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Sixteen Years of Polar Exploration

BY SIR HUBERT WILKINS.

COLONEL MESS:—May I make a progress report on behalf of the chairman of the membership committee. Mr. D. M. Goudy. This year we have added two hundred and fifty-eight members to the club, and our total is now one thousand four hundred and nineteen, which is a greater membership than we have had since 1931.

Colonel Mess continued:—Guests and members: "Wilkins the Explorer—the man who went under the ice in a submarine." That is how we think of him—not as a boy chasing kangaroos in the Australian bush; or, at the age of fifteen enrolling in three universities, the first to study electricity, the second to take a course in the liberal arts, and the third to study music; and later as an electrical engineer for a travelling circus, acting on the side as vocal soloist and playing the organ. Perhaps we have not heard of him as a cameraman for Gaumont, covering coronations and revolutions in Spain and Portugal. We may have forgotten that he was lost for twenty-four hours over the English Channel in a balloon, or that as a war correspondent with the Turkish army in the Balkans he turned pirate and captured a tug to rush his dispatches to a Black Sea port in order to evade the censors who had refused his story. We may not know him as a staff officer of the Australian forces, nor that when he heard of the war, he was somewhere near the Pole, and that he started off on foot, establishing perhaps the world's record for the longest distance travelled to enlist. Battles, wounds, decorations, citations, and from then on one expedition after another—Sixteen years of polar exploration—Gentlemen, Sir Hubert Wilkins.

SIR HUBERT WILKINS:—Thank you Colonel Mess. My introduction to polar exploration came many years ago

when I was entirely ignorant of what it meant and hardly realized the difference between Arctic and Antarctic. I was, in fact, on my way to undertake a tropical expedition in Brazil when I received a cable asking me if I would go to the Arctic. Now it happened that some years before this I had met Shackleton, and because of that experience was much interested and hoped some day I might go to the polar regions. On reading the message, I immediately jumped to the conclusion that I was to go with him to the Antarctic, and at once responded by sending a cable of acceptance.

There was no wireless in those days, and I had to send the money ashore in an envelope on the back of which I had written the message. That was all I knew about the journey till I reached London. Reading the cable over again carefully I noticed the word "Arctic" and wondered idly why he was going there instead of to the Antarctic, and thought perhaps a mistake had been made.

When I got to London I went to the Office and asked "When is Shackleton leaving for the south?"

They answered: "Shackleton? We don't know anything about Shackleton. You are going with Stefansson the great Canadian explorer who is representing Canada in the Arctic."

I said I didn't want to go with Canadians, but they told me that as I had accepted and all arrangements had been made, I must. So I made the best of it and started for Victoria. Since then I have come to know that Canadians were not as we had painted them in Australia— going out blowing the call of the wild and all working at chopping down little trees in the bush.

I want you to understand why I had such a great desire to go to the Polar Regions. Amundsen was my boyhood hero, largely because he had always seemed so efficient. But my particular interest in polar exploration was something quite different from what usually draws men to it. They mostly go in a spirit of adventure, following other heroes of exploration. Neither was my interest in geographical work, it was in fighting against the attacks of nature.

It happened that I was born of pioneering parents in a section of Australia that was subject to periodical droughts.

In 1900 an unexpected drought came along, and for the next three years we watched our animals starving to death, and instead of going to university, I had to spend three years driving stock to water, sometimes twenty miles away. We lost a hundred thousand head of sheep, three hundred horses and many head of cattle by starvation.

During those three years of watching people and cattle suffer, due to the unexpected drought conditions, I began to wonder why men allowed themselves to be so overruled by nature. I began to wonder why it would not be possible to understand the movements of winds and atmosphere, and gain some knowledge of climatology, so that we might be able to have some foreknowledge of coming drought conditions, and be able to store up sufficient food for our stock to tide them over the bad times.

I realized that after a three year period of drought, we were not prepared to take advantage of the good seasons, so that when the good times came immediately following the drought periods no one was able to take advantage of them, for, by the time we had made up our stock again, there came another drought.

I don't pretend that we can hope within the next few years to control weather conditions, but if we can only be prepared then, I believe it will be possible to reap such advantage as we can hardly conceive today.

I found out that if I wanted to do anything about it, I should have to do something else before I became a meteorologist. It was no use studying the weather from the point of view of Australia alone. The study must embrace the whole world. No atmospheric movements could take place around Australia without influence from other parts of the world. We really should be able to put ourselves outside this earth of ours and study it as a whole.

I realized also that many people were studying conditions in the equatorial and temperate zones, but that there were few at the ends of the earth. It so happened that when I came into contact with Shackleton and Scott that they had come back from the Antarctic with weather records of great importance, and I decided to look into the possibilities of further polar research, and I devised a scheme of world-wide meteorological research, with permanent stations in

the polar regions. If, however, we are to establish a number of stations we must first discover the most suitable places for observation. When I pointed out on the map what were likely to be the most suitable spots, I discovered they were still blank and unexplored.

I had always at the back of my mind the idea that I would devote my whole life to going to the polar regions and making them my study. Then came the opportunity, and instead of becoming a meteorologist I had to become an explorer.

So I set out to join Stefansson, and when he met me, I was the one member of his expedition whom he had not personally selected. He had said in London that he would like to take a man who would help to write reports and take photographs. He asked the London office to recommend such a man, and they picked on me.

I arrived in Ottawa all dressed up in pin-striped trousers and a cutaway coat, quite the latest thing from Piccadilly. He looked at me very coolly, I thought. He told me afterwards that, when I came walking into the hotel, he thought that at last he had let himself in for trouble, by deviating from his rule to choose his men himself.

"Here", he said to himself, "Is a man who will never stand the hardships—he is too much of a 'sissy'."

He told me, he was on the point of telling me to go back to London, but decided that as matters had gone so far, he would take the chance and let me stay. But after we had been in the Arctic for a few months, he appointed me second-in-command of his section of the expedition. That was because I was more or less adaptable and willing to take advice from a person of greater experience.

My point of view was: "Stefansson has nine years experience in the polar regions, and when he tells me to do a certain thing—such as to get into my sleeping bag naked when the weather is 40 degrees below zero—I am prepared to take his advice." Other members of the expedition thought it nonsense and wore their clothes or their pyjamas and soon developed an unpleasant ice condition in their sleeping bags. When they got in and the ice melted they were very uncomfortable. I found Stefansson's way uncomfortable at first. Then I found a method of keeping

warm and became very comfortable. I found it wise to follow the advice of an experienced man, and not try to introduce new ideas till the old had been tried and found faulty.

We lived more or less as the Eskimos lived and it was not as bad as some people had to put up with, though it had its revolting side. On one of my first trips we found a place where the bears had been digging into a whale carcase. We thought that whale was a good find as we needed meat, and we cut some off for ourselves. The Eskimos said to eat it raw. We followed their advice and it was not at all bad.

Some two hundred miles further on we came to a trader's house, and he asked us about the privations we had suffered from lack of food on the journey. We said there hadn't been any, and told him about the whale. "Yes", he said, "I remember that whale, I killed it seven years ago." Later on in the summer we passed it again and could not get within miles of it.

After getting the experience with Stefansson, I realized that it might be possible to carry on the work I had had in mind when I was a boy. After the war I was privileged to go back to the Arctic with planes, and some people got the idea that I was trying to race Byrd to the North Pole. Actually we were never in competition at all, for I flew to the north-west, hoping to find land for a meteorological station. We landed on the ice hoping to find shallow water, but the soundings I made. showed the ocean was eighteen thousand feet deep at this point. After further exploration, I came to the conclusion that there was not enough land to serve as a permanent base.

Meteorologists had told us that this was a key-position, because it was round here that the storms gathered and grew that cause so much unexpected damage in Canada and the United States. They wanted information from this part of the world, and when I found it was not possible to put a station on land, I told Stefansson it was just stupid. He replied that he had always thought that a submarine could do much more work. Furthermore, he said, you could take enough scientific supplies to make the work really worth while. On expeditions on foot very little could be carried along, and we were always in a desperate hurry because we were short of food. But at that time the cost seemed prohibitive.

After I had failed to find what I wanted with an aeroplane, I found it would be possible to get sufficient money to get a submarine to carry parties to the middle of the ocean area. I believed also that in addition to being the most efficient means, a submarine would be the most comfortable. It was about this question of comfort that people were most hard to convince. They said they thought it was stupid, and that we should freeze to death.

I pointed out that so long as we were in the water, we should never be below its freezing point.

Then they got worried about icebergs and said we should wreck ourselves by crashing into them. I pointed out that there were hardly any bergs in the Arctic, none at all like the huge ones found in the south polar regions. No berg was ever seen in the north that was over half a mile long, and none of even that size was ever seen in the Arctic proper.

Nansen, who was a very careful man, declared that the ice never exceeded fourteen feet in thickness. As the result of my trips, I came to the conclusion that about fifty per cent of the region is covered with ice, more than ten feet thick, about twenty-five per cent with ice not over two feet thick, and that the remaining twenty-five per cent will not have any ice at all. Actually there is open water five miles wide over the pole. I have travelled fifteen thousand miles in the Arctic, and never gone more than twenty-five without coming on a break in the ice.

We were asked how we could get up through the ice if that became necessary. Well, we can drill through the ice with a special drill, where it is more than ten feet thick. Then they wanted to know, what sort of a platform we should have that would give sufficient stability for the pressure on the drill. The submarine itself would be a platform. When it is pumped out, the buoyancy would give us a hundred tons of pressure. Where the ice is thinner than ten feet, that buoyancy would be enough for us to break through, without the necessity of any drilling. Actually if you calculated the weight of ten feet ice on the top of the submarine you would find it was only seven tons to every

hundred tons of buoyancy, exerted by the submarine. Actually we intend to come up through the breaks in the ice wherever possible. Otherwise, where it is necessary, we shall use the drill.

I will show you a picture of the Nautilus, lent by the United States government, and also pictures taken under the ice, for we found that the ice was transparent, and that there was ample light to take moving pictures.

Before starting on a submarine trip there is a great deal to be done in the way of preparation. The great thing to achieve is simplicity. One must simplify the mechanical parts of the vessel, as far as possible, to eliminate reasons for breakdown. We had aboard the navy submarine all the equipment and gadgets our friends could think of. We had, in the way of machinery, forty-seven electric motors and seven internal combustion engines, and I decided that this was a deal too complicated. Now I have found it possible, with the assistance of Vickers, Armstrong and Electric Boat Company engineers, to design a very simple ship to be built in England and go north next year.

The success of a submarine voyage depends on the skill of the crew, and one of the main reasons for a small simple vessel is that it can be operated by a small select crew, in this case only seven, all told.

(At this point Sir Hubert had the lights darkened and showed moving pictures of the Nautilus in operation. He explained that skids were built above the vessel to act as runners, and that the average speed was only about three miles an hour. The underside of the ice, he said, resembled a rather rough country road, adding that collisions with extra big bumps were unlikely, as it was possible to see fifty yards ahead, owing to the transparency of the ice. The films showed the general appearance of the under side of the ice, and Sir Hubert explained that the pictures had been taken with ordinary film, not the supersensitive variety in use today.)

The exhibition of moving pictures ended Sir Hubert concluded: What I am proudest of today is that it seems likely that this proposed expedition of mine will be made with the cooperation of some of your scientific associations in Canada and I shall consider that a great honour.

Colonel Mess:—Before I thank Sir Hubert, I should like to tell you that it was Bishop Wilkins, years ago, who gave Jules Verne the idea for his book "Twenty Thousand Leagues under the Sea", and it was Jules Verne's grandson who christened the American Submarine the Nautilus—after the vessel of his grandfather's story. I think you will agree with me that Verne's words "What a man can imagine, a man can do" have ample corroboration in the experiences of Sir Hubert.