are mountains on both sides that might give us trouble, but the higher ones will still be in sight, and they will serve to indicate the location of the lower ranges already submerged, but not covered deeply enough to afford safe going over them."

"All right," said Captain Arms, "you're the commodore, but if we don't hang our timbers on the Mountains of the Moon, or the Alps, or old Ararat, I'm a porpoise. Why can't you keep circling round at a safe distance, in the middle of the Atlantic, until all these reefs get a good depth of water on 'em?"

"Because," Cosmo replied, "even if we keep right on now it will probably take two months, allowing for delays in getting round dangerous places, to come within sight of the Himalayas, and in two months the flood will

have risen nearly 15,000 feet, thus hiding many of the landmarks. If we should hold off here a couple of months before starting eastward nothing but the one highest peak on the globe would be left in sight by the time we arrived there, and that wouldn't be anything more than a rock, so that with the uncertainty of our navigation we might not be able to find it at all. I must know the spot where Tibet sinks, and then manage to keep in its neighborhood."

That ended the argument.

"Give me a safe port, with lights and bearings, and I'll undertake to hit it anywhere in the two hemispheres, but blow me if I fancy steering for the top of the world by dead reckoning, or no reckoning at all," grumbled the captain.

At night, of course, they had not even the slight advantage that their observations of the probable place of the sun gave them when it was above the horizon. Then they had to go solely by the indications of the compass. Still, they forged steadily ahead, and when they got into what they deemed the proper latitude, they ran for the site of the drowned Sahara.

After about a week the billowing motion caused by the descent of the "lakes in the sky" ceased entirely, to their great delight, but the lawless nebula was now preparing another surprise for them.

On the ninth night after their departure from their lodgment on the

Palisades Cosmo Versál was sleeping in his bunk close by the bridge, where he could be called in an instant, dreaming perhaps of the glories of the new world that was to emerge out of the deluge, when he was abruptly awakened by the voice of Captain Arms, who appeared to be laboring under uncontrollable excitement.

"Tumble up quicker'n you ever did in your life!" he exclaimed, his big brown beard wagging almost in Cosmo's face. "The flood's over!"

Cosmo sprang out of bed and pulled on his coat in a second.

"What do you mean?" he demanded.

"Look for yourself," said the captain, pointing overhead.

Cosmo Versál glanced up and saw the sky ablaze with stars! The rain had entirely ceased. The surface of the sea was almost as smooth as glass, though rising and falling slowly, with a long, rolling motion. The Ark rode steadily, shivering, like an ocean liner, under the impulse of its engines, and the sudden silence, succeeding the ceaseless roar of the downpour, which had never been out of their ears from the start of the voyage, seemed supernatural.

"When did this happen?" he demanded.

"It began not more than five minutes ago. I was just saying to myself that

we ought to be somewhere near the center of the old Atlantic as it used to be, and wondering whether we had got our course laid right to go fairly between the Canaries and the Cape de Verdes, for I didn't want to be harpooned by Gogo or the Peak of Teneriffe, when all of a sudden there came a lightening in the nor'east and the stars broke out there.

"I was so set aback that I didn't do anything for two or three minutes but stare at the stars. Then the rain stopped and a curtain seemed to roll off the sky, and in a minute more it was clear down to the horizon all around. Then I got my wits together and ran to call you."

Cosmo glanced around and above, seeming to be as much astonished as the captain had been. He rubbed his huge bald dome and looked all round again before speaking. At last he said:

"It's the nebula again. There must be a hole in it."

"Its whole bottom's knocked out, I reckon," said the captain. "Maybe it's run out of water--sort o' squeezed itself dry."

Cosmo shook his head.

"We are not yet in the heart of it," he said. "It is evident to me now that what I took for the nucleus was only a close-coiled spiral, and we're run out of that, but the worst is yet to come. When we strike the center, then we'll catch it, and there'll be no more intermissions."

"How long will that be?" inquired Captain Arms.

"It may be a week, and it may be a month, though I hardly think it will be so long as that. The earth is going about twelve miles a second--that's more than a million miles a day--directly toward the center of the nebula. It has taken ten days to go through the spiral that we have encountered, making that about ten million miles thick. It's not likely that the gap between this spiral and the nucleus of the nebula is more than thirty million miles across, at the most; so you see we'll probably be in the nucleus within a month, and possibly much less than a month."

Captain Arms took a chew of tobacco.

"We can get our bearings now," he remarked. "Look, there's the moon just rising, and on my word, she is going to occult Aldebaran within an hour. I'll get an observation for longitude, and another on Polaris for latitude.

No running on submerged mountains for us now."

The captain was as good as his word, and when his observations had been made and the calculations completed he announced that the position of the Ark was: Latitude, 16 degrees 10 minutes north; longitude, 42 degrees 28 minutes west.

"Lucky for us," he exclaimed, "that the sky cleared. If we'd kept on as we were going we'd have struck the Cape de Verdes, and if that had

happened at night we'd probably have left our bones on a drowning volcano. We ought to have been ten or twelve degrees farther north to make a safe passage over the Sahara. What's the course now? Are you still for running down the Himalaya mountains?"

"I'll decide later what to do," said Cosmo Versál. "Make your northing, and then we'll cruise around a little and see what's best to be done."

When day came on, brilliant with sunshine, and the astonished passengers, hurrying out of their bunks, crowded about the now opened gangways and the portholes, which Cosmo had also ordered to be opened, and gazed with delight upon the smooth blue sea, the utmost enthusiasm took possession of them.

The flood was over!

They were sure of it, and they shook hands with one another and congratulated themselves and hurrahed, and gave cheers for the Ark and cheers for Cosmo Versál. Then they began to think of their drowned homes and of their lost friends, and sadness followed joy. Cosmo was mobbed by eager inquiries wherever he made his appearance.

Was it all over for good? Would the flood dry up in a few days? How long would it be before New York would be free of water? Were they going right back there? Did he think there was a chance that many had escaped in boats and ships? Couldn't they pick up the survivors if they hurried back?

Cosmo tried to check the enthusiasm.

"It's too early for rejoicing," he assured them. "It's only a break in the nebula. We've got a respite for a short time, but there's worse coming. The drowning of the world will proceed. We are the only survivors, except perhaps some of those who inhabited the highlands. Everything less than 2,400 feet above the former level of the sea is now under water. When the flood begins again it will keep on until it is six miles deep over the old sea margins."

"Why not go back and try to rescue those who you say may have found safety on the highlands?" asked one.

"I have chosen my company," he said, "and I had good reasons for the choice I made. I have already added to the number, because simple humanity compelled me, but I can take no more. The quantity of provisions aboard the Ark is not greater than will be needed by ourselves. If the rest of the world is drowned it is not my fault. I did my best to warn them.

Besides, we could do nothing in the way of rescue even if we should go back for that purpose. We could not approach the submerged plateaus. We would be aground before we got within sight of them."

These words went far to change the current of feeling among the passengers. When they learned that there would be danger for themselves in the course that had been proposed their humanity proved to be less

strong than their desire for self-preservation. Nevertheless, as we shall see, the Ark ultimately went back to America, though not for any reason that had yet been suggested.

Meanwhile the unexpected respite furnished by the sudden cessation of the downpour from the sky had other important results, to which we now turn.