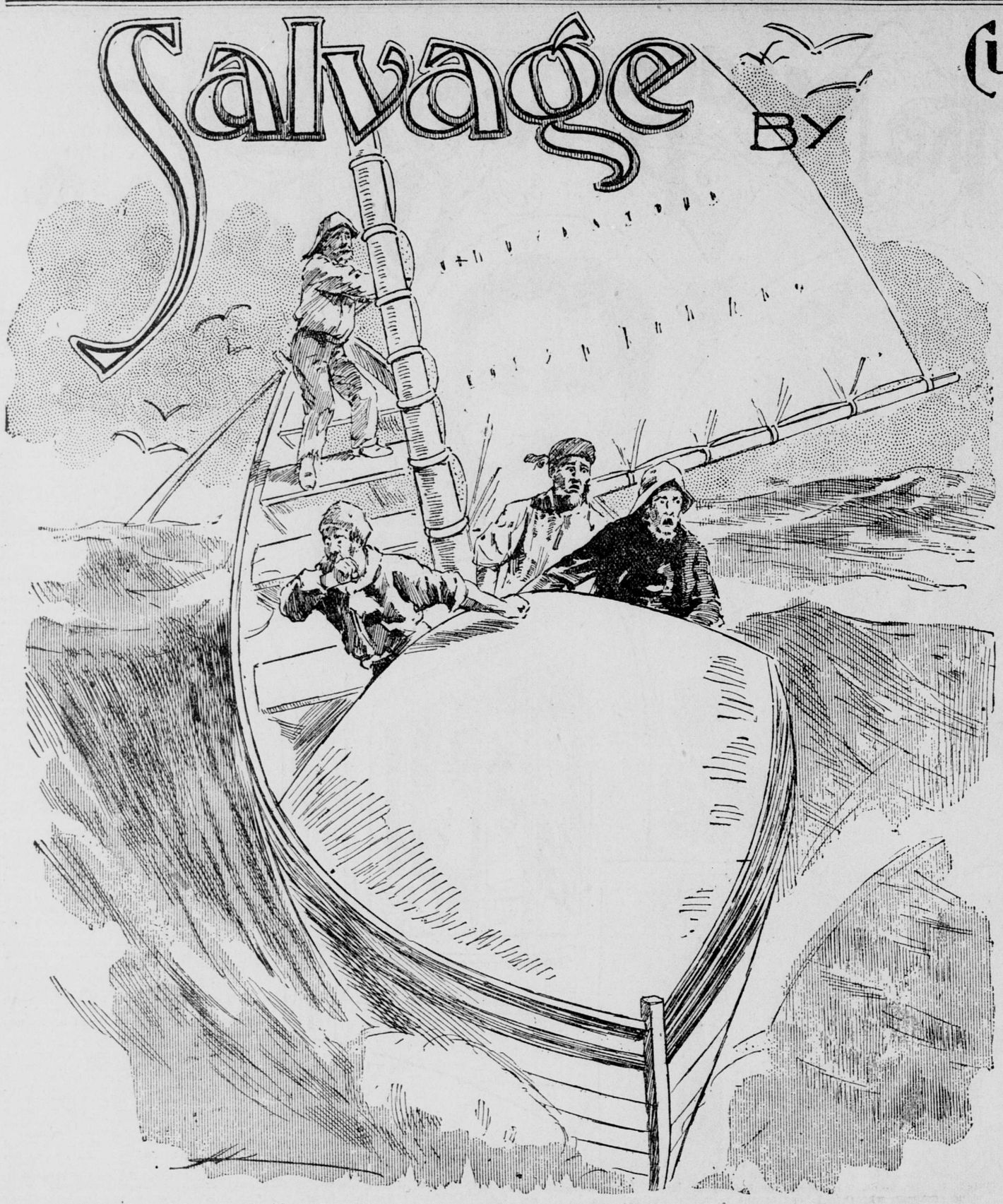
Salvage

BY CUTLIFFE HYNE



IN THE HEIGHT OF A BLAZING AFTERNOON THERE AROSE AN ISLAND OUT OF A TWINKLING TURQUOISE SEA.

"THE boat's an old P. and O. lifeboat," said Mr. McTodd, "diagonal built of teak, and quite big enough for the purpose. Of course, something with steam in her would be better, because we're both steamer men, but that's out of the question. That would mean too many to share. So the thing is, can you buy this lifeboat and victual her for the trip? I'm no what ye might call a capitalist myself just for the moment."

Captain Kettle eyed the grimy serge of his companion with disfavor. "You don't look it," he said. "That last engine-room you got sacked from must have been a mighty filthy place."

"'Twas," said McTodd. "But, as it happened, I didn't get the sack. I ran from her here in Gib, because I'd no wish to get back to England and have this news useless in my pocket. And, of course, I had to let slide the £8 in wages that was due to me."

Kettle gave up pacing the room and sat himself on the edge of the table and frowned. "I don't see the use of taking either Antonio, if that's his name, or your other Dago. I don't like the breed of them. You and I would be quite enough to handle an open boat, and quite able to take care of ourselves. If the wreck's got the money on her, and we finger it, we'll promise to bring them back their share all right; and if the thing's a fizzle, as it's very likely to be, they'll be saved a very unpleasant boat cruise."

"It's no go," said the engineer, "and you may make up your mind to have them as shipmates, captain, or sit here on your tail where you are. I don't trust them no more than a stripped thread. And they don't trust me. They would not trust the provost of Edinboro if he was to make similar proposals to them."

"I'd met Tonio in Lagos. He was a greaser on a boat there, and I was her second engineer. He's some English—coast English—and he did the talking. I give Tonio credit; he spat out his tale like a man. He and his mate were in the stoke hold of a dago steamboat coming from the River Plate to Genoa, and calling at some of the Western Islands en route. One night they were just going off watch and were leaning over the rail to get a breath of cool air before turning in. They were steaming past some rocky islands and there in sight of them was a vessel hard and fast ashore. There was no mistake about it; they both saw her; a steamboat of 1500 tons. And what was more, the other Portugee, Tonio's friend, said he knew her. According to him she was the Duncansby Head. He'd served in her stokehold three voyages, and he said he'd know her anywhere."

"A dago's word isn't worth much for a thing like that," said Kettle.

"Wait a bit. The pair of them stayed where they were and looked at it the rest of the watch on deck. The second mate on the bridge was staring ahead sleepily; the quartermaster at the wheel was nodding and blinking at the binnacle; the lookout on the forecastle was seated on a fife rail, snoring; no one of these had seen the wreck.

"And so Antonio and his mate told the other dago that they had seen the wreck?"

"Not much! They kept their heads shut. There was money in the idea. So there you have the whole yarn, except that they got to know that the Duncansby was on her way home after a long spell of tramping when she got into trouble, and carried all the money she'd earned in good solid gold in the charthouse drawer."

"Very well," said Kettle. "And now let's get a move on us."

It would be unprofitable to follow in detail the fitting out of the wrecking expedition upon insufficient capital, and so be it briefly stated that the old lifeboat (which had passed through many hands since she was cast from the P. & O. service) was purchased by dint of haggling for an absurdly small sum, and victualed and watered for eighteen days. The Portuguese, who still refused to disclose the precise location of the wreck, said that it might take a fortnight to reach her, and prudence would have suggested that it was advisable to take at least a month's provisions. But the meagerness of their capital flatly forbade this, and they were only able to furnish the boat with what would spin out to eighteen days on an uncomfortably short ration. They trusted that what pickings they might find in the storerooms of the wreck herself would provide them for the return voyage.

The voyage did not begin with prosperity. There is always a strong surface current running through the straits, and just then the breezes were light. The lifeboat was a dull sailer, and her people, in consequence, had the mortification of keeping Carnero Point and the frowning rock behind in sight for three baking days. The two Portuguese were first profane, then sullen, then frightened; some saint's day, it appeared, had been violated by the start, and they began first to hint at and then to insist on a return. To which Kettle retorted that he was going to see the matter through now if he had to hang in the straits for the whole eighteen days, and subsist for the rest of the trip upon dew and their belts, and in this McTodd backed him up. Once started and away from the whisky bottle, there was nothing very yielding about Mr. McTodd. Only one compromise did Kettle offer to make. He would stand across and drop his Portuguese partners on the African shore if they, on their part, would disclose the whereabouts of the wreck, and in due time, when the dividends were gathered, he faithfully promised them their share. But to this they would not consent.

At last, however, a kindly slant of wind took the lifeboat in charge and hustled her wetly out into the broad Atlantic, and when they had run the shores of Europe and Africa out of sight, then Senor Antonio saw fit to give Captain Kettle a course.

"We was steamin' froma Teneriffe to Madeira when we saw thosa rocks with Duncansby Head asho'."

"H'm," said Kettle. "Those'll be the Salvage Islands."

"Steamah was pile up on de first. 'Nother island we pass after."

"That's Piton Island, if I remember. Let's have a look at the chart." He handed over the tiller to McTodd, took a tattered admiralty chart from one of the lockers and spread it on the damp floor gratings. The two Portuguese helped with their brown paws to keep it from fluttering away. "Yes, either Little Piton or Great Piton. Which side did you pass it on?"

Antonio thumped a gunwale of the lifeboat.

"Kept it on the port hand going north, did you? Then that'll be Great Piton, and a sweet shop is it for reefs according to this chart. I wish I'd a directory. It will be a regular cat's dance getting in."

"Those Canary fishing schooners land on the Salvages sometimes," said McTodd, "so I heard once in Las Palmas."

"Then there'll be fleas on the islands, whatever else there is," said Kettle. "I guess we've got to take our chances, Mac. If the old wreck's been overhauled before we get there it's our bad luck; if she hasn't been skimmed clean we'll take what there is, and I fancy we shall be men enough to stick to it. It isn't as if she was piled up on some civilized beach, with coast guards to take possession, and all the rest of it. The islands are either Spanish or Portugee. At the shortest we've got 700 miles of blue water ahead of us."

Open-boat voyaging in the broad Atlantic may have its pleasures, but these, such as they were, did not appeal to either Kettle or his companions. By day the sun scorched them with intolerable glare and violence; by night the clammy sea mists drenched them to the bone. For a larger vessel the weather would have been accounted favorable; for their cockle-shell it was once or twice terrific.

In this guise, then, they ended their voyage, which had spun out to nigh upon 1000 miles, through contrary winds and the necessity for incessant tacking; and in the height of one blazing afternoon there rose the tops of the islands out of a twinkling turquoise sea.

These appeared first as mere dusty black rocks sticking up out of the calm blue—Great Salvage island to the northward, and Great Piton to the south and beyond—but they grew as the boat neared them, and presently appeared to be built upon a frieze of dazzling feathery whiteness.

Great Salvage Island drew abeam, and passed away astern; Great Piton lay close ahead now, fringed with a thousand reefs, each with its spouting breakers. The din of the surf came to them laudly up the wind. A flock of seafowl, screaming and circling, sailed out to escort them in. And ahead, behind the banks of breakers, drawing them on as water will draw a choking man, was the rusted smokestack and stripped masts of a derelict merchant steamer.

There is a yarn about an open boat which had voyaged 1200 miles over the lonely Pacific, coming upon a green atoll, and being sailed recklessly in through the surf and drowning every soul on board, and the yarn is easily believable. Captain Kettle and his companions had undergone horrible privations; here at last was the isle of their hopes, and the treasure (as it seemed) in full view; but by some intolerable fate they were barred from it by relentless walls of surf. Kettle ran in as close as he dared, and then flattened in his sheets and sailed the lifeboat close-hauled along the noisy line of breakers to the norrard, looking for an opening.

The two Portuguese grumbled openly, and, when not a ghost of a landing place showed itself, and Kettle put her about to sail back again, even the cautious McTodd put up his word to "run in and risk it."

But Kettle, though equally sick as they were of the boat and her voyage, had all a sailor's dislike for losing his ship, whatever she might be, and cowed them all with voice and threats, and at last his forbearance was rewarded. A slim passage through the reefs showed itself at the southern end of the island, and down they dodged, trimming their sheets six times a minute, with an escort of dangers always close on either hand, and finally ran into a rocky bay, which held comparatively smooth water.

There was no place to beach the boat; they had to anchor her off, but with a whip on the cable they were able touch, and in the end she shot out into clear deep water to step ashore on a ledge of stone and then haul the boat off again out of harm's way.

It may be thought that they capered with delight at treading on dry land again, but there was nothing of this. With their cramped limbs and disused joints it was as much as they could do to hobble, and every step was a wrench. But the lure ahead of them was great enough to triumph over minor difficulties. Half a mile away along the rocks was the Duncansby Head, and for her they raced at the top of their crippled gait. And the seafowl screamed curiously above their heads.

They scratched and tore themselves in this frantic progress over the sharp volcanic rocks, they choked with thirst, they panted with their labor, but none of these things mattered. The deserted steamer, when they came to her, was lying off from the shore at the other side of a lake of deep water. But they were fit for no more waiting, and each, as he came opposite her, waded out of his depth and swam off with eager strokes. Davit falls trailing in the water gave them an entrance way, and up these they climbed with the quickness of apes, and then with one accord they made for the pantry and the steward's storeroom. The gold which had lured them was forgotten; the immediate needs of their famished bodies were the only things they remembered. They found a cheese, a box of musty biscuit and a filter full of stale and tepid water, and they gorged till they were filled, and swore they had never sat to so delicious a meal.

With repletion came the thoughts of fortune again, and off they went to the chart house to finger the coveted gold. But here was a disappointment ready and waiting for them. They had gone up in a body, neither nationality trusting the other, and together they ransacked the place with thoroughness. There were papers in abundance, there were clothes furry with mildew, there was a broken box of cheap cigars, but of money there was not so much as a bronze piece.

"Eh, well," said Kettle, sitting back on the musty bed clothes, "we have had our trouble for nothing. Sone one's been here first and skinned the place clean."

"Weel," said McTodd, rubbing his thumb tightly into his finger's end, "if I were a swearer I could say a great deal."

"The dagos are swearing enough for the whole crowd of us, to judge by the splutter of them. The money's gone clean; it's vexing, but that's a fact. Still, I don't like to go back empty-handed."

"I'm as keen as yoursel'. There's that £8 of my wages I left when I ran in Gib that's got to be made up somehow. What's wrong with getting off the hatches and seeing how her cargo's made up?"

"She's loaded with hides. I saw it on the manifest. There was Jimmy Mulready's G scrawl at the foot of it. That photo there above the bed foot will be his wife. Poor old Jimmy. He got religion before I did, and started his insurance, too, and if he's kept them both up he and his widow ought to be all right—by James! Did you feel that!"

McTodd stared round him. "What?" he asked.

"She moved."

"I took it for sure she was on the ground."

"So did I. But she isn't. There, you can feel her lift again."

They went out on deck. The sun was already dipping in the western sea, behind the central hill of the island, and in another few minutes it would be dark. There is little twilight so far south. So they took crossbearing on the shore and watched intently. Yes, there was not a doubt about it. The Duncansby Head floated and she was moving across the deep water lake that held her.

"Mon," said the engineer enthusiastically, "ye've a great head and a great future before you. I'd never have guessed it."

"I took it for granted she's beaten her bottom out in getting here, but she's blundered in through the reefs without touching, and if she's come in she can get out again, and we're the fellows to take her."

"With engines?"

"With engines, yes. If she's badly broken down in the hardware shop we're done. I'd forgotten the machinery, and that's a fact. We'll find a lantern and I'll go down with you, Mac, and give them an inspect."

The two Portuguese had already sworn themselves to a standstill, and had gone below and found bunks; but the men from the little islands in the north had more energy in their systems, and they expended it tirelessly. McTodd overhauled every nut, every bearing, every valve, every rod of the engines with an expert's criticism, and found nothing that would prevent active working; Kettle rummaged the rest of the ship; and far into the morning they foregathered again in the charthouse and compared results. She had been swept, badly swept; everything movable on deck was gone; cargo had shifted and then shifted back again till she had lost all her list and was in proper trim; the engines were still workable if carefully nursed; and, in fact, though battered, she was entirely seaworthy. And while, with tired gusto they were comparing these things weariness at last got the better of them, and first one and then the other incontinently dropped off into the deadest of sleep.

That the Duncansby Head had come in unsteered and unscathed through the reefs, and therefore, under steam and control she could go out again, was on the face of it a very simple theory to make; but to discover a passage through the rocks to make it practicable was quite another matter. For three days the old P. & O. lifeboat plied up and down from outside the reefs, and had twenty narrow escapes from being smashed into staves. It looked as if nature had performed a miracle and taken the steamer bodily in her arms and lifted her over at least a dozen black walls of stone.

The two Portuguese were already sick to death of the whole business, but for their feelings neither Kettle nor McTodd had any concern whatever. They were useful in the working of the boat, and therefore they were taken along, and when they refused duty or did it with too much listlessness to please they were cuffed into activity again. There was no verbal argument about the matter. "Work or suffer" was the simple motto the two islanders went upon, and it answered admirably. They knew the breed of the Portuguese of old.

At last, by dint of daring and toil, the secret of the passage through the noisy spouting reefs was won; it was sounded carefully and methodically for sunken rocks, and noted in all possible ways; and the old P. & O. lifeboat was hoisted on the Duncansby's davits. The Portuguese were driven down into the stokehold to represent double watches of a dozen men and make a requisite steam; McTodd fingered the rusted engines like an artist, and Kettle took his stand alone with the steam wheel on the upper bridge.

They had formally signed articles, and apportioned themselves pay, Kettle as master, McTodd as chief engineer, and the Portuguese as firemen, because salvage is apportioned pro rata, and the more pay a man is getting the larger is his bonus. On which account (at McTodd's suggestion) they awarded themselves paper stipends which they could feel proud of, and put down the Portuguese for the ordinary fireman's wages then paid out of Gibraltar, neither more nor less. For, as the engineer said, "There was a fortune to be divided up somehow, and it would be a pity for a pair of unclean dagos to have more than was absolutely necessary, seeing that they would not know what to do with it."

Captain Kettle felt it to be one of the supreme moments of his life when he rang on the Duncansby's bridge telegraph to "half-speed ahead." Here was a bit for fortune such as very rarely came in any shipmaster's way; not getting salvage, the larger part of which an owner would finger, for mere assistance; but taking to port a vessel which was derelict and deserted, the greatest and rarest plum that the seas could offer. It was a thought that thrilled him.

But he had not much time for sentimental musings in this strain. A terribly nervous bit of pilotage lay ahead of him; the motive power of his steamer was feeble and uncertain, and it would require all his skill and resourcefulness to bring her out into deep blue water. Slowly she backed and went ahead, dodging round to get a square entrance to the fairway; then with a slam Kettle rang on his telegraph to "Full speed ahead," so as to get her under the fullest possible command.

She darted out into the narrow winding lane between the walls of broken water, and the roar of the surf closed round her. Rocks sprung up out of the deep—hungry black rocks as deadly as explosive torpedoes. With a full complement of hands and a pilot for years acquainted with the place, it would have been an infinitely dangerous piece of navigation; with a half-power steamer which had only one man all told upon her decks, and he almost a stranger to the place, it was a miracle how she got out unscathed. But it was a miracle assisted by the most brilliant skill. Kettle had surveyed the channel in the lifeboat and mapped every rock in his head, and when the test came he was equal to it. It would be hard to come across a man of more iron nerve.

Backing and going ahead, to get round right-angled turns of the fairway, shaving reefs so closely that the wash from them creamed over her rail, the battered old tramp steamer faced a million dangers for every fathom of her onward way; but never once did she actually and gayly hit diamonds from the wave-tops into the sunshine.

It is possible for a man to concentrate himself so deeply upon one thing that he is deaf to all else in the world, and until he had worked the Duncansby Head out into the open Captain Kettle was in this condition. He was dimly conscious of voices hailing him, but he had no leisure to give them heed. But when the strain was taken off, then there was no more disregarding the cries. He turned his head and saw a half-sunk raft which seven men with clumsy paddles were frantically laboring toward him along the outer edge of the reefs.

Without a second thought he rang off engines, and the steamer lost her way and fell off into the trough and waited for them. From the first he had a foreboding as to who they were; but the men were obviously castaways; and by all the laws of the sea and humanity he was bound to rescue them.

Ponderously the raft paddled up and got under the steamer's lee. Kettle came down off the bridge and threw them the end of the halyard, and eagerly enough they scrambled up the rusted plating, and clambered over the rail. They looked around them with curiosity, but with an obvious familiarity. "I left my pipe stuck behind that stanchion," said one, "and by gum it's there still." Fo'c'sle door's stove in," said another; "I wonder if they've scoffed my chest."

"You Robinson Crusoes seem to be making yourselves at home," said Kettle.

One of the men knuckled his shock of hair. "We was on her, sir, when she happened her accident. We got off in the captain's boat and she got smashed to bits landing on Great Salvage, yonder. We've been living there ever since on rabbits and gulls and cockles, till we built that raft and ferried over here. It was tough living, but I guess we were better off than the poor beggars who got swamped in the other boats."

"The other two boats got picked up."

"Did they, though? Then I call it beastly hard luck on us."

"Captain Mulready was master, wasn't he? Did he get drowned when your boat went ashore?"

The sailor shrugged his shoulders. "No, sir. Captain Mulready's on the raft down yonder. He reels all crumpled up to find the old ship's afloat and you've got her out. She'd a list on when we left her that would have scared Beresford, but she's chucked that straight again, and who's to believe it was ever there?"

Kettle gritted his teeth. "Thank you, my lad," he said. "I quite see. Now get below and find yourself something to eat, and then go you forrard and turn to." Then, leaning his head over the bulwark, he called down, "Jimmy!"

The broken man on the raft looked up. "Hullo, Kettle, that you?"

"Yes, come aboard."

"No, thanks. I'm off to the island. I'll start a picnic there of my own. Good luck, old man."

"If you don't come aboard willingly, I'll send and have you fetched. Quit fooling."

"Oh, if you're set on it," said the other tiredly, and scrambled up the rope. He looked around him with a drawn face. "To think she should have lost that list, and righted herself like this. I thought she might turn turtle any minute when we quitted her; and I'm not a scare-man, either."

"I know you aren't. Come into the chart house and have a drop of whisky. There's your missis' photo stuck up over the bedfoot. How's she?"

"Dead, I hope. It will save her going to the workhouse."

"Oh, rats! It's not as bad as that."

"If you'll tell me, why not? I shall lose my ticket over this job, sure, when it comes before the Board of Trade, and what owner's likely to give me another ship?"

"Well, Jimmy, you'll have to sail small and live on your insurance."

"I dropped that years ago, and drew out what there was. Had to—with eight kids, you know. They take a lot of feeding."

"Eight kids? By James!"

"Yes, eight kids, poor little beggars, and the missis and me all to go hungry from now onwards. But they do say workhouses are very comfortable nowadays. You'll look in and see us sometimes, won't you, Kettle?" He lifted the glass which had been handed him. "Here's luck to you, old man, and you deserve it. I bought that whisky from a chandler in Rio. It's a drop of right, isn't it?"

"Here, drop it," said Kettle.

"I'm sorry," said Captain Mulready. "But you should not have had me on board. I should have been better picnicking by myself on Great Piton yonder. I can't make a cheerful shipmate for you, old man."

"Brace up," said Kettle.

"By the Lord, if I'd only been a day earlier with that raft," said the other musingly, "I could have taken her out, as you have done, and brought her home, and I believe the firm would have kept me on. There need have been no inquiry, only 'delayed,' that's all; no one cares so long as a ship turns up some time."

"It wouldn't have made any difference," said Kettle, frowning. "Some of those lousy Portuguese have been on board and scoffed all the money."

"What money?"

"Why, what she'd earned. What there was here in the charthouse drawer."

The disheveled man gave a tired chuckle. "Oh, that's all right. I put in at Las Palmas and transferred it to the bank there and sent home the receipt by the B. and A. mail boat to Liverpool. No, I'm pleased enough about the money. But it's this other thing I made a bungle of, just being a day too late with that blasted raft."

Kettle heard a sound and sharply turned his head. He saw a grimy man in the doorway. "Mr. McTodd," he said, "who the mischief gave you leave to quit your engine room? Am I to understand you've been standing there in that doorway to listen?"

"Her own engineer's come back, so I handed her over to him and came on deck for a spell. As for listening, I've heard every word that's been said. Captain Mulready, you have my very deepest condolences."

"Mr. McTodd," said Kettle, with a sudden blaze of fury, "I'm captain of this ship, and you're intruding. Get to Hamlet out of here." He got up and strode furiously out of the door and McTodd retreated before him.

"Now keep your hands off me," said the engineer, when he had been driven as far as the end of the fiddley. "I'm as mad about the thing as yourself, and I don't mind blowing off a few rounds of temper. I don't know Captain Mulready, and you do, but I'd hate to see any man all crumpled up like that if I could help it."

"He could be helped by giving him back his ship, and I'd do it if I was by myself. But I've got a Scotch partner, and I'm not going to try for the impossible."

"Dinna abuse Scotland," said McTodd, wagging a grimy forefinger. "It's your ain wife and bairns ye're thinking about."

"I ought to be, Mac, but, God help me, I'm not."

"Varra weel," said McTodd, "then if that's the case, skipper, just set ye doon here and we'll have a palaver."

"I'll hear what you've got to say," said Kettle, more civilly, and for the next half-hour the pair of them talked as earnestly as only poor men can talk when they are deliberately making up their minds to resign a solid fortune which is already within their reach. And at the end of that talk Captain Kettle put out his hand and took the engineer's in a heavy grip. "Mac," he said, "you're Scotch, but you're a gentleman right through under your clothes."

"I was born to that estate, skipper, and I no more wanted to see yon puir deevil pulled down to our level than you do. Better go and give him the news, and I'll get our boat in the water again and revictualed."

"No," said Kettle, "I can't stand by and be thanked. You go. I'll see to the boat."

"Be hanged if I do," said the engineer. "Write the man a letter. You're great on the writing line; I've seen you at it."

And so, in the tramp's main cabin below, Captain Kettle penned this epistle:

"To Captain J. R. Mulready:

"Dear Jimmy—Having concluded not to take the trouble to work Duncansby Head home, have pleasure in leaving her to your charge. We having other game on hand, have now taken French leave, and shall now bear up for Western Islands. You have no call to say anything about our being on board at all. Spin your own yarn; it will never be contradicted. Yours truly,

"O. KETTLE, Master.

"N. A. McTodd, Chief Engineer.—O. K.

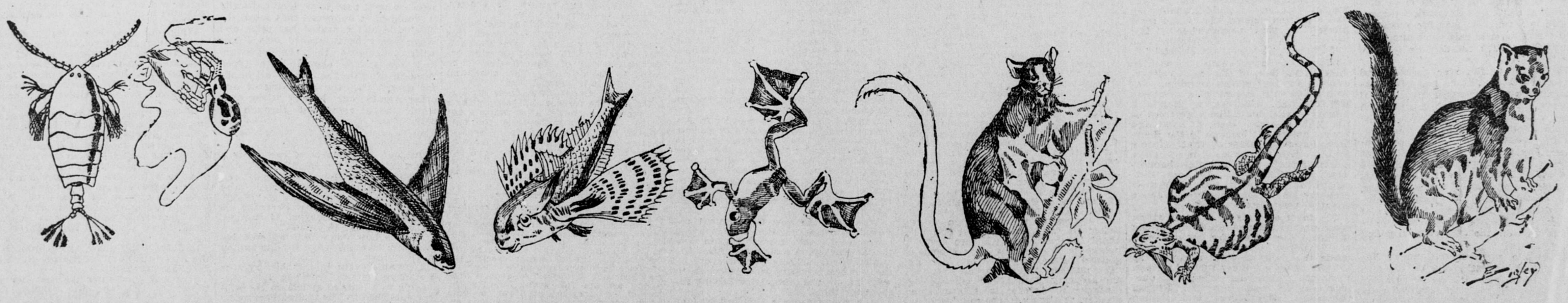
"P. S.—We take along those two Dagos. If you had them they might talk when you got them home. We having them, they will not talk. So you've only your own crowd to keep from talking. Good luck, old tin tacks."

Which letter was sealed and nailed up in a conspicuous place before the lifeboat left en route for Grand Canary.

It was the two Portuguese who felt themselves principally aggrieved men. They had been made to undergo a great deal of work and hardship; they had been defrauded of much plunder, which they considered was theirs, for the benefit of an absolute stranger, in whom they took not the slightest interest; and finally they were induced "not to talk" by processes which jarred upon them most unpleasantly.

They did not talk, and in the fullness of time they returned to the avocation of shoveling coal on steam vessels. But when they sit down to think, neither Antonio nor his friend (whose name I never learned) regards with affection those little islands in the Northern sea which produced Captain Owen Kettle and his sometime partner, Mr. Neil Angus McTodd. But at the same time they have a very proper and wholesome awe for the locality and its inhabitants.

STRANGE FISHES, FROGS AND REPTILES THAT FLY IN THE AIR.



FLYING CRUSTACEAN. BALLOON-MAKING SPIDERS. FLYING FISH. THE SWALLOW OF THE SEA. FLYING FROG. FLYING SQUIRREL. FLYING DRAGON. THE POLATOUCHE.

UNTIL quite recently it was generally supposed that in order to fly an animal must have wings. But now it is well known that several species of both land and water animals are possessed of the ability to sustain themselves and move with greater or less rapidity through the air for considerable distances.

It is interesting to know that yet another animal has long since solved the problem of aerial navigation—and one of as simple organization as the crustacean.

The discovery was made quite recently in Russia.

Dr. Ostroounoff, traveling in a boat along the shores of the Crimea, noticed what he took at first to be gnats, which seemed to leap up out of the water. Having captured some of them he was astonished to see that they were not insects at all, but crustaceans, which he recognized immediately as having been already baptized by Claus with the name of Pontellina Mediterranea.

These singular animals are absolutely without wings; but their feet are garnished with a kind of nap of long hairs, and the extremity of the abdomen carries hairy appendices something like feathers. They do not cut as many antics in the air as gnats and mosquitoes, and are only about four hundredths of an inch in length. The size, however, is not the important point in this case. It is the fact itself of a crustacean flying.

Next to this flying wonder comes the "flying fish," which lives in tropical waters. They have broad, winglike membranes on their long side fins. They leap suddenly from the wave and move through the air with rapidity for some twenty or thirty feet.

In company with the flying fish may be mentioned the "dactyloptere volant" of the Mediterranean, sometimes called the "swallow of the sea."

After the fish comes the flying frogs of the Sunda Islands. Their palmated feet are of comparatively large dimensions. On one whose body measured four inches in length Mr. Wallace found the spread of the membranous feet to be over twenty inches square.

Nature attains the same end by divers means in many cases. To give the crustacean, the fish and the frog the ability to fly she transforms as it were the ordinary locomotive members. With the reptiles, however, it is different, as in the case of the flying dragon, which has the skin stretched out on the sides by means of false ribs like those on an umbrella.

Among these may be mentioned the flying squirrel of the forests of Asia and North America. By means of their thin double skin parachute, joined to the fore and hind legs, giving them a broad spread of surface and a long, light tail for a rudder, they can not only fly from one tree to another several hundred feet away, but can change their course at will.

The "paloutauche" of Siberia, the "petaurists," with prehensile tails like mice, are other examples of flying mammals.

With all these examples of flying vertebrates the "pontilline" is the only one of the invertebrates so far known that can fly.