off fell away and we were dead becalmed, drifting about in every direction. This state of things, however, did not last long enough to give us time to think about it. In less than a minute the storm was upon us—in less than two the sky was entirely overcast—and what with this and the driving spray, it became suddenly so dark that we could not see each other in the smack.

"Such a hurricane as then blew it is folly to attempt describing. The oldest seaman in Norway never experienced anything like it. We had let our sails go by the run before it cleverly took us; but, at the first puff, both our masts went by the board as if they had been sawed off—the mainmast taking with it my youngest brother, who had lashed himself to it for safety.

"Our boat was the lightest feather of a thing that ever sat upon water. It had a complete flush deck, with only a small hatch near the bow, and this hatch it had always been our custom to batten down when about to cross the Ström, by way of precaution against the chopping seas. But for this circumstance we should have foundered at once—for we lay entirely buried for some moments. How my elder brother escaped destruction I cannot say, for I never had an opportunity of ascertaining. For my part, as soon as I had let the foresail run, I threw myself flat on deck, with my feet against the narrow gunwale of the bow, and with my hands grasping a ring-bolt near the foot of the foremast. It was mere instinct that prompted me to do this—which was undoubt-

edly the very best thing I could have done—for I was too much flurried to think.

"For some moments we were completely deluged, as I say, and all this time I held my breath, and clung to the bolt. When I could stand it no longer I raised myself upon my knees, still keeping hold with my hands, and thus got my head clear. Presently our little boat gave herself a shake, just as a dog does in coming out of the water, and thus rid herself, in some measure, of the seas. I was now trying to get the better of the stupor that had come over me, and to collect my senses so as to see what was to be done, when I felt somebody grasp my arm. It was my elder brother, and my heart leaped for joy, for I had made sure that he was overboard-but the next moment all this joy was turned into horror -for he put his mouth close to my ear, and screamed out the word 'Moskoe-ström!'

"No one will ever know what my feelings were at that moment. I shook from head to foot as if I had had the most violent fit of the ague. I knew what he meant by that one word well enough—I knew what he wished to make me understand. With the wind that now drove us on, we were bound for the whirl of the Ström, and nothing could save us!

"You perceive that in crossing the Ström channel, we always went a long way up above the whirl, even in the calmest weather, and then had to wait and watch carefully for the slack—but now we were driving right upon the pool itself, and in such a hurricane as this! "To be sure," I thought, 'we shall

get there just about the slack—there is some little hope in that'—but in the next moment I cursed myself for being so great a fool as to dream of hope at all. I knew very well that we were doomed, had we been ten times a ninety-gun ship.

"By this time the first fury of the tempest had spent itself, or perhaps we did not feel it so much, as we scudded before it, but at all events the seas, which at first had been kept down by the wind, and lay flat and frothing, now got up into absolute mountains. A singular change, too, had come over the heavens. Around in every direction it was still as black as pitch, but nearly overhead there burst out, all at once, a circular rift of clear sky—as clear as I ever saw—and of a deep bright blue—and through it there blazed forth the full moon with a lustre that I never before knew her to wear. She lit up everything about us with the greatest distinctness—but, oh God, what a scene it was to light up!

"I now made one or two attempts to speak to my brother—but in some manner which I could not understand the din had so increased that I could not make him hear a single word, although I screamed at the top of my voice in his ear. Presently he shook his head, looking as pale as death, and held up one of his fingers, as if to say 'listen!'

"At first I could not make out what he meant—but soon a hideous thought flashed upon me. I dragged my watch from its fob. It was not going. I glanced at its face by the moonlight, and then burst in tears as I flung it far away into the ocean.

It had run down at seven o'clock! We were behind the time of the slack, and the whirl of the Ström was in full fury!

"When a boat is well built, properly trimmed, and not deep laden, the waves in a strong gale, when she is going large, seem always to slip from beneath her —which appears strange to a landsman—and this is what is called *riding*, in sea phrase.

"Well, so far we had ridden the swells very cleverly; but presently a gigantic sea happened to take us right under the counter, and bore us with it as it rose-up-up-as if into the sky. I would not have believed that any wave could rise so high. And then down we came with a sweep, a slide, and a plunge that made me feel sick and dizzy, as if I was falling from some lofty mountain-top in a dream. But while we were up I had thrown a quick glance around-and that one glance was all-sufficient. I saw our exact position in an instant. The Moskoeström whirlpool was about a quarter of a mile dead ahead-but no more like the everyday Moskoe-ström than the whirl, as you now see it, is like a mill-race. If I had not known where we were, and what we had to expect, I should not have recognized the place at all. As it was, I involuntarily closed my eyes in horror. The lids clinched themselves together as if in a spasm.

"It could not have been more than two minutes afterward until we suddenly felt the waves subside, and were enveloped in foam. The boat made a sharp half turn to larboard, and then shot off in its

81

new direction like a thunderbolt. At the same moment the roaring noise of the water was completely drowned in a kind of shrill shriek-such a sound as you might imagine given out by the water-pipes of many thousand steam-vessels letting off their steam all together. We were now in the belt of surf that always surrounds the whirl; and I thought, of course, that another moment would plunge us into the abyss, down which we could only see indistinctly on account of the amazing velocity with which we were borne along. The boat did not seem to sink into the water at all, but to skim like an air-bubble upon the surface of the surge. Her starboard side was next the whirl, and on the larboard arose the world of ocean we had left. It stood like a huge writhing wall between us and the horizon.

Works of Edgar Allan Poe

"It may appear strange, but now, when we were in the very jaws of the gulf, I felt more composed than when we were only approaching it. Having made up my mind to hope no more, I got rid of a great deal of that terror which unmanned me at first. I suppose it was despair that strung my nerves.

"It may look like boasting-but what I tell you is truth—I began to reflect how magnificent a thing it was to die in such a manner, and how foolish it was in me to think of so paltry a consideration as my own individual life, in view of so wonderful a manifestation of God's power. I do believe that I blushed with shame when this idea crossed my mind. After a little while I became possessed with the keenest curiosity about the whirl itself. I positively felt a wish to explore its depths, even at the sacrifice I was going to make; and my principal grief was that I should never be able to tell my old companions on shore about the mysteries I should see. These, no doubt, were singular fancies to occupy a man's mind in such extremity—and I have often thought since that the revolutions of the boat around the pool might have rendered me a little light-headed.

"There was another circumstance which tended to restore my self-possession; and this was the cessation of the wind, which could not reach us in our present situation-for, as you saw for yourself, the belt of the surf is considerably lower than the general bed of the ocean, and this latter now towered above us, a high black, mountainous ridge. If you have never been at sea in a heavy gale, you can form no idea of the confusion of mind occasioned by the wind and spray together. They blind, deafen, and strangle you, and take away all power of action or reflection. But we were now, in a great measure. rid of these annoyances—just as death-condemned felons in prison are allowed petty indulgences forbidden them while their doom is yet uncertain.

"How often we made the circuit of the belt it is impossible to say. We careered round and round for perhaps an hour, flying rather than floating, getting gradually more and more into the middle of the surge, and then nearer and nearer to its horrible inner edge. All this time I had never let go of the ring-bolt. My brother was at the stern, holding

on to a small empty water-cask which had been securely lashed under the coop of the counter, and was the only thing on deck that had not been swept overboard when the gale first took us. As we approached the brink of the pit he let go his hold upon this, and made for the ring, from which, in the agony of his terror, he endeavored to force my hands, as it was not large enough to afford us both a secure grasp. I never felt deeper grief than when I saw him attempt this act-although I knew he was a madman when he did it—a raving maniac through sheer fright. I did not care, however, to contest the point with him. I knew it could made no difference whether either of us held on at all; so I let him have the bolt, and went astern to the cask. This there was no great difficulty in doing; for the smack flew round steadily enough, and upon an even keel-only swaying to and fro with the immense sweeps and swelters of the whirl. Scarcely had I secured myself in my new position, when we gave a wild lurch to starboard, and rushed headlong into the abyss. I muttered a hurried prayer to God, and thought all was over.

"As I felt the sickening sweep of the descent, I had instinctively tightened my hold upon the barrel, and closed my eyes. For some seconds I dared not open them—while I expected instant destruction, and wondered that I was not already in my death-struggles with the water. But moment after moment elapsed. I still lived. The sense of falling had ceased; and the motion of the vessel seemed much as

it had been before, while in the belt of foam, with the exception that she now lay more along. I took courage and looked once again upon the scene.

"Never shall I forget the sensation of awe, horror, and admiration with which I gazed about me.
The boat appeared to be hanging, as if by magic,
midway down, upon the interior surface of a funnel vast in circumference, prodigious in depth, and
whose perfectly smooth sides might have been mistaken for ebony, but for the bewildering rapidity
with which they spun around, and for the gleaming
and ghastly radiance they shot forth, as the rays of
the full moon, from that circular rift amid the clouds
which I have already described, streamed in a flood
of golden glory along the black walls, and far away
down into the inmost recesses of the abyss.

"At first I was too much confused to observe anything accurately. The general burst of terrific grandeur was all that I beheld. When I recovered myself a little, however, my gaze fell instinctively downward. In this direction I was able to obtain an unobstructed view, from the manner in which the smack hung on the inclined surface of the pool. She was quite upon an even keel—that is to say, her deck lay in a plane parallel with that of the water—but this latter sloped at an angle of more than forty-five degrees, so that we seemed to be lying upon our beam-ends. I could not help observing, nevertheless, that I had scarcely more difficulty in maintaining my hold and footing in this situation, than if we

had been upon a dead level; and this, I suppose, was owing to the speed at which we revolved.

"The rays of the moon seemed to search the very bottom of the profound gulf; but still I could make out nothing distinctly on account of a thick mist in which everything there was enveloped, and over which there hung a magnificent rainbow, like that narrow and tottering bridge which Mussulmans say is the only pathway between Time and Eternity. This mist, or spray, was no doubt occasioned by the clashing of the great walls of the funnel, as they all met together at the bottom—but the yell that went up to the heavens from out of that mist I dare not attempt to describe.

"Our first slide into the abyss itself, from the belt of foam above, had carried us to a great distance down the slope; but our further descent was by no means proportionate. Round and round we swept—not with any uniform movement—but in dizzying swings and jerks, that sent us sometimes only a few hundred yards—sometimes nearly the complete circuit of the whirl. Our progress downward, at each revolution, was slow, but very perceptible.

"Looking about me upon the wide waste of liquid ebony on which we were thus borne, I perceived that our boat was not the only object in the embrace of the whirl. Both above and below us were visible fragments of vessels, large masses of building-timber and trunks of trees, with many smaller articles, such as pieces of house furniture, broken boxes, barrels and staves. I have already described the unnatural curiosity which had taken the place of my original terrors. It appeared to grow upon me as I drew nearer and nearer to my dreadful doom. I now began to watch, with a strange interest, the numerous things that floated in our company. I must have been delirious, for I even sought amusement in speculating upon the relative velocities of their several descents toward the foam below. 'This fir-tree,' I found myself at one time saying, 'will certainly be the next thing that takes the awful plunge and disappears'-and then I was disappointed to find that the wreck of a Dutch merchant ship overtook it and went down before. At length, after making several guesses of this nature, and being deceived in allthis fact—the fact of my invariable miscalculation, set me upon a train of reflection that made my limbs again tremble, and my heart beat heavily once more.

"It was not a new terror that thus affected me, but the dawn of a more exciting hope. This hope arose partly from memory, and partly from present observation. I called to mind the great variety of buoyant matter that strewed the coast of Lofoden, having been absorbed and then thrown forth by the Moskoe-ström. By far the greater number of the articles were shattered in the most extraordinary way—so chafed and roughened as to have the appearance of being stuck full of splinters—but then I distinctly recollected that there were some of them which were not disfigured at all. Now I could not account for this difference except by supposing that

the roughened fragments were the only ones which had been completely absorbed—that the others had entered the whirl at so late a period of the tide, or, from some reason, had descended so slowly after entering, that they did not reach the bottom before the turn of the flood came, or the ebb, as the case might be. I conceived it possible, in either instance, that they might thus be whirled up again to the level of the ocean, without undergoing the fate of those which had been drawn in more early or absorbed more rapidly. I made, also, three important observations. The first was, that as a general rule, the larger the bodies were, the more rapid their descent -the second, that, between two masses of equal extent, the one spherical, and the other of any other shape, the superiority in speed of descent was with the sphere—the third, that, between two masses of equal size, the one cylindrical, and the other of any other shape, the cylinder was absorbed the more slowly. Since my escape, I have had several conversations on this subject with an old schoolmaster of the district; and it was from him that I learned the use of the words 'cylinder' and 'sphere.' He explained to me-I have forgotten the explanationhow what I observed was, in fact, the natural consequence of the forms of the floating fragmentsand showed me how it happened that a cylinder, swimming in a vortex, offered more resistance to its suction and was drawn in with greater difficulty than an equally bulky body, of any form whatever.\*

"There was one startling circumstance which went a great way in enforcing these observations, and rendering me anxious to turn them to account, and this was that, at every revolution, we passed something like a barrel, or else the yard or the mast of a vessel, while many of these things, which had been on our level when I first opened my eyes upon the wonders of the whirlpool, were now high up above us, and seemed to have moved but little from their original station.

"I no longer hesitated what to do. I resolved to lash myself securely to the water-cask upon which I now held, to cut it loose from the counter, and to throw myself with it into the water. I attracted my brother's attention by signs, pointed to the floating barrels that came near us, and did everything in my power to make him understand what I was about to do. I thought at length that he comprehended my design-but, whether this was the case or not, he shook his head despairingly, and refused to move from his station by the ring-bolt. It was impossible to reach him; the emergency admitted of no delay; and so, with a bitter struggle, I resigned him to his fate, fastened myself to the cask by means of the lashings which secured it to the counter, and precipitated myself with it into the sea, without another moment's hesitation.

"The result was prescisely what I had hoped it might be. As it is myself who now tell you this tale—as you see that I did escape—and as you are already in possession of the mode in which this es-

<sup>\*</sup> See Archimedes, "De Incidentibus in Fluido."-lib. 2.

cape was effected, and must therefore anticipate all that I have further to say-I will bring my story quickly to conclusion. It might have been an hour. or thereabout, after my quitting the smack, when. having descended to a vast distance beneath me, it made three or four wild gyrations in rapid succession, and, bearing my loved brother with it, plunged headlong, at once and forever, into the chaos of foam below. The barrel to which I was attached sunk very little further than half the distance between the bottom of the gulf and the spot at which I leaped overboard before a great change took place in the character of the whirlpool. The slope of the sides of the vast funnel became momently less and less steep. The gyrations of the whirl grew gradually less and less violent. By degrees, the froth and the rainbow disappeared, and the bottom of the gulf seemed slowly to uprise. The sky was clear, the winds had gone down, and the full moon was setting radiantly in the west, when I found myself on the surface of the ocean, in full view of the shores of Lofoden, and above the spot where the pool of the Moskoe-ström had been. It was the hour of the slack—but the sea still heaved in mountainous waves from the effects of the hurricane. I was borne violently into the channel of the Ström, and in a few minutes was hurried down the coast into the 'grounds' of the fishermen. A boat picked me upexhausted from fatigue-and (now that the danger was removed) speechless from the memory of its horror. Those who drew me on board were my old mates and daily companions—but they knew me no more than they would have known a traveller from the spirit-land. My hair, which had been raven black the day before, was as white as you see it now. They say too that the whole expression of my countenance had changed. I told them my story—they did not believe it. I now tell it to you—and I can scarcely expect you to put more faith in it than did the merry fishermen of Lofoden."