behind me so he could see. When I got to the line I looked back for "Mike." He was nowhere in sight. I kept playing the lamp toward where I had left him. But I couldn't see him. I telephoned up and asked, "Where is 'Mike'?" I didn't get my answer. They said, "Do you want to come up?" It was so cold I didn't think I could hold out much longer, so I said, "Yes, please haul me up.'

Before the line became taut I walked back on the deck of the submarine and played the light all around to make sure "Mike" was being pulled up.

They hauled me straight from the bottom to the surface without making any stops for decompression, because my suit was full of water. They rushed me into the decompression chamber and I got out of my suit. "Mike" was in there too. We had to cut his suit and gloves off his underwear. It took two men to bend his knee. We wrapt "Mike" in blankets soaked in hot water.

I got my own underwear off and wrapt up in a blanket. They ran the air-pressure up to sixty pounds, ten more than the pressure on the bottom, at the place where the submarine was sunk.

I was sitting by "Mike's" side watching him at 3:30 o'clock Monday morning when he first opened his eyes.

The labors and perils of a diver's life were perhaps never set forth more realistically than in this laconic narrative. The sequel of the story is that "Mike" was stricken with a bad case of the "bends," and the Falcon rushed him ashore to a hospital—an unexplained trip which gave rise to the mistaken impression that the work of rescue was being abandoned. And now comes another story of under-water adventure, rivaling that of Eadie in the light it throws on the chances that confront the men who go down into the sea in diving-suits. As transmitted by Whitney Bolton, a staff correspondent of the New York Herald Tribune:

A graphic, stirring story of the vicissitudes encountered by divers as they tread the floor of the sea in the effort to salvage the submarine S-4 was related aboard the Falcon late this evening by Lieut-Com. Edward Ellsberg. Twice in peril of his life, a third time apparently buried alive, the master diver discust his forty-minute joust with death in the simplest terms.

Surveying the torn hulk of the submarine, he was engulfed in mud particles stirred up by his movements. Blinded, his suit sleeve torn and leaking, he toppled off the submarine and into the deep mud, which immediately

sucked him under. The underwater telephone saved his life. "I went down to find out how

1269

badly cut she was," he said as he sat on the Falcon, apparently unconcerned by his battle for life seventeen fathoms down. "I could see no danger of her breaking. It was not a clean-cut break, like the S-51, but a jagged one. I landed at the bow and examined the S-C tube and found it in good condition.

"As I was walking back I came to a place twenty feet aft of the torpedo compartment. Here the superstructure was ripped away at an angle of forty-five degress. It was a clean rip except for two planks on the port side. To get aft I dropt into the depression created by the torn-away superstructure and found the plating on top of the boat in perfect condition.

"I walked twelve feet aft just in front of the gun. The gun was slewed muzzle down to port and breach high to starboard. Just aft of the gun was a part of the Paulding's hull hanging over the port side. I crawled over and saw no damage aft. The Paulding apparently sideswiped the bridge, because the forward lines (handlines on the deck) were torn away and the after-lines were sagging.' Lieutenant Ellsberg spoke slow-

ly, tracing the cruelly torn submarine in the air with sensitive

fingers. He seemed to feel every gash ripped into it by the plowing bow of the Paulding. He seemed to feel sorrow for the Paulding, as he described her torn plates hanging in the water.

"I was going to go aft," he resumed, "but so far I hadn't seen any reason why the boat sank. I had not seen the hull. I crawled back over the gun to see where the hole was that let the water in. Just at this time my life-line and air-hose started to sag toward the wreckage, and I told them above and they took in the slack.'

He described the slime gathering on the shell of the submarine and the dark, cold water that surrounded and impeded him in movement and vision.

"I could see the submarine shell all right, but it had become covered with a fine film of mud, and when I walked forward it had been stirred up and I couldn't see the submarine below.

This was when three desperate encounters with possible death seized him in quick succession, calling on him for everything he ever had learned in diving to preserve life in emergencies. A mud-slippery steel cylinder under him, leaden, ungripping shoes and a heavy suit to contend with, made the fight one against tremendous odds. The dark and cold added to the terror and almost took him to death with the forty silent men in the shell he crawled over.

"I leaned way over to see which way was forward," he said. "The line suddenly gave a pull, which threw me off balance and I slipt off the starboard side into a hole.

"It was a V-shaped cut. I tried to grab at the top of the hole, but a sharp edge cut my right-hand glove open. I tried to erawl up, but the water was running in my sleeve. I tried to work away, but I wasn't able to hold on-and I slid down the starboard side to the sea bottom and landed on my right side in soft mud.

"Before my eyes it was dark. I could see nothing. I stopt struggling. I could feel a lot of pieces of broken steel which ap-

parently had fallen off the submarine. I asked for a pr they asked me if I wanted any help. I said I certainly d A diver working on the opposite side of the subma. ordered to abandon his work and rescue Ellsberg. Befor ungainly clothing would permit him to mount the great hu. and slide down to Ellsberg's muddy, gravelike hole, Ellsberg had called his diving lore into play and, taking a desperate chance

over to help me, and Carr started over. I thought it was one hell of a place to have to stay forever, but I felt pretty sure they could get help down to me. I decided to open the air-valve to fill

Please Over

with the bends, freed himself. The other diver was William Carr. "Carr was working on the port side. They told Carr to cross my suit with air.

THE LONG PILGRIMAGE OF THE PONTOONS All the way from Brooklyn to Provincetown they were laboriously towed, and the Navy is criticized for not having them nearer the habitual scene of submarine activities.

> "This air-valve lies at the joint between the helmet and suit. Closed, it maintains air in the helmet only, and the diver breathes all he needs of it. Open, it sends some of the air down into the suit and inflates the rubbery, grotesque garment.

> "This would carry me up," Commander Ellsberg explained, "but the danger lay in that if the suit were too light and I came to the surface too quickly. You know what that meansbends.

> "I let the air in slowly, and I felt myself floating up. Then I slacked the air off and my head came out of the sticky mud. I could see daylight again.'

> Commander Ellsberg smiled, partly as if amused at the spectacle of his goggling, helmeted head emerging from the ooze in the face of terrified fish, and partly as if in recollection of his own relief.

> "I shut the air off and started to sink again. So, by turning the air on and off and balancing myself I finally got up to where I was in mud only to my waist.

> His serious face broke again into a smile, a grim smile born of his victory over the mud that would have taken him lower and lower until he no longer would have been able to extricate himself from the slime.

"I looked up and saw the life-line and the hose-line going straight up," he resumed. "So I told them to lift me up and I came out of the mud. I kicked myself around to try and see the submarine, but I could not see it. Then they pulled me up fifteen feet and I kicked around again, but still I couldn't see it. So I told them to take me up.

He turned away and began examining his diving gear. His story was ended and he saw no reason to prolong the discussion. His gear lay before him, torn by the scissors-like edges of the gashed submarine. He would have to go down again. He must see to its repair.

A few officers, a diver or two, and others stood about during

