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THE OPERATIONS ON LAKE TANGANYIKA IN 1915

By COMMANDER G. B. SPICER-SIMSON, D.S.O., R.N.

On Wednesday, 28th March, 1934, at 3 p.m.

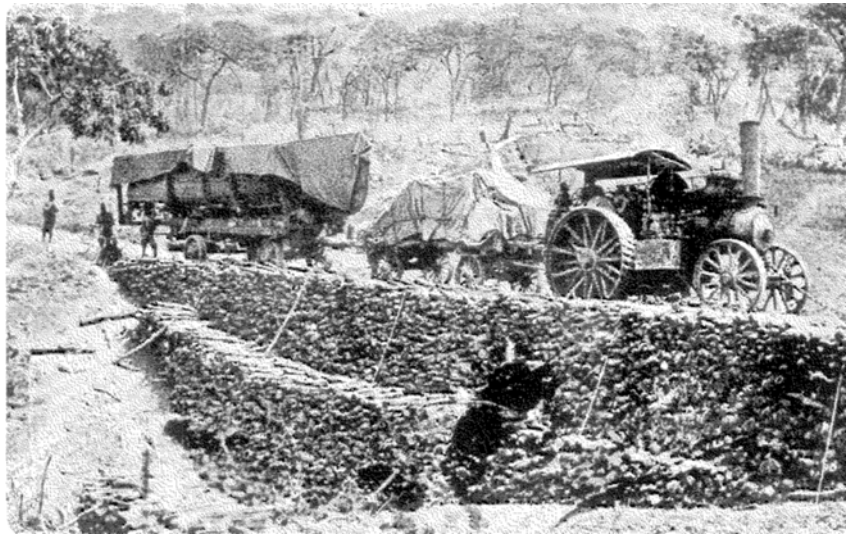
ADMIRAL SIR WILLIAM GOODENOUGH, G.C.B., M.V.O., in the Chair.

THE CHAIRMAN, in introducing the Lecturer, said that Commander Spicer-Simson had had a very varied and adventurous career. He saw service in China; he was on the Boundaries Commission in North Borneo; he made a triangulated survey of the Upper Yangtze; and between 1910 and 1914 he was the Director of the Gambia Survey. In 1915 he was sent out with a small party of officers and men on the expedition to Lake Tanganyika, which, if it was a minor operation of the War, was nevertheless one of great importance.

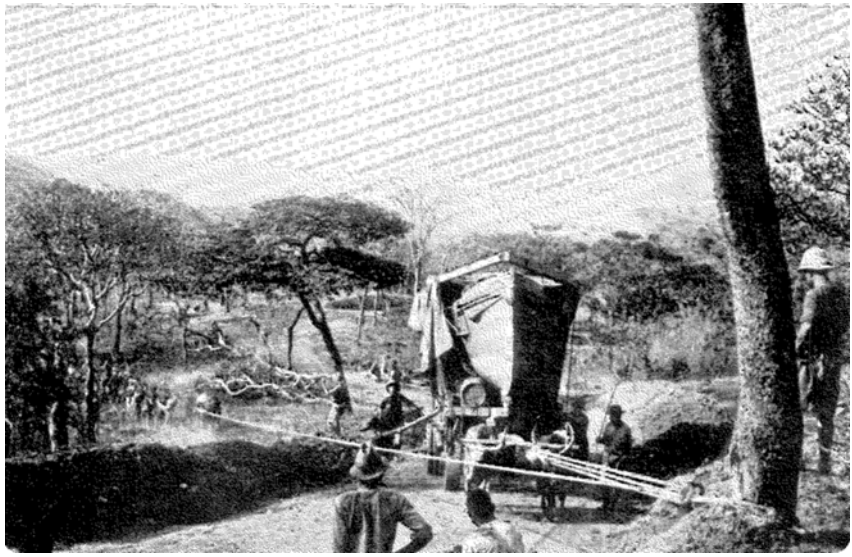
LECTURE.

LAKE TANGANYIKA is a very considerable stretch of water. It is as long as England from Southampton to the Scottish border—about 420 miles; but not very wide—the average width is only 47 miles, though there are places where it is over 70 miles wide. The prevailing wind is South-East, and blows straight up the Lake, when quite a heavy sea can be encountered.

The question of taking boats out there depended very largely on the size and sort of boats, and upon the means of transport available. We did consider taking craft in sections, but that would have meant special construction and consequently delay, while time was regarded as being of first importance. The only thing to do, therefore, was to look round for the most suitable boats available. In making my selection I had to review the potential routes to the scene of action. There were three means of access to the Lake. One of these was by railway from Dar-es-Salaam, right through German East Africa; naturally that route was closed to us. A second route was up the Congo, and thence by railway to the Lake; that would have been very easy but for the fact that in the Crystal Mountains, where the Congo breaks through, there is a succession of falls and rapids, where the Belgians—this being in the Belgian Congo—had built a narrow-gauge railway which passed through a very large number of tunnels and little

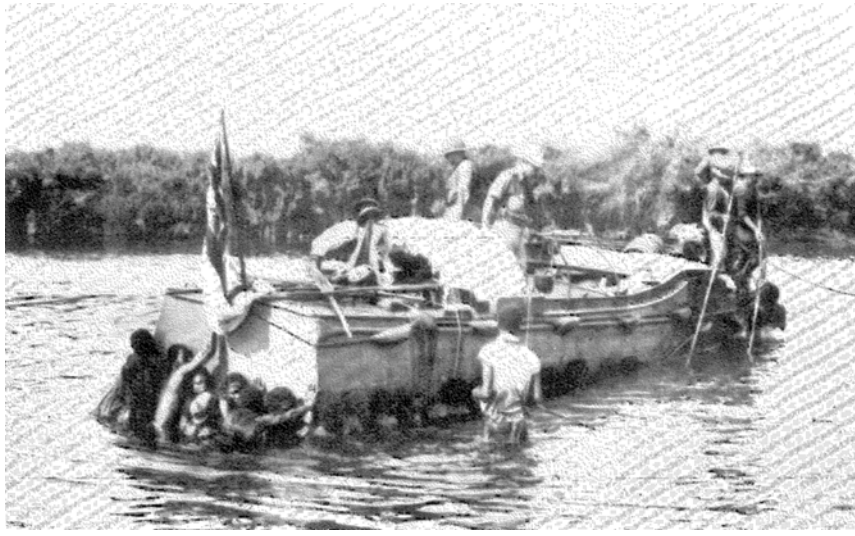


THE OVERLAND JOURNEY—A LOG CAUSEWAY

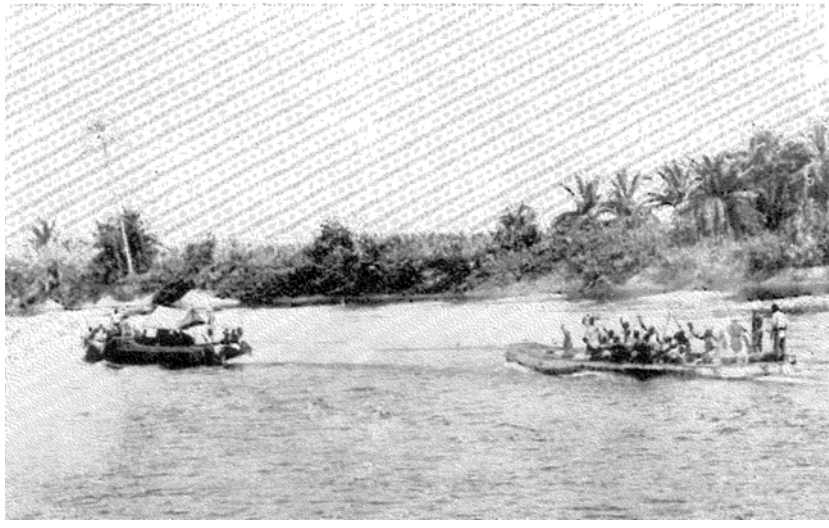


OXEN HAULING "TOUTOU" UP A STEEP GRADIENT

THE OPERATIONS ON LAKE TANGANYIKA 1915



LIFTING "MIMI" OVER SHALLOWS—UPPER CONGO RIVER



IN DEEP WATER—NATIVE CANOE IN TOW

THE OPERATIONS ON LAKE TANGANYIKA 1915

enclosed bridges. These would have limited any vessel that could have been got through to about 3 ft. beam.[1] We were left, therefore, with the only remaining route, namely—from Cape Town by railway to Fungurume (about 2,700 miles), from that point through the bush for a distance of about 150 miles to Sankisia, thence by rail (15 miles) to Bukama, and then about 200 miles down the river Lualaba to Kabalo, again entraining for the last part of the journey (175 miles) to Albertville, on the Lake.

Obviously the size of our boats would be limited by the stretch of railway, and the final determining factor appeared to be a certain bridge, but, as a matter of fact, when we reached that bridge the boats had to be taken off the trucks and slid along the track on their cradles. This was done by lowering them on to sleepers laid across the rails, which were well greased; the engine then simply towed them along through the bridge. Even so we had only about 7 in. clearance at the top.

THE BOATS AND THEIR TRANSPORT.

The boats we took with us were two small craft—the remainder of a batch of eight built just before the War for the Greek Government. These I named " Mimi " and " Toutou." They were 40 feet long and 8 feet beam, and had twin screws, and two 100 h.p. motor engines which used petrol. Their full speed was nearly 19 knots. As originally designed, they were not very suitable, because we had to mount some sort of gun on them So we cut down the forecastle and mounted a 3-pdr. hotchkiss forward. The ordinary mounting for this gun made the centre of gravity too high, so this also had to be cut down, and the gun-layer, instead of standing at the gun, had to kneel down to fire it. Anyone who has ever handled a hotchkiss gun will realize how much more difficult it is to fire it from a kneeling than from a standing position. Aft we mounted a maxim.

The petrol tanks were on and underneath the stern sheets, and I was a little afraid that, since the hulls were only $\frac{3}{8}$ in. mahogany, rifle fire might penetrate to the tanks; so we fitted thin plates to protect them—incidentally these helped to compensate for the weight of the gun forward. When these various operations were completed, however, the boats drew nearly four inches more than before, and could barely do 15 knots. However, the fastest enemy vessel on the Lake was reported to do only 12 knots, so I was satisfied.

In order to prepare our road, we had sent out a part of the expedi-

[1] The railway was a 12 in. gauge, with tunnels about 4 ft. wide. It has since been enlarged.

tion in the steamer before the one in which we left The order to organize the expedition was given on 22nd May, 1915. On 5th June the advance party—that is the road-making party—left England, and on 12th June we got the boats on board our ship, and the main party set forth. The advance party, having arrived, proceeded to build twenty miles of road ; then they simply pushed on through the bush for another thirty miles, and began to build the next section. This plan was adopted because I knew that it would take a considerable time to get the expedition away from the base, and that the advance of the boats would be slow. So I proposed to complete the 30-mile gap, which had just been blazed, while I was waiting for all the gear to be collected before we could make a start with the boats, and while these were doing the first twenty miles.

The boats were carried in cradles specially made for them by Messrs. Thornycroft. These cradles were built to a design of my own, but certain details were altered by the experts, who assured me that the light wheels they put fore and aft and the 6-in. by 2-in. supporting beam would be quite adequate to stand any strains likely to be thrown on them. I had stuck out for a 12-in. beam, and I was right. We had not gone more than 200 yards before the 6-in. beam broke. It was impossible to get a 12-in. beam locally, so we had to be content with two 6-in. beams. Instead of the little wheels fore and aft, which also showed signs of buckling, I got hold of some truck wheels that the railway were using for transporting their sleepers from the bush ; with these we made a sort of fore-carriage, the main wheels being shifted a little bit further aft. To tow the whole outfit along the roads we had traction engines. The boats' cradles were so fitted that they could be unbolted from their trucks for lifting on to the deck of a steamer or a railway truck.

THE JOURNEY TO THE LAKE.

On arrival at railhead, just beyond Fungurume, we had to unload the gear. We had 130 tons of ammunition, food and stores, which had to go with us. A good many of the natives who assisted us came from Rhodesia, and after we had been in the Congo for a little while we got a fair number of carriers, who took the smaller things. The lorry took the guns. While the expedition was being prepared for the long journey, work was started on the 30-mile gap in the road. Curiously enough some of my men suffered from snow-blindness at this time, although we were not far from the Equator. The fact was that the whole of the surface soil in the district is full of mica, and the brilliance of the reflection of the sun off that material produced the same effect as snow.

In making the road we also had to construct a good many bridges, and none of us knew much about that art. Lieutenant Wainwright, who had been ranching for some time in Southern Rhodesia, knew a little about bridge-building and road-making, but generally speaking we learned by experience. We made our first bridge by cutting down huge trees and laying them across the stream, fairly high piers being set up underneath; but when the first traction engine attempted to go across it just dropped through. Thus we learnt our first lesson; viz.: make the piers short for then the bridge is shorter and the piers less likely to fail. In the course of our travels we realized that there were other problems besides the actual building of the bridges. The time of year happened to be towards the end of the dry season, and the water-level of the streams was some way below the top of the banks; this meant that there was a considerable slope down to it on one side, and up from it on the other. The result was that the traction engine with its boat in tow got down on to the bridge, and then could not climb up again. The bridge was not wide enough for the other traction engine to pass, so the only thing to do was to build another, higher, bridge for the second engine. When it had got to the other side it helped the first traction engine to climb the bank; then the two engines were used to get the boats across. We built a very large number of bridges—over a hundred and fifty, if those of only 6 ft. or so are counted; but there were nearly a hundred of over 10 ft.

The great problem was to get the boats over the Mitumba Mountains, between Fungurume and Sankisia. There were many difficulties on this part of the route. At the top of the mountains the water runs off rapidly, with the result that the trees are small, and the local timber was inadequate to bridge the dry, but fairly deep, watercourses. However, we buried explosive charges in the two banks on either side and blew them up; the earth fell into the dried watercourse and filled it up to some extent. Meanwhile we collected as many of the local natives as possible,[1] and they were set to work cutting down trees and grading them according to length. The trees were laid in the gaps with their points inward and their butts outward, the longest being at the bottom, with smaller and smaller ones on top, until the gap was filled in. This sort of bridge looked quite satisfactory, but to walk on it while the boats were being taken over was almost impossible—it was like trying to walk on a spring mattress.

This section of our journey was about a hundred and fifty miles in

[1] The white man, for certain reasons, is not greatly esteemed on the Belgian Congo; however, the natives learnt that we were a different sort of white man, and within two days I had 1400 natives available.

length, so far as we could judge by bicycling along it and reading the cyclometers. I divided it into three fifty-mile sections, and at the end of each section we built a depot, which was guarded by three white men and one officer together with some natives. It was also necessary to build depots because a great deal of the ammunition and food we carried was marked "keep cool"—very good advice, but not easy to follow with a temperature in the shade reaching 118°, and in the sun 182°; moreover, having cut down the trees, we were deprived of their shade. Another discomfort was the dust made by the traction engines. What with the dust and heat, it was thirsty work.

Our lorry was marked "load not to exceed 3 tons"; but we found an abandoned ox wagon, took off the wheels and built a trailer; into the lorry we put a load with guns and ammunition of about 6 tons, and into the trailer a matter of about 1 ton. Each load was then run out from the railhead to the first depot, fifty miles out, where it was dumped. That would occupy a morning and part of the afternoon; during the rest of the afternoon the lorry and trailer would come back again, reaching our base camp usually just after sunset. While the stores were being moved forward, the boats were also progressing steadily in tow of their engines—ordinary agricultural traction engines from Northern Rhodesia.

For many miles we had to cut down trees and we used the branches to bind the surface of the track together. As time went on we gained experience in bridge building. We used to build out sections from both sides of the river and leave a gap in the middle; then a few men with poles would be placed on the two ends of these sections to keep the river debris moving through the gap. Just before one of the trains arrived, the gap would be closed and the train would pass over; then the bridge would be reopened. The object of this was to avoid our bridges being swept away; previously we had two bridges swept away by the collection of debris against them.

Another obstacle which we had to encounter was wandering swamps —swamps which actually move about. As one sees them on the surface of the water they look rather like water-lilies; the Belgians call them "water cabbage." There is nothing very much above water, but these aquatic plants, which is what they really are, throw out long hair-like roots, sometimes 6 ft. in length, not into the ground, but into the water. So dense do they become that they form a kind of barrage until the weight of water is sufficient to roll the obstruction before it. Sometimes when we had built our road we found that it was in the path of one of these wandering swamps, and the traction engines could not get through because their fire-boxes were so low that the fire would have been put out. Then we had to build another road round the swamp.

The country through which we went was mainly mahogany forest —African rosewood—although every now and then we came to open downs. Now and then we encountered a forest fire, probably caused by the natives, or it might have been spontaneous combustion. In any case it was not at all pleasant to see a sheet of flame coming down towards us at thirty or forty miles an hour. The best thing to do was to follow the plan of the natives and light another fire in the path of the big flames, so that when the latter reached the spot there was nothing to keep them alive.

Another thing which gave us trouble was ant-bear holes, into which on occasions the wheel of one of the boats' cradles would drop. These holes would measure as much as 3½ ft. in diameter, and were usually of some depth. Occasionally they were near the surface, and if any weight was placed on them they gave way. The danger was that, if a wheel dropped into one of these holes, the propeller shaft of the boat, which projected well below the stern, might be damaged. Eventually we got the natives to tap the ground ahead; with their finer senses, they could tell whether there was any hollowness, when they would scrape off the surface growth, thus marking the places to be avoided. Luckily no damage was done to the boats.

By and by we reached a spot where the surface was very sandy. I had been warned that there was a great deal of sandy country to traverse, so I had brought up from Southern Rhodesia sixty-four head of cattle. These beasts are excellent in sand, mud, swamps or anything of that sort, but they do not seem to be of much use for pulling up a hill. On reaching the mountains we put both traction engines on to one boat and went some little way up, but after a time we came to a stop. The traction engines could not get up the slope. Then we put the oxen in front of the traction engines, started up the engines and, as soon as the engines began to move, blew a whistle, which caused the oxen to move on, and so we got moving again. Very soon, however, the oxen got used to the whistle, and, incidentally, the hill got steeper, and they refused to pull any more. This was rather an impasse, and I learned afterwards that the Belgians were betting 100 to 1 that we would not get even half-way up—I wish I had known it at the time; I would have taken them on! Then the idea occurred to me of balancing the weight of the oxen against the eight tons or so which had to be pulled up. A purchase was attached to a tree, well stayed to others, about twenty yards ahead of the boat; one block of the purchase was made fast to the boat carriage, and the hauling part was made fast to a team of oxen facing down the slope. The oxen were then made to pull downhill, and in that way the boat came slowly up. We were still at no great height above the plain, and this same method had to

be repeated many times for each boat. Eventually we got to a point 4,200 ft. above the plain and 6,400 ft. above the sea. The top of the mountains was now beginning to come into sight. Here we actually got to a place where it was no longer very steep and we could use the oxen in the ordinary way. On 8th September we reached the summit.

We had thought that going down the other side would be quite easy, but that proved not to be the case. Our traction engines had no brakes, and there were no means of checking them from running away except that they were fitted to go astern. But on one occasion " Toutou's " traction engine, with steam on for full speed astern, was actually running away full speed ahead. Luckily it was checked before there was any serious accident. At one sharp bend in the descent the traction engine which was pulling " Mimi " suddenly turned broadside on, and the boat very nearly went over the edge. It was necessary to draw fires to prevent burning out the combustion chamber and tubes, and then to haul " Mimi " and the tractor up again by means of a cable. Fortunately we had plenty of natives with us to carry out the hauling operation by hand. Afterwards, instead of allowing the tractors to run down free, we used to bury a " dead man "—that is, several blocks of timber 20 ft. long—about 8 or 9 ft. in the ground, with a wire strapped round them and brought up to the surface, thus acting as an anchor; then by means of a hawser and bollard we managed to ease the traction engine gently down the slope.

At length we got to the bottom, in the valley of the Lualaba River, and only thirty-five miles from the river itself. Having reached that point we found ourselves running short of water. There were twenty white men and four hundred natives. We had been on an allowance of half a pint a day each, but now we had only ten gallons left. I sent out a lot of natives to scout for water, and luckily they managed to find it at a village, just as the traction engines had come to a full stop because there was not sufficient water in the boilers to allow us to keep the fires in. All the men from that village had gone on with our road-making party, but we bribed the women by supplying them with some gaudy waist-cloths—in that place a woman is regarded as over-dressed if she has two articles of clothing—and for these they were prepared to tramp a distance of eight miles carrying on their heads water from their well. They supplied us with sufficient for the traction engines, and we all had a wash and a bath and as much to drink as we wanted; that very night we were washed out of camp by a thunderstorm!

THE BOATS AFLOAT AGAIN.

That was the end of our troubles, for at Sankisia we reached the terminus of the fifteen miles of light railway to Bukama. There we

launched the boats into the Lualaba River—another name for the Upper Congo—and set forth to Kabalo. So, at last, " Toutou " and " Mimi " were afloat again after having been for four months high and dry, and the condition that they were in shows the care that had been taken of them by their crews. " Toutou " was absolutely water-tight, and " Mimi " only made 2 in. of water the first night.

We next proceeded to collect every native canoe we could lay hands on to transport our stores. The stores we put into them were mainly sacks of rice and flour, and so on. They went off in charge of Lieutenant Dudley, who could speak various Bantu dialects. Then we lashed underneath our boats four large empty petrol drums, two on each side of the keel. We wanted first to lift the boats as high as we could so as to load as much as possible into them and, second, to protect the propellers and shafts if we grounded. The river was very shallow at that time of year, so when we could not safely use the engines the natives propelled the boats with their long paddles until we reached deeper waters. If we ran aground—which we did continually—we used to get all the natives together, and at a given signal they would lift the boat and we would push her ahead with poles. As we were going down the river we were assisted by the current in getting over the shallows. On 9th October " Mimi " and " Toutou " went aground fourteen times in twelve miles—a record, I think, for H.M. ships.

When we reached the deeper water we cast off the empty drums and took some of the bigger canoes in tow. A little later I got a message from Dudley, who had gone on ahead to say that he had come across a shallow-draught river steamer with nobody on board but a caretaker. He sent word to ask whether I thought she would be of use to us. I replied that she would, especially as a Danish pilot, M. Mauritzen, who had been in the service of the Belgian Government, told us that there were rocks to be negotiated. Dudley thereupon went on board, but the native caretaker refused to let him take over the vessel; his orders, he said, were to keep her where she was until the crew arrived. Dudley invited him into the captain's cabin to discuss the situation and have a drink. He had arranged to be called away by one of his engine-room staff, and as he went out he locked the caretaker in; then he brought the vessel along to us.

We lifted the boats in their cradles on to the steamer's deck, using long trees cut down from the river bank and purchases as sort of extempore cranes. Thus we proceeded downstream to Kabalo, from which place 175 miles of railway ran up to the Lake. As a matter of fact the line stopped short thirteen miles from the Lake, and the Belgians assured me that it would be impossible to do the remainder of the

journey by rail because there were no more lines to be had; but we took up the rails behind us for thirteen miles and laid them in front of us!

ARRIVAL ON THE LAKE.

The place where we reached the Lake was Lukuga, and our first camp was in the little bay called Kalemie Bay. The Belgians had not much telephone gear available, so I went across to the other side to see what could be done about it: they had a small motor-boat armed with a Lewis gun, and I had been told that there was a telephone connecting all the military posts on the German side. We annexed a matter of about twenty-five miles of telephone wires and two instruments from the enemy, which provided us with the communications we wanted on our side.

I must say a word about our magazines. We chose a place on the hillside where the natives were not likely to go, burned off all the grass and dug a hole about 8 ft. deep, putting our ammunition at the bottom. On the top of this we put foodstuffs and other stores, over which we built a roof of palm-leaf thatch, covering the whole with tarpaulins to keep it all cool. It was as well we did make the clearing, because a fairly big fire came along shortly afterwards.

Before launching the boats on the Lake we had to construct a harbour to protect them from the violence of the seas raised by the prevailing South-East wind. Just before we arrived there two Belgian boats had been washed up on the beach. To have launched our boats in the ordinary way would have taken five or six hours, during which time the German ships might have come along and shelled us; so I devised a method of running them on railway trucks from their place of concealment into 10 ft. of water, and in each case the launching was accomplished in twenty minutes. An extension of the railway line was run out on to the breakwater, then down a fairly steep ramp into the Lake, until the lines had 10 ft. of water over them.

The Germans showed considerable interest in what was going on, and we learned that natives had reported to them that we were building a bridge across the Lake—this would have been no mean achievement, since it is 2,000 ft. deep in places. The enemy knew that we were up to something, however, and used to shell us. During one of his bombardments one of our trucks, which was full of stones, got smashed, but we left it where it was as a reinforcement of the breakwater. It was these attacks which caused me to revise the method of launching the boats to which I have already referred. Eventually they were floated out of their cradles on Christmas Eve, 1915. We had left England on 12th June, so that it had taken us five and a half months to get the

boats to the Lake. But it only took us five and a half weeks to get command of the Lake.

INLAND WATER ENGAGEMENTS.

The next day being Christmas Day we had a rest. It was the first time in the whole expedition that we had all been together, because hitherto the road-making party had been ahead of us. We had mounted the guns as soon as the boats were in the water—and, on the following day, it was my intention to carry out some trials to see whether the gun mountings were all right. It was Sunday, and at 6 a.m. all hands had mustered for prayers when one of the Belgian officers came up from the signal station to report that the fastest of the German steamers was heading straight towards the port. I completed the service, and then sent the hands off to prepare for action.

At 11 a.m. we steamed slowly out of harbour. Forty minutes later we were sighted by the enemy vessel, " Kingani." [1] She went ahead and turned away, so I steered to cut her off. At this time she was only about 3,500 yards away, and I noticed that she had only one gun, which was mounted in the centre-line of the ship, just in front of the wheel; immediately behind the wheel was the funnel, and immediately behind that the boiler-room skylight, and abaft that a small deck cabin. It was obvious, therefore, that she could not fire astern; so I manœuvred to get astern of her. She opened fire on " Mimi," and we returned her fire almost at the same moment. It was a naval action in miniature. By this time we had closed to about 2,700 yards, and the " Kingani " could no longer get her gun to bear on " Mimi," so she shifted her fire to " Toutou." But both boats got into a position from which they could fire on the enemy, though he could not fire on us. Actually " Toutou " never fired a round; but " Mimi's " first round carried away the " Kingani's " mast; then we fired twelve more rounds; afterwards we discovered that, including the one on the mast, she had received eleven hits. There was a choppy sort of sea, and Petty Officer Waterhouse, who was firing from " Mimi," had to be on his knees to fire, yet he made twelve hits out of thirteen rounds!

At 11.58 a.m.—eleven minutes after the action had commenced—the " Kingani " stopped, hauled down her ensign, and someone on deck waved a white handkerchief. It appeared that everybody on deck except one seaman had been killed, and that a shell had burst in the engine-room. This seaman did not know what to do, so he waved the white handkerchief. We tried to board her, but the sea was too much for us, and we damaged " Mimi " very considerably in the attempt-

[1] The original name plate of this vessel is in the Royal United Service Museum.

she had already been damaged by the recoil of her gun. Therefore the " Kingani " was ordered to go full speed for the shore, and we trained our gun on her. They declared that she was sinking, but actually she did not sink until just as she reached the harbour, when she capsized before we could run her aground, but nobody was lost. Her two officers and three seamen of the four carried had been killed and there were left only two engineers and one white seaman, besides some of the native crew. Later that same day the dead Germans were brought ashore and buried. A guard had to be placed over the graves to prevent the Askari, who still retain their anthropophagous habits, from digging them up.

We parbuckled the " Kingani " on to the beach, rolling her up broadside on. She had a 6-pdr. gun which had been seized from a ship in the Indian Ocean by the " Königsberg " ; this I shifted aft. Then we strengthened the deck forward with bits of old iron and mounted a 12-pdr. semi-automatic gun which had been sent out to protect our base. The " Kingani " was placed under the White Ensign and renamed the " Fifi." The new gun was really much too big for the ship, which was only 56 ft. long, while the gun itself was 12 ft. long ; when we fired it right ahead the recoil stopped the way, even when she was going at full speed.

There were still three German ships to be accounted for in these waters : the " Hedwig von Wissmann " and the " Graf von Götsen " —both larger than the " Kingani "—and the " Pangani," which was the " Kingani's " sister ship.

Although once or twice we heard fictitious stories about German ships having been seen, nothing happened until 10th February, except that a storm came up from the North-East and the " Toutou " was sunk. On that day the " Hedwig " was sighted from our look-out station at M'Toa, fifteen miles North of Kalemie. The vessel was first seen at 6.15 in the morning, and I estimated that she would be near us at 8.30. At 8 a.m. I put out in the " Fifi," followed by " Mimi." We sighted the " Hedwig " at 8.40. As soon as she saw us, she put her helm over and made off for the German side of the Lake. We had to chase her for about thirty miles before we got within range. I noticed that the " Hedwig " had only one gun—a revolving six-barrel 1-pdr.—which could bear astern; so I told " Mimi " to close to about 2,700 yards, which was about as far as her gun would fire with any accuracy, and to keep firing at the " Hedwig." The " Hedwig " had three alternatives : she could turn and attack " Mimi," or she could go straight on, or she could yaw from side to side so as to bring all her four guns to bear. She chose this third alternative ; but as soon as " Mimi " saw

the flash of the guns she put her helm hard over, and by the time the shell pitched she was some yards away.

After about an hour and a quarter, during which " Mimi " evaded damage by continuous zig-zagging, the slower " Fifi," with her heavier gun, got within range and opened fire. We fired a couple of rounds, and " Mimi " signalled " your rounds are going over." As a matter of fact, the captain of the " Hedwig " said afterwards that our second shot had carried away the end of the bridge, although it struck the water ahead of him. However, I ceased firing for about half an hour, and we pushed on as hard as we could go. At last we got to a range of about 5,000 yards, which was quite a reasonable one for that gun. We fired six rounds, and got on the target with our second shot, after which we used high explosive shell. These semi-automatics can fire 28 rounds a minute, and in two minutes the " Hedwig " burst into flames all over. When we ceased fire we could hardly see her through the smoke and flames, and her forecastle was under water. " Mimi " picked up the survivors—fourteen white men and quite a large number of native crew. Incidentally we picked up the captain and the ensign. The ensign, I believe, was the first German ensign that was captured in a naval battle in this or any war, and the " Kingani " was the first German warship that was brought into harbour as a prize and transferred to the Royal Navy.

The sinking of the " Hedwig " was an occasion for great native rejoicing, because the German flagship had amused herself, for no known reason, by steaming up and down the coast of the Belgian Congo and, whenever a group of natives were seen together, just dropping a shell amongst them. The natives accordingly hated the vessel, and as the action had taken place within sight of the shore—never more than 25 miles away—they had seen what was happening. They lighted fires and, when we got back to harbour, the native soldiers were loosing off their rifles, and the wives of the chief came to greet me as I landed. Their method of saluting is rather uncomfortable. The idea is to pick up a handful of earth and present it to you, indicating that their land is yours, but when, as in this case, they pick up handfuls of gravel and throw them at you it is not so pleasant.

This left the " Pangani " and the " Graf von Götsen " to be dealt with. One day, the " Pangani " mistook a small Belgian motor-boat armed with a Lewis gun only for " Mimi " or " Toutou," and promptly turned and fled towards the German coast; not looking where she was going, she ran on a rock. I went out in " Fifi," and we dropped a few shells to smash her up.

The " Graf von Götsen " was a more formidable problem. The

" Kingani " was only 56 tons, the " Hedwig " 160 tons, but the last enemy was a 800-ton vessel, and she was armed with four 10-cm. guns from the " Königsberg." We got torpedoes out from home, with dropping gear—the Admiralty had some difficulty in finding dropping gear, because it was out of date—but it seemed that we could never get at her. At length I asked the Admiralty whether they could supply us with some seaplanes. They said they could let us have the seaplanes, but no pilots, as all the pilots were wanted for the Western Front. We got some Belgian pilots, who had been running the mails up the Congo, and they went over and tried to bomb the " Graf von Götsen," but she would not come out of harbour. One morning, however, when we went over to bomb her she was not in the harbour any longer. For the next three weeks we were feverishly searching every bay, harbour and mouth of a river along the Lake from end to end, being fired at from the coast because the natives had got it into their heads that everything afloat was German. It was not until some three months later that we discovered that the Germans had come to the conclusion that the Lake was not a healthy place for them. Their smaller boats had disappeared one by one—they were not quite sure where they had gone to—and so they had just taken the " Graf von Götsen " out of the harbour and sunk her.

Our expedition went out with twenty-eight officers and men all told, and returned intact. We had not a single casualty of any sort, unless we must count a Sub-Lieutenant who, being threatened by a German native, hit him with his fist, and, his finger catching on the native's teeth, it had to be amputated because septic complications set in. Having finished our job, we disarmed our boats and handed them over to the army to do what they pleased with them. Actually they used them as transports. Then we made our way home. Lieutenant Wainwright and five other officers were awarded the Distinguished Service Cross, and most of the men got the Distinguished Service Medal. Thus ended the domination of Lake Tanganyika by the Germans.

There was no discussion.

The customary vote of thanks to the Lecturer was passed by acclamation.