

hard at taking it apart before he skipped ashore to see if any new pubs had been opened in the twelve months or so since he was last in Cardiff.

In my innocence I assumed that the Chief would have told the Captain the dynamo would be out of commission for at least two or three days but apparently not. So at the onset of dusk there came a messenger from the Captain asking me to start up the dynamo, and I had to explain why it could not be done. He was extremely annoyed but there was nothing he could really do about it; I was only the dogbody in the engineroom and was leaving the ship for good in two or three days, and I felt sure he knew I didn't like him very much anyway. He was not at all popular with the mates and engineers.

My last memory of the year I spent in the ship is pleasant as it is of the wonderful feeling of the double handful of gold coins and crisp Bank of England notes with which I was paid off, real money that I had earned literally by the copious sweat of my brow and every other part of me in the heat of the engineroom in the tropics.

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ITH THE EXAM FOR A SECOND

Engineer's Certificate looming ahead of me I had done a certain amount of studying as opportunity offered, both at sea and in port. I had also picked up odd bits of information and advice from men who had passed and obtained their certificates.

I had been told for instance that the Board of Trade surveyors in the various ports where the exams were held had a tendency to bear down on young men like myself of the minimum age at which it was possible to comply with the requirements as to apprentice training and sea time, before taking the exam. They were said to ask what were known as trick questions that comparatively few would be able to answer, especially in the viva voce part of the test.

It was said that the best way to prepare for this eventuality was to go to one of the established Crammer's schools for a short course beforehand, and I did this at a well-known school in London. Among other items of good advice from the proprietor was a suggestion to visit the display of models of marine engines in the South Kensington Museum. This was a very good display designed to trace the evolution of the marine engine from the very earliest types.

In due course I had reason to be very thankful that I had spent some hours in that section of the museum. The exam

took four days and what was regarded as the toughest part, the viva voce, was on the last day. Candidates who had failed one of the earlier parts did not reach the viva voce test.

It was with some trepidation that I went into the examiner's office and sat facing him across his desk. After a few preliminary remarks he pushed a sheet of paper and a pencil across to me and told me to draw a rough diagram of the valve gear of an oscillating cylinder engine. It was certainly a trick question if only because the type of engine was obsolete, and I doubt if any had been manufactured for some years, though possibly one might be found still in operation in some remote part of the world.

I would never have been able to comply with the examiner's request if I had not studied the models in the museum. As it happened I was able to produce the diagram he wanted and after that it was all plain sailing. He chatted with me about my voyages, occasionally interjecting a question that I was able to answer easily enough, and the ordeal was over, to my great relief.

My decision to emigrate to Canada had been made as the result of discussing the pros and cons of different countries with engineers I had met on ships in the various ports I had been in. At the time there was a boom in emigration to Canada and the passenger ships running to Canadian ports had their accommodation fully booked.

I did manage to secure a passage in a 4-berth cabin in the *Empress of Britain* of the Canadian Pacific Line, for which I paid the sum of 11 pounds sterling. It was much too crowded for comfort and caused me to resolve that I would never cross the Atlantic again unless I could have a cabin to myself. In the event my next crossing was at the expense of the Admiralty, when I went back to serve in the Royal Naval Volunteer Reserve in World War I, and shared a cabin with a very good friend I had made in Toronto, who was going on the same errand.

I stayed in Quebec for three days and concluded it was not a promising place for a young Englishman to seek a career, so took the train for Montreal and after three days there moved on to Toronto, where I stayed for 25 years, less the time spent on active service overseas in the R.N.V.R. in World War I.

Canada and the United States were enjoying a boom that lasted for two years after I arrived in mid-1911, and collapsed rather suddenly in mid-1913, some twelve months before the outbreak of war in 1914.

The summer of 1911 was very hot and I remember that in Toronto the official temperature was recorded for several weeks after I arrived, as 103°F. in the shade at mid-day. Many people were taken to hospital suffering from heat prostration, but I did not feel it so much as I had but recently come from doing my daily stint in a ship's engineroom in the tropics, and in much higher temperatures.

Jobs were fairly plentiful and skilled artisans were especially in demand, but there was a marked prejudice against Englishmen in some quarters. I had heard and read about this before I left England and had not been in Canada very long before I encountered it in operation.

English people were naturally inclined to resent this strongly but in time I came to understand that it was not entirely without cause. I met Englishmen of the working class who indulged the national propensity for grumbling to the full in Canada, continually making the most trenchant criticism of the many things of which they did not approve.

I think it is fair to say of them that they were not adaptable and in that respect temperamentally unfitted for emigration. It is also true that there were large numbers of immigrants from Scotland and Ireland, who came from the social class that persists in nursing ancient grudges against the disliked Sassenach, and welcomes any opportunity to annoy or embarrass any English who cross their path.

I had brought letters of introduction from relatives in England to Canadians who were, I found, in the category often referred to as "wealthy and socially prominent," but it did not take long for me to discover that such letters in Canada were not regarded in the same light as in England, and in any case it seemed better to "paddle my own canoe" in hunting a job.

I came across a number of young Englishmen who had been educated at one of the private boarding schools known as "Public Schools," where they had excellent education in the classics, also character training and discipline, but little or no training for any specific vocation.

They were first-class material as officers in the armed services but there were not enough commissions to go round in time of peace, and few of them had the private means needed to support that mode of life. Many came to Canada with some vague idea of learning to farm and then taking up some of the homestead land being given away by the government.

Learning to farm by working as virtually unskilled labour on an established farm, was "doing it the hard way," especially in the harsh winters of the Canadian climate, wages were very small and living accommodation extremely primitive.

It was not surprising in the circumstances that a number of the young Englishmen of this type ended by enlisting in the Royal Northwest Mounted Police, and I think it is true that the enviable reputation for devotion to duty enjoyed by the R.C.M.P. today, was built up by the men of the "Old School Tie" class from Britain, in the earlier days of the existence of this unique service. In those days the pay was too low and the standard of discipline too high to attract the majority of young Canadians, most of whom were more intent on making money in a business of some sort.

The Canadian banks did not employ women then but recruited many of their junior clerks in Britain, to come to Canada on a contract at a salary of \$40 a month, on which it

was barely possible to subsist without a supplementary allowance from home.

One thing we did not have to contend with in the second decade of the twentieth century was the current passion for university education, which is all very well when not carried to absurd extremes as it is today in some ways, I am convinced.

Because things were booming I had little trouble in finding jobs despite being English, which was definitely a handicap where I was, in Ontario. In other parts of Canada that might not have been the case, specifically I think in the west, but it takes time for a newcomer to find these things out and some have to be learned the hard way.

There was certainly a demand for men with the kind of technical training I had, though pay was not high and some of the jobs available offered only subsistence rather than a reasonably comfortable living. I had my experiences of what English people called "roughing it" in the Colonies, taking it for granted that living conditions in the "Colonies" were in the nature of things primitive and lacking in the amenities of civilized existence.

After trying various jobs for 18 months or so I stumbled more or less by accident into a job with an engineering firm, that had the Canadian agencies for several well-known English concerns of world-wide reputation.

These included makers of electrical equipment of all kinds, steam engines, gas engines, pumps and other assorted engineering items. I began as what was known as a "trouble-shooter," going out in response to calls received from customers about real or imagined trouble experienced with some item purchased from the firm.

For a time all went well and I liked the work for which my experience qualified me fairly well, though my knowledge of electricity was limited, and I had several narrow escapes from being electrocuted in the process of 'learning by doing.'

Incidentally I did have the opportunity to learn much about the business part of the operations of the firm, by which I mean the buying and selling and office routine, and what was very important in Canada then, the matter of getting paid for what was sold.

At the time Canada was developing rapidly and working capital was limited, so much business was done on credit; there were many instances of firms going bankrupt through extending credit to their customers unwisely, and in fact the firm for which I worked experienced that fate after I had been with them for about two years. This was sad for them but gave me the opportunity I wanted to start in business for myself, an example of the old proverbial saying about the ill wind . . .

The firm's troubles began when a general business depression started in mid-1913, in both Canada and the United States. In those days the economy of both countries was very much of the alternate "boom or bust" type. It was quite possible for the "bust" part of the cycle to be brought on by a serious crop failure in the mid-west United States or the Canadian prairies.

When so much business was done on credit, people generally were disposed to panic on slight excuse, banks called in loans to business firms some of which could not pay at short notice, unemployment increased rapidly and bankruptcies multiplied.

This sorry state of affairs had existed for more than a year when the outbreak of war in 1914 had the initial effect of giving panic and economic depression a great impetus. One large firm making electrical equipment reduced its staff and ordered a salary cut of 25% for those not discharged.

I was in the early stages of starting my own business as the Canadian agent for an American firm in Cleveland, Ohio, who were manufacturers of electric motors and dynamos, and specialized in equipment for electric welding, a process in which I had become much interested. It was in a very early

stage of development but I was convinced it had a tremendous future, and was happy to stake my own future on this new process.

The outbreak of war put me in a very difficult position. My problem was whether to drop everything and join the Canadian army or return to England to rejoin the territorial army unit to which I had formerly belonged during my time as an apprentice, or possibly go to sea again as an engineer in the merchant marine for which I was qualified. In the end I did none of those things immediately but went overseas on active service in the R.N.V.R. a year or so later.

When it came to the point I found it was not so easy for me to simply drop what I was doing and go off to the war, without feeling I had let down the American company whose agency I had in Canada, and a Canadian friend who had undertaken to give me the financial backing I needed in order to start the business, not possessing enough money of my own for the purpose.

Also I admit making the same error of judgment about the probable length of the war that was made by many people better fitted than myself to have opinions on the subject. At the very beginning the fighting was so fast and furious, and the casualties so heavy, it really seemed that it could not last long at that rate, and would be settled one way or the other in a few months at most. I thought it more than likely that if I did go off at once to the war, it would be over before I got close enough to it to see action.

It was not long before Canadian industrial firms began to realize that the war offered interesting possibilities for supplying munitions of all kinds to the British and Canadian armies. I believe one of the first orders of the kind was given to a manufacturer of farm machinery for a large number of horse-drawn wagons for the Army Service Corps.

The war on land soon settled down to the frustrating stagnation of trench warfare, with trenches stretching from Switzer-

land to the sea. Then reports came that the British artillery was so short of shells that the batteries were rationed to two or three shells per gun per day, and the making of shells in Canada quickly boomed into a major industry.

All this was grist to my mill in supplying electric motors to power the machine tools that made the shells and other items that made the war possible.

However, there came a time in 1915 when my business was going well and the only limit to its growth was in the number of motors that the factory in Cleveland could send to us. They were working to full capacity on war business in the United States and we could not expect any special favours from them.

I am not a war-like type but felt that to retain my self-respect I could not stay out of active participation in it indefinitely. By then it looked as if it would last a long time, perhaps several years as in fact it did. Also by then the business seemed established and on a firm footing, and my silent partner and the American company agreed to my going.

The papers contained articles about the Admiralty sending a mission to Canada to recruit young men with experience in sailing yachts or motor boats, for manning some hundreds of small, fast motor vessels, for anti-submarine work round the British Isles, in the Mediterranean and elsewhere.

The contract for these vessels was placed with a well-known firm in the United States, but America was technically neutral at the time, so it was arranged for all the various parts to be made in the United States and shipped to Canada to be put together and launched on the St. Lawrence River.

These small submarine-chasers were 80 feet long, had a maximum speed of 19 knots and carried a complement of 9, including 2 officers, 2 motor mechanics and 5 deck-hands. Armament was supposed to consist of a gun mounted on the fore-deck and four depth-bombs in launching racks at the stern. These bombs were quite formidable weapons when conditions were favourable for their use, as they contained 300

pounds of the powerful explosive TNT. Additional bombs were carried as spares in the magazine.

As usual in war-time this project for coping with enemy submarines was supposed to be highly "classified" but that did not prevent a great deal of rumour and gossip about it, much of which had little relation to the truth.

However, the idea appealed to me strongly because it seemed as if the experience I had had could be put to exceptionally good use in such craft, and the whole project had many advantages as compared with the deadly dull trench warfare in which the army seemed to be indefinitely bogged down.

I had done a lot of sailing in yachts on the south coast of England and on Lake Ontario, also motor boat cruising and racing. The territorial army regiment in which I had served during my apprenticeship trained in the coast-defence batteries in the Isle of Wight, which were equipped entirely with naval guns from the .303 Maxim machine gun up to the 12-inch calibre. It was reasonable to suppose that my experience in the engineroom at sea might be useful too, as the motor mechanics we had were nearly all garage hands with little or no marine experience.

The members of the recruiting mission that came to Canada made a tour of the country, visiting the yacht clubs on both coasts and the Great Lakes. I do not know exactly how many young men they gathered in but think it must have been several hundred altogether.

We were to start with the rank of Sub-Lieut., R.N.V.R. with the prospect of promotion to Lieutenant in 12 months if satisfactory. We were to receive pay at British navy rates for our rank, which were small by Canadian standards, 7/6 per day for Sub-Lieuts., equal to about \$1.85 or so at the time. As officers we had to pay for our food and there was no additional allowance for being married, which I was not then though some of my Canadian fellow officers were. It was in keeping with the tradition that commissioned officers in the armed