

HISTORY SPEAKS

JOHN KANNAWIN



WITH AN INTRODUCTION BY

HECTOR CHARLESWORTH

• Excerpts from Appreciations •

"I have just heard the 48th of *This Week in History*. It was an address packed full of information." — *Fort Covington, N.Y.*

"I have been given to understand that you are publishing the series *This Week in History* in book form. I trust I was correctly informed as I should very much enjoy reading those "Weeks" which I was not privileged to hear." — *Norwood, Ontario.*

"During the past year I have listened with great interest to your weekly series of talks on *This Week in History*. I understand that steps are to be taken to make the series available in written form. Please let me know how I may obtain one. I am a teacher and I feel that I could use these papers to great advantage in my work." — *Wales, Ontario.*

"I listened to a wonderful address over your radio station, by Jack Kannawin, on The Dardanelles." — *West St. John, New Brunswick.*

"I have listened with great interest to your series *This Week in History*. May I ask you to place my name on the list of those who wish to have these papers if and when they are published?" — *Lucan, Ontario.*

"A week ago to-night I had the pleasure of hearing *This Week in History*, when the subject was the ill-fated Morro Castle and after hearing it I decided I wouldn't miss next week's broadcast." — *Toronto, Ontario.*

"On Friday night last at 7.30, I listened to a most charming and instructive address on "Sir Christopher Wren" given over your station under the caption *This Week in History*." — *Seignory Club, Quebec.*

"It has been my great pleasure—a few moments ago to listen to one of the finest descriptions of the Halifax Disaster I have ever heard. There were several people gathered at my home for a game of bridge, not a sound was heard from the start of your story until the finish."

"Permit me to extend this humble tribute to *This Week in History* for your tribute to Woodrow Wilson. I have nothing but admiration for any American, and especially for Woodrow Wilson and his ideals."

History Speaks

contains thrilling narratives and biographical sketches on the following subjects:

The Halifax Disaster

Wings over the Atlantic—The Flight of Alcock and Brown

Louis Pasteur—The Father of Bacteriology

The Tragedy of The Empress of Ireland

The Last of the Romanoff's

The Story of the Quebec Bridge

Fire at Sea—The Morro Castle

Franz Schubert—Great Writer of Songs

The Tragedy of The Dardanelles

Sir Christopher Wren—Builder of St. Paul's

Florence Nightingale—"The Lady with the Lamp

The Shot that Killed Ten Million Men

Disaster on Parliament Hill

The German Revolution of 1918

David Thompson—Canadian Explorer

Woodrow Wilson and America's Declaration of War

Death in Antarctic—The Story of Robert Scott

The Storming of Zeebrugge

The Great Chicago Fire

\$2.00

ABOUT THIS BOOK and its Author

"From the outset, the Commission and its officers realized that Mr. Kannawin was making an important contribution to the knowledge of hundreds of thousands of Canadian listeners, and presenting his material in a way that would hold the attention of these listeners.

"Among myriads of other listeners, I myself became a follower of Mr. Kannawin's broadcasts, and turned to them whenever I had the time and opportunity. I did so not merely because the Commission, of which I was the head, was sponsoring them on the National Network, but because they appealed to me as a private individual who had spent many years of his life as a working newspaper-man. Only a listener of such experience could appreciate the amount of preparatory research involved in these narratives; and the instinctive gift for selection and condensation which Mr. Kannawin brought to his task.

"Mr. Kannawin takes us all over the world in his narratives, but the Canadian events which he describes are of special significance. Sometimes he deals with catastrophes, sometimes with biography, but always his writing is straightforward and salient The facts he presents are often more tragic than excess of words could make them, and are left to speak for themselves. In his emotional reticence he shows a fine literary discrimination that gives potency to an admirable narrative style. He is a Canadian who, in his clearness of thought and cogency of utterance, reflects honor on his Alma Mater—the University of Western Ontario."

HECTOR CHARLESWORTH.

HISTORY SPEAKS

HISTORICAL REMINISCENCES
BY A RADIO COLUMNIST

John Kannawin

FOREWORD *by* HECTOR CHARLESWORTH

Toronto

THE THORN PRESS

1937

S. J. REGINALD SAUNDERS

COPYRIGHT 1937

All Rights Reserved

PRINTED IN CANADA

To my Wife

FOREWORD

by

HECTOR CHARLESWORTH

It was with very sincere pleasure that I learned that the series of broadcasts, originally entitled, "THIS WEEK IN HISTORY", which were featured on Canada's National Radio Network for twelve months beginning at the end of April, 1936, were to become permanently available in book form. The work was undertaken by Mr. Kannawin on his own initiative, while I was Chairman of the Canadian Radio Broadcasting Commission, and I was glad when they were continued by the successors of that body, the Canadian Broadcasting Corporation.

From the outset, the Commission and its officers realized that Mr. Kannawin was making an important contribution to the knowledge of hundreds of thousands of Canadian listeners, and presenting his material in a way that would hold the attention of these listeners. The latter is a very important point in all broadcasting enterprise. A broadcaster may assemble information of the most highly instructive character, but his effort is futile unless presented in a manner that grips the attention of the listener and induces him to refrain from turning the pointer on the dial until it is over. He must successfully face the competition of jazz and many other

types of entertainment. In other words, he must employ all the arts of good newspaper work, whereby a reader is induced first to glance at an article, and then follow it to the end.

Among myriads of other listeners, I myself became a follower of Mr. Kannawin's broadcasts, and turned to them whenever I had the time and opportunity. I did so not merely because the Commission, of which I was the head, was sponsoring them on the National Network, but because they appealed to me as a private individual who had spent many years of his life as a working newspaper-man. Only a listener of such experience could appreciate the amount of preparatory research involved in these narratives; and the instinctive gift for selection and condensation which Mr. Kannawin brought to his task. Like most good work, these broadcasts were a labor of love, in which the long hours of preparatory work could not be recompensed.

Mr. Kannawin takes us all over the world in his narratives, but the Canadian events which he describes are of special significance. Sometimes he deals with catastrophes, like the burning of the Parliament Buildings at Ottawa, and the devastating T. N. T. explosion at Halifax; sometimes with biography, and I value particularly his account of the great explorer, David Thompson, whose trail covered countless miles of previously unmapped wilderness. But always his writing is straightforward and salient. The stories he tells are often melo-

dramatic, but he never indulges in pathos and rhetoric. The facts he presents are often more tragic than excess of words could make them, and are left to speak for themselves. In his emotional reticence he shows a fine literary discrimination that gives potency to an admirable narrative style. He is a Canadian who, in his clearness of thought and cogency of utterance, reflects honor on his Alma Mater—the University of Western Ontario.

C O N T E N T S

<i>Chapter</i>	<i>Page</i>
Foreword	5
Author's Preface	11
I. The Halifax Disaster	13
II. Wings over the Atlantic — The Flight of Alcock and Brown	23
III. Louis Pasteur — The Father of Bacteriology	34
IV. The Tragedy of the Empress of Ireland	46
V. The Last of the Romanoff's	57
VI. The Story of the Quebec Bridge	68
VII. Franz Schubert — Great Writer of Songs	79
VIII. Fire at Sea — The Morro Castle	89
IX. The Tragedy of the Dardanelles	100
X. Sir Christopher Wren — Builder of St. Paul's	111
XI. Florence Nightingale — 'The Lady with the Lamp'	121
XII. The Shot that Killed Ten Million Men	132
XIII. Disaster on Parliament Hill	143
XIV. The German Revolution of 1918	153
XV. The Great Tay Bridge Disaster	163
XVI. David Thompson — Canadian Explorer	173
XVII. Woodrow Wilson and America's Declaration of War	184
XVIII. Death in Antarctica — The Story of Robert Scott	195
XIX. The Storming of Zeebrugge	206
XX. The Great Chicago Fire	215

AUTHOR'S PREFACE

In presenting these pages of historical reminiscences which have been gathered under the title, "HISTORY SPEAKS", I should like to explain briefly the origin of the series, and the purpose for which it was primarily intended. Under the caption "THIS WEEK IN HISTORY", it was my happy privilege to enjoy fifty-two interesting weeks with members of the Canadian Broadcasting Corporation's audience, during which time we spent fifteen minutes each Friday evening in anniversary retrospect.

As the original title suggests, the conception of the idea was to choose, each week, an outstanding episode in history which took place sometime during that particular week. From those fifty-two radio scripts, this group has been chosen as representative of the complete series. It was felt however, that it would not be wise to leave them in their chronological order, nor would it be proper to alter them in any greater degree than that consistent with the demands of the book itself. For that reason, the material has been left much as in its original form, although the various episodes appear in a grouping which, it is hoped, will contribute some variety and a reasonable amount of contrast.

In this short word of explanation, I think it only proper that I should express again my deep

appreciation of the many kind letters and personal comments of the radio audience during the actual presentation of "THIS WEEK IN HISTORY". Whatever there may be of value in "HISTORY SPEAKS", the volume owes its existence to those who, by their constant encouragement and inspiration, made a pleasurable task of what otherwise might well have been a menial job.

John Kannawin.

Toronto, Canada, July 22nd, 1937.

Chapter I

THE HALIFAX DISASTER

HORRIBLE news of inconceivable portent was flashed to the ends of an already deeply harassed world on December 6th, 1917; news of the mightiest disaster in the history of the Dominion of Canada, and the greatest war-time catastrophe ever to be suffered by a belligerent country upon whose soil no actual fighting took place. On that day 2,800 tons of high explosive aboard the French munition ship Mont Blanc detonated in the Halifax Harbour; devastated two and one half square miles of the city; killed 1,266 persons, wounded 6,000, left 25,000 homeless and destitute, and rolled up a damage toll of \$30,000,000.

It was a quiet, clear, wintry Thursday morning, that 6th of December, 1917. The four venerable faces of the Halifax Town clock gazed north, south, east and west, upon a great and proud Canadian city whose justifiable lot it was to boast one of the finest natural maritime harbours in the world. The old clock tower marked the passage of time to 58,000 people whose city had been founded on a rock in the year 1749; the City of Halifax, capital of the picturesque Province of Nova Scotia, and wartime

winter quarters of the British North Atlantic Squadron.

To the west lay the historic Citadel commanding the mighty Atlantic; to the south a prosperous residential section; to the north the confines of the 24 square miles of Bedford Basin; and to the northwest the industrial and laboring district of Richmond, sloping rather steeply to the great piers and docks of Halifax Harbour. Gazing straight north across the harbour one saw the Dartmouth shore, and as the eye swung westward, that shore constricted at the point known as Tuft's Cove, only to widen again still further westward into Bedford Basin.

At 7.30 on the morning of December 6th, a French vessel with a sombre war-grey prow gently made her way into the entrance of Halifax Harbour and steamed carefully westward along the Dartmouth shore. She was a munition ship bound from New York to Halifax, headed for Bedford Basin to receive the official British examination before docking at pier 8 opposite Tuft's Cove. This was the ill-fated *Mont Blanc*, loaded with a sinister cargo of pictric acid, twenty drums of benzol and 2,800 tons of deadly trinitrotoluene. Carefully her pilot guided the dangerous vessel up the east shore, the more carefully when he sighted another ship approaching him from Bedford Basin obviously headed southward for the open sea. Through his glasses he made her out as the Belgian Relief Ship *Imo*, bound for war-torn Europe on an errand of mercy.

The pilot gave two blasts on his siren to indicate that he was going to starboard. The Imo came on in direct line. The Mont Blanc veered and blasted wildly a second time but the Imo misunderstood. Directly opposite Richmond's pier 8, both pilots, with the imminence of collision staring them in the face, rang for reversed engines and the tortured water churned violently astern, but it was too late.

At 8.30 A.M. the Imo rammed her sharp prow a quarter way through the Mont Blanc amidships and the burst drums of benzol sprayed through to mingle with the picric acid below deck. As great shooting, chemical-fed flames leaped toward the sky the crews of both vessels became panic stricken. Those of the Mont Blanc, knowing their cargo, abandoned ship in disorder and in their boats made for the Dartmouth shore with all dispatch. The Captain of the Imo, realizing the situation from the nature of the sinister flames, immediately put about for the same shore and shallow water. It was fifteen minutes before nine when this helpless, abandoned herald of doom with no hand to guide her and no voice to give desperate warning, drifted in the prevailing current ominously and relentlessly toward Pier 8 on the Halifax shore.

With devilish cunning the hour of maximum death-dealing potentialities had been chosen by the fates. Hundreds of innocent, light-hearted children played on their way to school, snow-balling one another in approved December style. Tardy ones were

unsuspectingly hastened toward their rendezvous with death by fond mothers, lest they be late for school—and the smouldering Mont Blanc drifted slowly southward. Workmen crowded the streets and the north end shops in a city swollen with the abnormal flux of war. They labored in a frame constructed, congested area close on the harbour shores innocent of the fact that 2,800 tons of fire-bombarded T. N. T. lay at their very doors awaiting but the appointed moment to blast them from the face of the earth.

The town clock boomed the hour of nine, business men settled behind their desks, school bells rang, industry hummed, and at that moment both harbour shores sprang to life with tragic futility. To the north the crew of the Mont Blanc beached their boats and made for the Dartmouth wooded areas. The Imo grounded off Tuft's Cove and her crew prepared to disembark. To the south at Pier 8 the terror stricken attendants of the fire station, now fully aware of impending disaster, frantically signalled for help. But Halifax was beyond human aid. At 9:04 the blasting blow-torch within the hold of the Mont Blanc gave a mighty roar, burst its confines and ignited the deadly explosive.

With an ear-splitting, screeching wail as of a million tortured souls, the great ship disappeared under the devastating blast of the monster concussion. It mounted unleashed, roar upon roar, mile upon mile, picked up by the vacuum pocketed air, a

mighty thunder building upon itself during one century-long second of cataclysmic agony. It shrieked from the depths of the earth to the very roof of heaven and with it mingled the death cries of humanity. Mutilated bodies blown high in the staggered air literally rained upon the wretched city. Hundreds of tons of shattered brick and stone, timber and metal bombarded the devastated area for blocks, and the entire North section of two and a half square miles was reduced to a shambles of twisted wreckage such as the human mind can scarce comprehend. The gigantic blast had raised a tidal wave in the harbour which drove south forty feet over the Intercolonial tracks sweeping away to destruction 300 loaded freight cars, 100 passenger cars and 20 locomotives. The wave tumbled north to the Dartmouth shore killing every man above deck on the relief ship *Imo*. Wooden buildings along Water Street poured their wreckage into the corpse-choked thoroughfare, and fire, the demon scavenger, burst out in all its horror to consume what little remained.

Thousands of men, women and children, wounded but still able to move, fled toward the southern section of the city when news was passed by word of mouth that there was great danger of the dockyard magazine exploding, and in a space of seconds Barrington Street resembled a Belgian refugee road. Every conceivable variety of vehicle was pressed into service to transport the sick and

wounded. They staggered through streets lacerating their feet on splinters of thousands of window panes blown out by concussion. Six hundred and sixty persons were blinded by the flying glass. Stores were forsaken, homes deserted and parks crowded with refugees who rushed about in panic. Wild rumours circulated and every bearer of tidings surrounded. The stories lost nothing in the telling until the brain reeled and the heart grew sick with the realization of the utter horror and desolation of the mighty disaster.

So the hours passed, and grim darkness approached to still further accentuate the consuming purpose of the flames in the north, and still the pathetic treck continued south. There were nuns who had left the cloistered quiet of their convents. Old bed-ridden ladies were being carried along in sheets. Half-dressed mothers with babies wrapped in blankets hurried past. Blind men were being led by little boys; little girls clutched their cats and pet dogs. Chinese, shaken from their celestial calm, careened southward. Motors, wagons, perambulators and bicycles augmented the heterogenous army of terrified survivors with but one thought in mind —to get away. And then—the word was passed that the dock-yard magazine had been flooded, the fires had died down somewhat, and Halifax again turned its face northward.

To those thousands of grief-stricken, wretched people who had lost their very all, it seemed as

though some giant monster with a great scythe had hewn down the entire northern district with one mighty sweep, and had then breathed fire upon it. Everywhere about were dead and dying persons, and the pitiful wails of men frantically clawing at debris in an effort to find loved ones can better be imagined than described.

From the sugar refinery to Creighton Corner one could see nothing save splintered, charred timbers, powdered brick and stone, and human bodies. On the shore less than two hundred yards away lay the war-grey prow of the *Mont Blanc* all that was left to mark her violent passing. To the left, a dozen sunken piles and one distorted steamer slammed bodily against a pile of wreckage which had once been a dock, was all that was left of Piers 7, 8, and 9. A few blackened timbers along the tracks represented the Richmond Station in which every employee was killed. All through the devastated area piles of burning coal, of which there was an acute shortage, smouldered and gleamed ironically and threw a ghostly light over the shattered city. The North Street Station, familiar to thousands on both sides of the Atlantic, was a windowless, roofless skeleton with not one square inch of platform space free from splintered glass.

Word of the horrible Halifax disaster was flashed to the North American continent on one solitary telegraph wire which the explosion had not destroyed. Every other means of communication;

telephone, road, railway and wireless, had been blasted from the face of the earth in that one awful moment. The news reached the adjoining American City of Boston, which had long had friendly and close relations with stricken Halifax, and in a space of hours a relief train was organized to fly to the rescue. Doctors, nurses, workers of every type and description volunteered and were hurriedly enlisted. Thousands of panes of glass, hundreds of pounds of putty and a small army of expert glaziers journeyed north to protect the survivors of the Halifax disaster from the cruel winter winds. Special trains simultaneously left from Moncton, Truro and Windsor, headed for a city which lay to a large extent an indistinguishable shambles virtually under martial law. Victoria General Hospital which was crowded to the roof with terribly wounded and burned survivors, resembled a war-time front-line dressing station. All public buildings that remained standing; churches, Y.M.C.A., hospitals, schools and even private homes, were hastily converted to temporary relief quarters and the army of wounded carried in.

So the morning of December 7th dawned, and the cruel fate which controlled the destiny of that broken city looked down and refused to relent; for Halifax found itself in the throes of the wildest weather the Atlantic coast could produce. A lashing Nor'easter, burdened with snow and sleet, swept the city at forty miles per hour—a city with over

1,200 dead, 6,000 wounded and 25,000 homeless—a city whose buildings had few if any windows!

The Boston relief train was snowed in; rescue workers were forced to suspend operations and a thick pall of snow covered the blackened ruins of the north end. The destitute were protected by barriers of tar paper hastily erected in window frames. The blizzard carried its chill contact in a falling temperature over thousands of beds of pain, and the horror of disease was added to the already crushing burden. For fifteen hours it raged, and then the winds abated and the rescue workers of Halifax were given an opportunity to save human life.

The heroic work which was carried on under the most trying circumstances by several hundred volunteers can never be forgotten. Nothing was too much, and no task was too great. 25,000 homeless people and 6,000 wounded were cared for. With the railway equipment 90 per cent destroyed, yet facilities were provided to relieve the city by moving many of the wounded to adjacent neighborhoods. Hundreds of units of anti-toxin were rushed to the explosion-shattered district to protect its citizens from dread pneumonia and tetanus. Temporary structures were erected and hundreds of panes of glass replaced. Man in all the compassion of his finer nature had rushed to the aid of his fellow sufferer.

A strange sad Sunday dawned on December 9th in the old City of Halifax; probably the strangest and saddest in all the world. Broken and emotion-

less, struck dead as it were on the post of duty, stood the hands on the southern face of the town clock, pointing like two ghostly fingers to the hour of 9:04—the hour of the greatest tragedy in the history of Canada. There were no sweet Sabbath bells to call the righteous save those of historic St. Paul's, more than a century old, and those chimes were less a call to the living, than a requiem for the dead. Benumbed and heartbroken, holding all things alike, Halifax, questioning this inexplicable thing that had befallen it, reverently laid away her dead—many in the Fairview Cemetery, where rest the recovered bodies of the ill-fated *Titanic* disaster.

And then Halifax turned her face resolutely toward the future—to the rebuilding of her great city and to the business of war itself, which indirectly, had all but destroyed her forever. And Halifax did rise again, from the ashes of despair and the twisted shambles of violent destruction, to regain her enviable position in the world of affairs as one of the greatest sea-ports on the continent, laid in a garden province of the great Dominion of Canada.

Today we salute this new Halifax, but, in our brief moment of retrospect, we reverently honor the memory of 1,266 persons who lost their lives in the greatest tragedy ever recorded upon the pages of Canadian history.

Chapter II

WINGS OVER THE ATLANTIC—THE FLIGHT OF ALCOCK AND BROWN

DURING the early months of the year 1919, events of great importance from a pioneering standpoint were shaping themselves with such confusing rapidity that the eyes of the world were focused upon the drama to the exclusion of almost every other thing. The centre of this seething scene of activity was the Great Circle route of rolling waste known as the North Atlantic, and the players in the fascinating thriller, a group of the world's most intrepid aviators. Yes, the war was over, and one could again turn one's hand to those almost forgotten tasks, which had been dropped literally in mid air when the battle cry went forth. The Atlantic had not yet been conquered by air nor had any attempt been made to fly its treacherous wastes since the year 1914. On June 15th, 1919, with attempt after attempt coming in quick succession, an Englishman and a Scotsman flew the Atlantic from West to East in a heavier-than-air machine—and they flew it non-stop. The later exploits of such men and machines as Lindbergh, Byrd, Post, Gatty, Mollier; the American Clipper Ships, the Graf and Hindenburg dirigibles have paled into insignificance the fickle public memory of the first men to fly the At-

Iantic non-stop, yet they flew a pioneer course; blazed the trail for the world of aviation in an open cockpit bombing plane which today, in comparison with our modern, luxury air-cruiser, might easily be mistaken for a box-kite. Their names were John Alcock and Arthur Whitten Brown!

In the year 1913 Viscount Northcliffe offered the Daily Mail award of £10,000 as an incentive to the first Britishers who would fly the Atlantic in either direction. Even then the east to west route was considered too treacherous because of failing daylight and prevailing winds; all thought was toward a crossing from North America to Europe. In 1914, war was declared, with the resultant cessation of all activity in any other direction, but in the spring of 1919, aviation again turned its attention to the conquest of the Atlantic and the winning of the handsome Daily Mail Award. Though not eligible for the British prize, the American Navy offered sporting competition with its famous NC massed flight. The four Navy-Curtis flying boats left Long Island on May 8th, 1919 bound for Trepassey Harbour, Newfoundland. Three of the ships arrived safely, and on May 16th took off for the Azores, their next stopping place. Only the NC 4 successfully reached the Azores without assistance from American Destroyers and later the ship made the last leg of the journey to Lisbon. Thus had an American plane made the first crossing but the flight had yet to be accomplished non-stop.

The British pilots who had entered the race for a May or June crossing and the Daily Mail award were Harry Hawker and Lieut.-Commander MacKenzie Grieve with their Sopwith Biplane the "Atlantic"; and Captain John Alcock and Lieut. Arthur Whitten Brown with their Vickers-Vimy-Rolls Bomber. Their machines had been brought to St. John's, Newfoundland; set up in preparation, awaiting only favourable weather to make their start. Both crews had decided on the Great Circle non-stop route of nearly 2,000 miles. It is only natural to suppose that a prize of £10,000 would create a tremendous rivalry between the two camps and although they passed the weary days in companionable entertainment, they watched each other's movements with friendly suspicion. At last the suspicion became absurd to both of them and an inevitable agreement to give each other two hours notice of an intention to start relieved the tension. But the weather continued to control the situation.

The following Friday evening, May 16th, the three huge flying boats carrying the Stars and Stripes thundered out of Trepassey Harbour for the Azores and this spurred the Britishers to make their start if the Americans successfully reached their first port of call. The next evening a report that the NC 4 had reached the Azores settled the issue, and on Sunday afternoon one small plane with two men on board was ploughing a difficult course with a faltering engine for Ireland, with no reassuring destroyers

in the grey forbidding track below to give them confidence. Hawker and Grieve had taken off. The world knows what happened; how Hawker fought his protesting motor with ultimate failure; how civilization gave them up as lost only to see them snatched from a watery grave by the small Danish vessel "Mary". Hawker and Grieve had lost but they had made their contribution to the great science of aviation.

Meanwhile the Daily Mail Prize was still to be won, and Alcock and Brown lay storm bound in Newfoundland, champing at the bit, anxiety testing them in the extreme. But their confidence could not be shaken. Their experience had been wide and telling; their plane the best available. Alcock was a Royal Naval Air Service man who had served throughout a great portion of the war as a bomber in the eastern Mediterranean where he had shown exceptional bravery, winning the Distinguished Service Cross. In 1917 he was shot down and captured by the Turks. Arthur Whitten Brown was one of the few men qualified for the position of navigator. His war record began in 1914 in the University and Public School Corps and, with a commission in the Manchester Regiment, he served in France in 1915, following which he trained as an observer with the Royal Flying Corps. Brown too was taken prisoner in 1917 when he was severely wounded. Without doubt Brown's studious navigating ability together with Alcock's practical flying experience made an

admirable partnership for the great attempt which they were about to make. Their ship was a Vickers-Vimy-Rolls which had been built as a bombing plane. It had two 350 Horsepower Rolls-Royce motors with a cruising speed of 120 miles-per-hour. With 865 gallons of gasoline she was calculated to have a flying range of 2,440 miles with only 1,950 miles to go from Newfoundland to Ireland.

On Friday, June 13th, almost a month after the near tragedy of Hawker and Grieve, the Vimy was filled with fuel and water in preparation for an early start on Saturday morning, but a strong cross wind again thwarted Alcock's intention and he was forced to wait until late afternoon when he threw caution overboard and climbed into his cramped cockpit beside his navigator. With a roar that threatened to shake her apart, the Bomber responded to the gun and raced down the narrow apron that led through an uninviting valley; lifted her nose at the 300 yard mark in response to the stick; circled the city of St. John's and pointed toward the broad Atlantic over which lay the menacing Newfoundland fog banks. Alcock and Brown were away.

Seated side by side in their open cockpit, the two fliers were almost immediately cut off from the outside world by the failure of their wireless apparatus. The propellor which operated their power supply was carried away by the slip stream, and with it went a couple of wire stays. Brown noticed the serious accident to their wing but told

Alcock nothing other than that their wireless equipment was dumb. Alcock later gave the information that, had he known of the more serious damage, he would have turned back immediately. But the Vimy carried on with a plunge into banks of fog which for the next seven hours made navigation utterly impossible, and which led Brown to believe that his meteorological information had been incorrect. His only alternative was to use bergs and wave sights for astronomical observations. With darkness increasing the weather became even less favourable, but at midnight the atmosphere temporarily cleared and their position was computed from the stars Vega and Polaris with a moonlight cloud horizon to assist. Thirty minutes later they entered an obscure, bumpy section of air which suddenly brought them to the very brink of disaster. Alcock caught the Vimy spinning, probably due to the fact that there was no horizon with which to level her; added to this the air speed indicator had stuck, leaving him no warning of loss in momentum. It was a steep spin from 4,000 feet which couldn't be checked without a horizon and it brought the Vimy tumbling down toward the ocean. Had the fog bank extended to the surface the biplane would undoubtedly have crashed carrying Alcock and Brown with it as the first human sacrifices in the conquest of the Atlantic. But they suddenly emerged into a clear area giving Alcock a glimpse of his dangerous angle with respect to the ocean. Under his skillful hands the big bomber

came up on an even keel, zoomed into a bank, rolled to safety with such a horrifying sensation that Alcock was persuaded that he had executed an outside loop in his excitement. The Vimy had been almost on her back when the Atlantic came into view. Their escape had been as close as was Hawker's.

Fog continued to clog their course though they climbed and climbed to seek clearer altitudes. Only occasionally could Brown glimpse the moon for observation; dead reckoning proving to be their only salvation. Sleet and ice clotted the wings and fuselage, at one period freezing up the aileron hinges through which their lateral control was obtained. Brown repeatedly climbed perilously from his cockpit seat to scrape and claw the ice from instruments and struts that he might lighten the burden on his rapidly tiring pilot. There were times when he was loath to loosen his safety belt so that he might move from his seat in an effort to fight the ice, for neither man was sure that they were not flying upside down. Alcock wore electrically heated clothes but such was the strain and tension, that he forgot to turn the current on during the entire flight.

For the balance of the night Alcock fought the elements while Brown sought to pierce their mystery in an effort to determine just where they were, or in what direction they might be travelling. Eventually, at about six A.M. the Vimy climbed through to 11,000 feet to obtain an observation if at all possible. Fortunately the sun was glimpsed several

times as it attempted to force its way through the clouds and Brown checked his position. Then it was decided to descend to see if visibility was better close to the surface but they had almost reached it before emerging into clear atmosphere. A strong southwest wind was blowing at the surface and to counteract drift, Brown advised a more south-easterly course. Forty minutes later two islands were spotted, which proved to be Eashal and Turbot, five miles off Galway, Ireland; but the mainland, invisible ahead under rain and low clouds, was not sighted until the Vimy was passing over it. Then hills and hills only came into view. Alcock and Brown were very insecure as to their actual position until some ten minutes later, while circling about, they sighted tall wireless masts which were immediately recognized as those of the Clifden wireless station. Then and then only did they know that they were flying over Ireland—that their non-stop flight had been successful!

Alcock circled the wireless station for some sign of life but, receiving no answer to his Verey light signals, banked off to seek a landing place. He flew over the town of Clifden firing more lights without success. It was 8:40 A.M. Greenwich Mean Time. Low clouds trailed across the country immediately ahead with the result that Alcock turned back toward the Clifden wireless station and sighted a possible looking landing field. Idling his motors he went into a glide and his undercarriage touched with every possibility of a perfect three point land-

ing. Suddenly the nose of the big bomber went over and plunged into the ground. There she stood with her tail ignominiously pointing toward the sky, a victorious aeroplane, innocently brought to rest in a bog by her desperately fatigued pilot. Alcock had finished his flight with a simple, unavoidable accident which did no damage to himself but which injured his navigator Arthur Whitten Brown about the mouth and nose. Still, they had accomplished the greatest ocean flight in the history of aviation to that time. England had admirably responded to America's challenge.

The Vickers-Vimy was first sighted over Ireland by an Austrian soldier on his honeymoon, and a farmer's lad tending hogs in a field, both of whom, together with dozens of other natives, had supposed that this was a plane from England which had come to welcome the Atlantic fliers. Wireless operators from the Clifden station rushed into the field of muck to ascertain whether or not anyone was hurt. Alcock climbed from his plane with the greeting, "This is the Vickers, we have come from Newfoundland!" The two men who had successfully completed the first Atlantic non-stop flight then soberly shook hands. Fatigued to the point of exhaustion, both were completely deaf and almost helpless on their feet. The Clifden operators half carried them to the station where they were given temporary relief and a make-shift change of clothing. Hot drinks were immediately supplied as the two men gave a

hesitant, broken story of their flight to the astonished wireless men.

Within a matter of minutes news of the epoch-making event was flashed to the far corners of the earth. Alcock and Brown had won the Daily Mail prize of £10,000 and together with it went the personal congratulations of His Late Majesty George V. Their plane had broken a main spar of the lower wing in the unfortunate landing, but this damage was insignificant compared with that done by over-zealous souvenir hunters who waded ankle deep in mud to gain access to the Vimy. Fabric was ripped from her wings—portions of wood were cut away with jackknives; but the big bomber stood aloof with her tail in the air, and enough gasoline in her tanks to take her another thousand miles—far away from such indignity. Neither of her big motors had missed a single beat on the entire journey.

What now of Alcock and Brown, the pioneers of the great circle route—the forgotten fliers amid today's pomp and adulation? Immediately following their history making flight both men were knighted by His Late Majesty. In June, 1929, the tenth anniversary of the flight was celebrated by Vickers Aviation Limited and the Rolls Royce Company. Sir Arthur Whitten Brown was present, a bowed, modest figure, emerging into the limelight almost for the first time since his great flight, his marks of age a startling reminder of the passing of an epoch since 1919. Following the celebration Sir

Arthur returned to the obscurity of his private life from which he seldom ventures. Brown has been a broken man since the death of his dear friend, and intrepid partner in the flight, for Sir John Alcock became a victim of the progressive struggle of aviation just one year later. In 1920, while delivering a Vickers machine from England he crashed to his death in France.

Thus has another chapter in the titanic struggle for scientific progress been written in blood. Still the fight continues, championed by men whose memories of those who have gone before steel them to carry on; memories which should ever be fresh in the present that we may more properly respect the deeds of the past.

Chapter III

LOUIS PASTEUR—THE FATHER OF BACTERIOLOGY

Five years before the turn of the present century the thunderous applause of nations, which had been so spontaneously aroused and so freely given, sank to a mere murmur of suppressed anxiety, then gave place to unrestrained grief as news was flashed around the globe of the death of one of this world's truly great benefactors. On September 28th, 1895, a toil-worn, triumphant old man who, from the very days of his youth, had given of his best that his fellow men might live, journeyed on to a great reward at the age of seventy-three. He is known and beloved as the "Father of Bacteriology"—his name was Louis Pasteur! Thus passed a man of whose memory the world of science is justifiably proud; a man who, as an immortal representative of the great field of chemistry and its allied branches of research, opened still further the door of medical progress.

Living as he did during years behind which stretched an indeterminable period of groping in the dark; fighting the philosophy which claimed, and not without reason, that the doctor puts medicine of which he knows little into bodies of which he knows

nothing; Louis Pasteur, not a medical man but a grim warrior armed with the science of his beloved chemistry, fought through to his astonishing, and finally convincing victory. He exploded the myth of spontaneous generation; showed definitely that bacteria is a *living* organism, and proved without shadow of doubt that man's normal span of life might not only be threatened but protected by the same type of sub-visible, living organism generally classed as the microbe! Here was a passionately tenacious enemy of microbes who held to a theory the fundamental soundness of which his contemporaries for years refused to accept because of its contradictory nature.

By what manner of witchcraft had this modest chemist arrived at the astounding conclusion that some invisible living agent was, in many instances, alike responsible for life and death? The story of Louis Pasteur is one of poignant appeal not only to the physician and scientist but to the layman.

The man who was to become the father of a new school of scientific thought was born of humble parents on December 27th, 1822, the son of an Arbois tanner. During his first twenty years of life young Pasteur showed no signs of becoming either a great student or an outstanding experimental genius; he was just another careful, plodding French boy. While attending the little college of Arbois, however, Pasteur demonstrated a trait which was to be the main guiding influence of his long and colorful career—the ability to stick to a problem until it

had been either solved or proven impossible. It was at this time too, that he set his heart on a study of chemistry as a profession, nor was it long before his first stumbling researches with test tubes and mysterious solutions amply demonstrated to his associates that here was a man who displayed more than ordinary initiative and intelligence.

Lectures at the Paris Normal School dealing with a study of the crystals of tartaric acid seem to have fascinated the young man and it was his discovery in this field which initially stamped him as a coming scientist of unusual ability. Pasteur proved that there were four, not two types of tartaric acid—an amazing disclosure, and within three months the bewildered student was being praised and surrounded by grey-haired chemists and learned men three times his age. He was forthwith made a professor at Strasburg and almost immediately decided that he should like to marry the Dean's daughter, and so, married they were, after what one might term, even in those days, a whirlwind courtship. Madame Pasteur was to become a devoted and long-suffering wife; an inspiring helpmate to a man whose whole world was defined by the field of his microscope.

Shortly thereafter the little chemist was appointed professor and dean of the faculty of Sciences at Lille and it was there, by mere chance, that he first stumbled upon the existence of microbes, for this was a town the majority of whose inhabitants were stolid, honest distillers and sugar-beet raisers;

this was the place to which Pasteur came, little dreaming that in a short while he was to make discoveries which would shake the scientific world to its very foundations—discoveries which were to grow out of his sympathetic efforts to aid local industry in its problems.

Without doubt there was something seriously wrong in the great distilleries. Many of the vats were sick, with the result that thousands of francs were being lost daily. Would Professor Pasteur please come over and examine the vats which refused to produce alcohol? Indeed he would, for here was something different, something fascinating upon which he might concentrate his microscope. True, he knew nothing of how sugar ferments into alcohol—indeed, no chemist in the world knew anything about it, but he could try and, in trying, learn something. Back in his shabby laboratory with samples from both the sick and the healthy vats, Pasteur set to work and in a matter of hours made an amazing discovery. As was to be expected, his microscope revealed yeasts in the globules of the healthy solution—yeasts which one found in all stews where sugar was fermenting into alcohol—but he found no yeasts in the stew of the sick vats, and therefore, no alcohol. Why had the yeasts disappeared or failed to form? What were these strange looking little specks which floated about? He would examine one of them. Pasteur fished into his flask and with some difficulty, managed to transfer one of the

specks to a drop of clear water upon which he directed his microscope. The great moment had come! No yeasts here . . . no . . . but something which Louis Pasteur had never seen before; a tangled, dancing mass of rod-like bodies which moved about with a peculiar type of vibration. The determined man neither slept nor ate until he had satisfied himself that here was a great new discovery and then week upon week and month upon month he but existed from one laboratory session to another. He discovered that the rod-swarming juice of the sick vats always contained the acid of sour milk—and no alcohol. He decided that the little rods were alive and that they *made* the acid of sour milk, and in its manufacture, attacked and killed the yeasts.

Eventually Pasteur developed a culture into which he transplanted a group of the little rods to see if they would multiply and grow—and they did! Impetuously he rushed to caution the distillers against allowing the rods to get into their vats and whether or not they thought him insane, we do not know. To this ceaseless experimenter the one thing that *was* important was the fact that living, sub-visible things were the real cause of fermentation.

Pasteur, in the midst of his work, was moved to Paris as Director of Scientific Studies in the Normal School. There he continued under laboratory conditions which were deplorable, but discouragement had no part in his plans, for he had already discovered that there were more kinds of microbes than those

which produced the acid of sour milk—many more kinds—but where could they all have originated? Pasteur proved conclusively that they came from the dust of the very air which we breath. Before a society of chemists he insulted the scientific ability of naturalists with his astonishing declarations, but won his arguments by brilliant experiments which left his contemporaries speechless.

His name and fame rang around the world and he was presented to the Emperor Napoleon III. He informed that gentleman that his consuming ambition was to find the microbes which must surely be the cause of disease, and the emperor himself immediately became microbe conscious. Whisperings seeped through the gates at the Normal School to the effect that Pasteur was plumbing the very depths of the origin of life and that, wonder of wonders, he might soon even disclose the cause of disease! Men spoke his name with awe and were prepared to believe almost anything. Pasteur talked about microbes causing disease long before he even knew that such might be the case, but he did not for a moment doubt the truth and the ultimate proof of his statements. In his own innocent, showmanlike manner of ultra-confidence he had set the stage for—no one knew what, least of all himself.

Year after year he toiled on in his dingy little laboratory, squinting into his microscope until his eyes almost failed him and his back was strained to the breaking point. He travelled the length and

breadth of France rescuing the wine industry from sickness caused by his little sub-visible animals and, to the utter astonishment of his harshest critics, was able to diagnose the various types of wine sourness through use of his microscope alone. He proved to them that a temperature just below the boiling point would destroy certain forms of bacteria without affecting the fundamental properties of a solution, and this invaluable process today bears his name—pasteurization!

But his heart was set on the discovery of some definite association of his microbes with the illnesses of animals and men. Surely it seemed at that moment as though the world was looking to Pasteur with almost fanatic adoration. The great English Surgeon Lister had written a worshipping letter in which he thanked Pasteur for having shown him the theory of germs of putrefaction out of which had grown his own convictions, and Pasteur was proud of that letter. He showed it to his close friends and inserted it in his scientific papers. So the years passed as the great chemist carried on, a man detached from the outside world, piecing together the astonishing results of discovery after discovery, incorporating in his papers the amazing conclusions which he had drawn.

Louis Pasteur was fifty-eight years of age when, armed with a secret wealth of scientific knowledge he chanced to attend a meeting of the academy of medicine in Paris one day. A famous physician was

holding forth on the researches of Semmelweis and the still totally unknown causes of child-bed fever. Suddenly the learned voice was interrupted literally by a bellow from the rear of the amphitheatre.

"The thing that kills women with child-bed fever isn't anything like that. It is you doctors who carry deadly microbes from sick women to healthy ones!"

Louis Pasteur was out of his seat with eyes aflame.

"Possibly you are right," returned the orator, "But I fear you will never find that microbe."

"You say I will not find that microbe . . . man I *have* found it, and this is the way it looks!"

Pasteur limped to the blackboard and with a sweep of his hand scrawled a chain of circles with his chalk. The meeting broke up in utter confusion. Pasteur had thrown down the glove to the medical profession of the day. He had literally hurled himself into controversial research in a field of which he knew little.

But the courageous Frenchman soon circumvented his medical ignorance by associating himself with three young doctors who grew to worship him as a man not of this world. They taught him anatomy and the workings of the animal machinery and privately swore to follow him where e'er he went—the disciples of a new science. Pasteur hunted microbes of disease, he grew germs from germs; visited the hospitals to find his chain microbes in the bodies

of women who had died of child-bed fever; hurried to the country to collect earthworms and proved that they were an alternate host for deadly anthrax bacilli which killed cattle by the thousands. This strange genius was tireless and irrepressible, a man obsessed with an all-consuming purpose which refused to acknowledge defeat at the hands of mere ridicule on the part of the medical profession, to whom he was but a blundering intruder with a wild craze for microbes at whose door he insisted upon laying the sum total of this world's ills. But Louis Pasteur was not to be turned aside. He collected a veritable menagerie upon which he experimented with all the compassion of his great heart for he was a passionate lover of animals and thoroughly hated the thought of inflicting pain upon any dumb creature. There is solace in the knowledge that those of Pasteur's animals that died, did so that thousands of men might live.

The mysterious laboratory, ruled by a chemist with his three medical assistants, became a seething hive of industry as weeks grew into months and months stretched to years before Pasteur literally stumbled upon an almost outlandish, audacious plan, upon the detail of which he concentrated and dreamed, worked and experimented to the exclusion of every other thing; a plan by which he conceived the possibility of turning living microbes of disease against their own kind, so that the animals and men whom they attacked might be guarded against

horrible and invisible death. Louis Pasteur was discovering the secret of immunization through use of anti-toxin. He isolated the deadly anthraz bacilla; discovered that by keeping it in solution over a period of weeks, a taming process, so to speak, a large percentage of the virulent properties were lost. It was then found possible to hypodermically inject thousands of these weakened bacilli into the living body of a cow with the result that the animal suffered a very mild attack of the disease and then recovered. But the amazing revelation of the whole magnificent discovery was that from then on that particular animal became immune to that particular disease. The injection of any number of the deadliest anthrax bacilli had absolutely no effect.

To give a graphic picture of the immediate upheaval which this sensational discovery caused would be to run the whole gamut of superlatives. Violent, chaotic revolution swept the scientific and medical universe. Ordinarily reserved and conservative men mounted the rostrum in public debate to shout themselves hoarse in condemnation or approval. Pasteur was at one and the same time worshipped as a near deity and labeled a ruthless mountebank as the fires of hatred and jealousy swept the continent unleashed in a cruel torrent of abuse. The theory and practise of preventive medicine, such as it was, had been literally shaken to the core; torn from its foundations and scattered to the four winds by a modest, toil-worn French chemist who, too tired to protest with

the youthful vigor which had been his, simply shrugged his shoulders at his ruthless critics and in public demonstration, under the most exacting conditions, proved conclusively that he was right; and proof is something the convincing power of which no man can deny!

It was but a step from his fundamental discovery of the theory of immunization to the development of Pasteur's greatest medical contribution in the eyes of the layman—the prevention and cure of rabies and hydrophobia. Immediately following this, his last glorious effort, the Czar of all the Russias presented Pasteur with the diamond cross of St. Anne and a hundred thousand francs with which to commence the building of what is now known as the Pasteur Institute. The great man saw that laboratory erected but his own work was done. In the very moment of his triumph, over forty years of ceaseless, painstaking searching ended in death in a quiet, darkened chamber of his own Paris home where watched his three faithful medical assistants who had risked their lives on many occasions in his laboratory and who would have died for him now if they but could. Thus did this mortal clay give up the spirit of a great and noble man; a spirit which in life had inspired his beloved students in their efforts to rise above themselves that they might give of their best to their more unfortunate brothers; a spirit which in death gave immortal inspiration as the memory of his words, a veritable hymn of hope,

flooded their every moment of consciousness—

"Live in the serene peace of laboratories and libraries. Say to yourselves first: what have I done for my instruction? then, what have I done for my country? until the time comes when you may have the immense happiness of thinking that you have contributed in some way to the progress and good of humanity."

Chapter IV

"THE TRAGEDY OF THE EMPRESS OF IRELAND"

ON the evening of May 27th, 1914, a happy gathering of over one thousand people assembled in the spacious auditorium of the Salvation Army Temple in Toronto to take part in a very special and unique service; a service of temporary farewell to 150 fellow-members of that worthy organization who had been chosen to represent the Dominion of Canada at the International Congress in London, England. Over a thousand hearts pulsed with pride and envy as glances of admiration were cast upon the fortunate 150 seated on the platform who on the morrow would leave what was, for the majority of them, their land of adoption, to journey across the sea, home again to friends and loved ones from whom fond farewells had been taken many years before. Indeed, it was an impressive service as the little uniformed band of prospective travellers arose with their fellows and joined in the solemn melody of prayer, "God be with You till We Meet Again"; nor did a single person of that large assemblage dream that the chasm of eternity yawned between the last parting and the next sad meeting with but twenty-six of the little group, for the Salvation Army

delegation to the International Congress in London sailed on the next day upon the ill-fated liner the "Empress of Ireland".

With her sister ship the "Empress of Britain", these two floating palaces were in many respects rightly referred to as the "Empresses of the Atlantic". Standing as they did for everything synonymous with safety, luxury and reliability, they represented a high standard of achievement in architectural perfection. The "Empress of Ireland" was built by the Fairfield Shipbuilding Company of Glasgow in 1906 and was owned and operated by the Canadian Pacific Railway. She was 550 feet in length with a gross register of 14,500 tons and her twin screws drove her at a speed of eighteen knots per hour. The Empress was built to accommodate 1,700 passengers in addition to her crew and elaborate provision had been made for their safety and comfort. Six transverse bulkheads divided her into seven watertight compartments which, but for the tragic memory of the failure of safety devices in the Titanic disaster of but two years before, would have led men to believe that she was unsinkable. Following that sea tragedy the lifeboat accommodation of the Empress, in common with that of all other big liners, was overhauled and extended. She had been on the Atlantic Service for eight years and was regarded as one of the finest ships on the Canadian route to England. Comfortable, fast and considered to be as safe as any liner afloat, she plied her way

from Quebec to Liverpool, a favourite with travellers the world over.

This, then was the great trans-Atlantic medium which 150 Salvation Army delegates decided to use for a spring crossing in the year 1914. Their choice was made in common with 907 others who became passengers on that last journey, and a crew of 420 brought the total list to 1,477 persons. Proudly the "Empress of Ireland" under the command of Lieut. Henry George Kendall of the Royal Navy Reserves, moved from her dock at Quebec, about four-thirty on the afternoon of Thursday, May 28th, 1914, bound for Liverpool. Scenes that are old yet ever new accompanied her departure; the screeching of harbour vessels mingled with the shouted "bon voyage"; the last good-byes of the waving handkerchief; the last "all ashore that's going ashore"; and as the ship's band played they cast her off and the gap widened between land and rail. Fainter and fainter the crowd on the dock appeared until finally the landmarks of Quebec blended with the general shore line as the graceful vessel gained headway and her motors pulsed in confident rhythm.

The happy passengers strolled in groups about the decks, in the lounges and saloons, examining the vessel's magnificent equipment, giving free play to their exuberence and enthusiasm. More experienced users of the Atlantic ferry betook themselves to their respective staterooms and suites, to arrange their quarters and accustom themselves to their surround-

ings. Twilight and evening settled upon the mighty St. Lawrence as she carried another great ship down to the sea, a ship whose company was gay and unrestrained as it disposed itself for the full enjoyment of the first evening on board.

Captain Kendall paced the confines of the bridge occasionally exchanging a clipped phrase with his first officer or darting a glance at the wheelhouse from which point the pilot skillfully navigated the vessel down the river. Kendall had been warned of the prevalence of fog in the lower river and, in addition, information had reached him that there were forest fires in Quebec which were throwing smoke blankets over the St. Lawrence. He had experienced such conditions before and although quite unalarmed, had taken more than usual precautions. As night came on the speed of the Empress was reduced considerably; reduced to such an extent that when she passed the incoming Alsacian the passengers on the latter had an exceptional view of the big Canadian liner as she carefully and majestically floated down to the sea, her decks blazing with myriad electric lights.

Kendall put in at Rimouski, a town of 2,000 on the New Brunswick coast and at that time the last outpost of the Dominion mail service. Bags of mail were loaded aboard and the Empress moved out again into the broad river, which at this point becomes the Gulf of St. Lawrence with a width of over thirty miles. At midnight the tide was running in

strongly with a cold wind and a piercing sting in the air. Few passengers were abroad because the mercury had dropped to within a point of freezing. Several parties were noted in progress in the smoking room, probably a few passengers at bridge, but it was too cold to make late vigils or promenades pleasurable and the great majority had taken to their staterooms for the night.

At one-thirty A.M. the "Empress of Ireland" reached Father Point where the pilot was dropped and the vessel proceeded at increased speed through the Gulf of St. Lawrence. Captain Kendall passed the Cock Point Gas Buoy and almost immediately sighted the Norwegian Collier "Storstad", a 6,000 ton vessel skippered by Captain Thomas Andersen, and bound from Sydney, Nova Scotia, to Montreal. At that time the Storstad was about one point on the Empress' starboard bow and Kendall noted that a fog bank was drifting from the land and would pass through the two mile gap which separated the boats at that time. Almost in the face of his reckonings the fog descended, cut off the Storstad's lights and Kendall rang full speed astern on his engines, stopped his ship with all dispatch and blew three short blasts on his steamer whistle—"I am going full speed astern!" The Storstad answered with one prolonged blast as Kendall glanced over the side and saw that his ship was stopped. Ordering his engines down he gave the Storstad two long blasts—"I have no way upon my ship!" Again the Storstad answer-

ed with one blast and the sound came through a dense fog four points upon the Empress' bow. In two minutes Kendall saw the collier's red and green lights—she was just one ship's length away. With the danger of a collision inevitably apparent, Kendall shouted to Andersen through a megaphone to go full speed astern and ordered his own boat full speed ahead with helm hard a-port in an effort to avoid the shock. But the Storstad came right in and cut the Empress in a line between her funnels. The steel-sheathed bow of the collier sliced through the plates of the Empress as though they were egg-shell and penetrated the hull to a depth of twelve feet. She ripped a 350 square-foot hole in the side of the stricken sea queen and in less than five seconds water at the rate of 265 tons per second was pouring into her hold. Kendall immediately ordered full speed ahead with the hope of running his vessel aground before she floundered but there wasn't going to be any time for that. Andersen attempted to keep the bow of the Storstad in the wound and thus prevent the water from entering, but the two vessels twisted away and became temporarily lost from one another in the dense fog.

In a nightmare of agony and fear such as only a disaster at sea can produce, the terror stricken passengers found themselves trapped for the most part in their cabins; trapped without a chance to gain the upper decks to fight for their lives. Literally hundreds of men, women and children had been

killed and horribly maimed in the collision, and those who had miraculously escaped death by the impact lived only to face it at the hands of the cruel sea water which poured into the floundering vessel like a tidal wave. The "Empress of Ireland" was doomed to certain and speedy death. The one smashing blow had mortally wounded her, and as Captain Kendall made along her steep, slanting deck to the wireless room he gave his admission with the words: "The ship is lost—women and children to the boats!"

Junior wireless operator Edward Bomford, anticipating the skipper's orders, was already splitting the ether with the cry for help that every ship must heed. His SOS almost immediately raised the Marconi operator at Father Point and then his call for aid swept the Gulf and hurled the news 500 miles into the ocean. Steamships hours away heard him and began retracing their course toward the position given, but scarce had they turned before the Empress of Ireland and two thirds of her ship's company were under fifteen fathoms of water. One hasn't much chance of doing rescue work in fourteen minutes!

The marvel of the whole disaster is that Captain Kendall was able to launch ten lifeboats within ten minutes. Such an act in itself is a tribute to the coolness and resourcefulness of those of the crew and passenger list who were able to assist with the rescue work. The Storstad, standing by in the fog,

lowered her boats and they immediately pulled toward the spot from which came the death cries of the wounded and drowning. Working against time and the cruelly low temperature of the water, the rescuers filled their boats and hurried back to the crippled Norwegian collier whose bows were warped and twisted from the impact. Had there been time, hundreds who went down with the ship would undoubtedly have been saved. Literally a thousand passengers who had been asleep awoke too late to scramble on deck. They were either crushed or mangled by the Storstad's bow or drowned in the terrific rush of water which followed hard on the crash. The terror and confusion of those fateful few minutes can scarce be put into words, yet survivors report remarkable discipline. But there was no time for even frantic attempts at rescue work—the doomed ship was rapidly settling. Her rear decks became awash as the mighty bow lifted to the starry sky; perpendicular she stood, with a third of her mass above the wreck-strewn water. Her machinery and water-logged cargo rumbled toward her stern as every light became extinguished. She hesitated, and then to the accompaniment of a mighty hiss of steam, the massive sea-queen slid quickly, quickly to the bottom. Alone to mark the scene of this greatest sea catastrophe in all Canadian history was a bit of wreckage, a few bobbing heads, a group of small boats frantically attempting to escape the vortex, and the slow heaving bulk of the collier in

the background.

The "Empress of Ireland" had taken with her to a watery grave 1,012 persons included among whom were Sir Henry Seton-Karr, English lawyer, traveller and member of parliament; Lawrence Irving and his wife, the son and daughter-in-law of the late Sir Henry Irving; Major Henry Herbert Lyman, prominent Canadian, and 124 Salvation Army delegates to the International Congress—the cream of that great organization's Toronto adherents.

Wireless operator Bomford's frantic calls for help had aroused Crawford Leslie, the assistant on duty at Father Point, with the immediate result that the Government boats "Eureka" and "Lady Evelyn" put out for the scene of the disaster. On their arrival they found that the Empress had gone down, leaving in her wake a troubled sea, smeared with debris and floating lifeboats with their pathetic cargo. Many of the survivors were dying of wounds and exposure; indeed 22 of them died while being removed from the lifeboats to the rescue ships. The Government boats worked rapidly and quickly transferred the living and the floating dead to their cabins and decks. Two additional ships, the "Lady Grey" and "Strathcona" arrived later to find the "Eureka" and "Lady Evelyn" lying to in proximity to the Storstad, picking up scattered boats and searching amongst the floating debris. When the rescue work had been completed the sad flotilla put about for Rimouski and upon arrival at that point the work

of first aid and identification of the dead commenced. The crippled *Storstad*, accompanied by a Government tug, continued her slow journey to Montreal and the survivors were rushed to Quebec.

In the full sunlight of a perfect spring Sunday, with church bells chiming and residents attending early mass, the Government steamer "Lady Grey" slowly steamed into Quebec with the most ghastly cargo ever to arrive at that port—188 coffined and rough-boxed corpses of the victims of the "Empress of Ireland"—the only reclaimed bodies of the 1,012 who had been lost. The huge shed on pier 27 was transformed into a temporary mortuary and there the work of identification and release was carried out. Inside was a scene of gloom and tears and death.

The sad story ends where it began. On the following week thousands of Toronto residents attended an impressive and soul-stirring service under the auspices of the Salvation Army in the old Arena Gardens. In heavily draped caskets covered with the world renowned colors of the Army, surrounded by handsome wreaths and tokens of respectful esteem, lay the bodies of sixteen victims of the disaster—sixteen of 124 who had been lost. Striking in its significance was the revelation of the common brotherhood of man exhibited at that great service. A calamity had befallen the Salvation Army and men and women of all walks of life were united by the bond of sorrow and sympathetic grief. With the

heavily draped standards of their late corps massed before, and amid the solemn notes of the impressive Chopin Funeral March, the dead of the Salvation Army were borne to their final resting place in Mount Pleasant Cemetery. Today, a memorial, striking in its simplicity and arresting in its power of recollection, stands to their honor and glory in that burial ground.

Chapter V

THE LAST OF THE ROMANOFF'S

IT was a dogged group of allied nations who made their last, and what proved to be, successful stand against a relentless foe during the early months of 1918. And during those months events political and historical of the most stupendous significance in world history since the fall of the Roman Empire reached their first milestone. Amid a tempestuous riot of unchained passions such as civilization had never before witnessed, and represented by the most fiendish group of blood-mad revolutionaries which human nature could ever have hoped to produce, Russia murdered the last of the Romanoff's! By this amazing and repulsive act of mass regicide, news of which stunned thinking peoples the world over in an attempted grasp of the awful reality of the thing, class hatred had taken the upper hand and, sweeping all before it, had exacted the supreme penalty for hundreds of years of folly, neglect and indifference. Nicholas II, last Czar of all the Russia's, his wife and their entire family, paid that penalty for themselves and for their ancestors at Ekaterinburg on the night of July 16th, 1918.

In all the romantic history and lore of Imperial

Russia, that most fascinating of all countries, no story can possibly be more gripping or more soul stirring than that surrounding the last of the Romanoff's. To crowd those rapidly marching events into one short chapter is a well nigh impossibility nor do I ignore the fact that any man who sets his name even to stories, much less opinions of Russia, leaves himself open to severe censure from would-be critics who are ever alert to catch the budding Bolshevik. Let those two exacting masters, Truth and Justice, claim our allegiance as the story unfolds itself.

A humble, servile, fear-stricken Russian people, 180,000,000 of them, had merely existed through torturous centuries of iron-fisted autocratic rule coupled with supreme indifference on the part of a callous aristocracy, a little class which despised the common herd for its ignorance, and yet did nothing to remove it or to develop the sacred ideals which smoulder in the breast of every moujik.

The fires of revolution had burned in the hearts of the common people for hundreds of years but the only remedy for such outrageous thought which ever occurred to the Royal House was one which sent thousands of the innocent with a few of the guilty to the fortress of St. Peter and St. Paul, or to an equally horrible living death in the land of frozen snows and forgotten souls—Siberia. Came the war years of 1914 to 1917, with their immediate causes, and to the amazement of a credulous, befuddled Romanoff, whose utter child-like innocence of the

conditions which surrounded him was, and still is a deep mystery—came revolution.

The world knows those immediate causes. Nicholas Romanoff, last Czar of all the Russia's, a charming courtier and perfect gentleman, faithful husband and adoring father, was one of this world's most tragic victims of circumstances. Hounded by misfortune throughout his life, he still remained impervious to it and ascended the throne in 1894 at the age of 26, a mild, inconsequential man, unaware of the realities of life, fatalistic and superstitious, a doomed ruler who accepted rather than contested his self-created, unhappy fate. What putty then was this tragic man in the hands of the wilful wife to whom he was passionately devoted, for Alexandra, Princess of Hess and the favourite granddaughter of Queen Victoria, championed the autocratic system when the political trend discouraged it. Suffering a chronic neurosis and profound melancholia, she became steeped in religious mysticism and any thwarting of her purpose resulted in immediate hysteria.

This was the ill-mated couple who prayed throughout the births of four beautiful daughters for a son to carry on the male succession and in 1904 with the answer to that prayer fulfilled, came stark tragedy again to further hasten the march of doom. With her little prince Alexis a hopeless victim of the dread haemophilia; with his every cry of agony tearing her mother's heart, can we blame Alexandra

when a man who claimed that he could, and *did* relieve the little boy's suffering, was admitted to the inner sanctum of the court of Romanoff's. Was it Alexandra's fault, when the cries of her son called her in one direction and the interests of her country pointed in another, that she became blind to reason, a hopeless victim and an innocent tool for Rasputin's machinations? The elimination of Romanoff rule, though probably inevitable in the long run if the Russian people were to survive, was immeasurably hastened by the little Prince's delicate physique and the hereditary disease which caused him to bleed at the nose or fall into a painful convulsion at the slightest bruising of his too sensitive skin. Had her son not been a chronic haemophilic, had she not been an abnormal hypochondriac, the Empress Alexandra might indeed have saved Russia from the scourge that came upon her, and the world might not so soon have known the challenge of Bolshevism. But men forget the essential humanity of kings and queens; men forget the tremendous influence of petty factors on the destiny of states and peoples.

On the advice of his wife, who in turn had again been swayed by Rasputin, Czar Nicholas II took over supreme command of the Russian army in the early stages of the great war. This final act of folly sealed the doom of the Russian Empire for never did that vast domain boast so pathetic a figure in a field marshall's uniform, nor had any country before nor since been subject to such resultant chaos. Russian

soldiers by the thousand went to the front without guns, food or proper clothing. Confidence was completely lacking; mutiny flourished as Hindenburg and Ludendorf slaughtered almost the entire army of Russian Imperials at the historic and momentous Battle of Tannenburg. The dawn of the revolution had broken! On the night of March 15th, 1917, the last Czar of all the Russia's signed the document of abdication with the stub of a pencil. He bowed his head and whispered, "I have been deceived".

On the 21st day of March, the provisional Government under Kerensky arrested the Romanoff family to protect them from the hatred of the revolutionaries. They were confined in the summer palace at Tsarskoe Selo, twenty miles from Petrograd where followed a relatively easy and mild imprisonment. The Czar spent the greater part of his time writing his diary, studying his beloved weather reports and spading in the garden. The Czarina cared for her children and made bandages for the Red Cross. The ex-Royal family carried on much as they had done before, letting the world go by, blissfully ignorant of the seething monster of revolution which swept by their palace door with all-consuming purpose. In no other place was it more clearly demonstrated than at Tsarskoe Selo just how fatally the destiny of Russia was determined by the pathetic invalidism of the only son. This frail, spoiled, over-petted child gave complete explanation for the actions of the Empress, gave reason for Rasputin, gave a key to the

entire situation and at the same time supplied the one redeeming trait in the characters of both the Czar and the Czarina. They had jeopardised an empire to save a son from a congenital disease and the Czarevitch Alexis so far as his parents were concerned, dominated not only the entire Romanoff family but the entire empire of Russia. So the days of imprisonment continued with monotonous regularity, Nicholas adapting himself to his new conditions with amazing ease, Alexandra sullen and despondent. The Czar had abdicated in spirit and in truth, accepting obscurity with the same fatalistic resignation as he had shown in his efforts to cling obstinately to his waning autocracy.

On August 10th the Premier of the Provisional Government waited on the ex-Czar and announced a startling resolution. The Imperial family was to be transferred to Siberia! Fearing the rise of Bolshevism, Kerensky moved the ex-Emperor to Tobolsk, 2,000 miles from Petrograd so that, in the event of rioting, the Imperial family would be far removed from immediate danger. Life at Tobolsk during the first month was another idyll of domestic calm and tranquillity, the Czar consulting his weather reports, the Czarina caring for her children. But three months after the removal to Siberia, Lenin overthrew the Provisional Government and the reign of Bolshevik terror commenced with civil war which seethed throughout the length and breadth of the land. Every member of the cultured and educated

class that the revolutionary could get his hands on was killed in cold blood, and the death cry went up for the Czar and everyone belonging to him.

Meanwhile the Royalists and White Russians plotted for the release of their monarch and prepared plan after plan which would enable them to successfully smuggle the family out of the country to England. Sensing such plots to defeat their purpose the Bolsheviks suddenly decided to move the Imperial Family for the second time and transferred them to the more loyal city of Ekaterinburg which was situated 300 miles nearer Moscow. There the Czar and Czarina with their son, daughters and faithful servants were imprisoned in the private dwelling of a prominent merchant whose house had been commandeered for the purpose. A ten foot stockade was erected about the house which effectively discouraged any attempt to escape.

Ekaterinburg was dominated by the dreaded Cheka, the secret police now composed of red extremists; executioners whose sole object was to stamp out counter-revolution. Its members were largely made up of foot-loose Hungarian war prisoners and some Chinese and the entire city was controlled by a fanatic, Yourovsky whose first lieutenant, a thirty-six year old ex-convict, bore the name of Peter Ermakov. Yourovsky and Ermakov were placed in complete charge of the unfortunate royal prisoners at Ekaterinburg whose living conditions had now become degraded and unfortunate in the extreme.

Night and day three red guards were posted on the various floors of the house, spying on their prisoners at all times to such an extent that privacy was utterly impossible. The food was nauseating and the prisoners were forced to eat with their guards. The very walls of the house were made to contribute something to the mental suffering of the helpless victims when the guards covered them with ribald verses and gross sketches of the Empress and Rasputin which can better be imagined than described.

Yet through it all the charming personality and graciousness of the royal prisoners was so disarming and attracted their guards to such an extent that finally Yourovsky, the Terrible, was forced to take charge himself. The Russian guards had been completely won over. Yourovsky carried on with a group of Hungarian ruffians whose only desire in life was to use guns and watch blood flow, and with fear in their hearts lest the Royalists should break through, the revolutionists of Moscow decided on the death of the Romanoff's! On July 12th, 1918, Yourovsky was commissioned to prepare a death sentence and to carry it out at the earliest opportunity. Ermakov was chosen to assist and to cremate the corpses.

The night of July 16th was set for the execution, and on the evening of the 14th Ermakov prepared a place of cremation at the abandoned shaft-head of an old mine some few miles out of the city. Five motor lorries were requisitioned from the

official Bolshevik garage and the chauffeurs were instructed to have them in readiness outside the rear of the prison house at midnight. On one of those lorries were placed barrels of benzine and containers of sulphuric acid. A second lorrie driver was instructed to roar his motor at the rear of the prison so that the pistol shots might not be heard abroad. Yourovsky detailed Ermakov and Vaganof to assist him with the shooting, and a basement guard room was chosen as the death chamber. The instruments of death were provided, the grave was ready, the executioners were resolved and the victims asleep in their beds. It was Tuesday night, July 16th, 1918.

The knell sounded shortly after midnight when Yourovsky knocked at the door of the ex-Emperor's room and ordered him to rise and dress. The same summons was delivered to the Czarina and her children with the explanation that the Siberian army was approaching and the resultant shooting which must inevitably follow necessitated the removal of the prisoners to a place of greater safety. Yourovsky led his victims down the two flights of stairs to the appointed room and, holding the door, bade them enter. Into the brightly illuminated death chamber passed Nicholas II last Czar of all the Russia's, Alexandra his Queen, the Czarevitch Alexis, and the Grand Duchesses Olga, Tatiana, Maria and Anastasia, together with four of their faithful servants. Without formality Yourovsky read the insulting death sentence which he had been ordered to

prepare; a document which will go down in history as characteristic of the type of mentality which existed among the brutal murderers of the Imperial family; a document which cries to heaven for shame.

Yourovsky faced the Czar and spoke:—

"You think the whites are going to rescue you—but they're not! You think you're going away to England to live and be Czar again—well you're not! The Soviet of the Urals sentences you and your family to death for your crimes against the Russian people!"

The ex-Czar didn't seem to understand and asked,

"What do you mean?"

Yourovsky's answer was to fire his automatic straight into the monarch's face—and the horrible slaughter commenced. Eleven people to be killed with all haste and three men to do it. The scene that followed cannot possibly bear description as each one of these murderers, frenzied with primeval blood-lust, chose his own particular victim, fired, and gave vent to the spleen of three hundred years of pent-up hatreds and tortures. When all inside were dead the tragic remains were blanketed, loaded into the waiting trucks and, with a roar, the cavalcade of death set out for the appointed rendezvous, and as dawn came to streak the grey sky with blessed light, a little pile of charred ashes was all that remained to give mute testimony to the last resting place of the Romanoff's.

Eight days after these events had transpired, Ekaterinburg was evacuated by the Bolsheviks and the White Russians arrived. Almost immediately they were successful in discovering relics of their late monarch and knew that their mission had failed. So passed Nicholas II, Czar of all the Russias; so passed the last of the Romanoff's.

What now of Russia? Ah yes, that is the question; and the historian who will trace the Russian Revolution to its last ramification to answer that question will be a man of unconquerable spirit, one who will be content to travel to the ends of the earth to study its effects, a man who will consult teacher, lawyer and priest, one who will go wherever men go to discuss the great problem of the race. One lifetime will not suffice to see the end. We do know that another great empire fell in the dust even as the Roman Empire fell, and as empires will fall until such time as the brotherhood of man becomes a practical fact rather than a nebulous theory.

Chapter VI

THE STORY OF THE QUEBEC BRIDGE

THOUSANDS of

Canadian men and women of all walks of life lined the picturesque shores of the historic St. Lawrence River on a chilly fall day of the year 1917. They dotted the water's surface in craft of every type and description, that they might witness the successful culminating operation in an engineering triumph the like of which had never before been seen to that time. With scarce beating hearts they watched this last manoeuvre of tremendous delicacy in a project which, conceived eighty-three years before, had taken a toll of more than seventy-five lives in two great disasters, and seemed destined to go down in history as a gigantic, ignominious failure. It was on September 20th, 1917, that a determined group of Canadian engineers won their long fought victory, rammed home the last key rivet, and amid the well-earned plaudits of an admiring world, stepped back to view their handiwork. The great Quebec Bridge, the largest cantilever construction in the world, had been successfully completed! 3,239 feet long it stretched, like a giant spiderweb, linking the north and south shores of Quebec Province; spanning the mighty St. Lawrence, Canada's gateway to the broad

Atlantic; a monument of steel and concrete erected in the name of scientific progress. The Quebec Bridge with its eight traffic lanes will ever stand as an example of Canadian perseverance and faith and a perpetual memorial to the unfortunate men who lost their lives during the period of its construction. It represents years the story of which is a thrilling episode on the glorious pages of Canadian history.

In 1853 the idea was conceived that a suspension railway bridge should be erected across the St. Lawrence River at a point eight miles above the City of Quebec. With this thought in mind, a New York engineer by the name of Serrell was instructed by the City Council of Quebec to make surveys, plans and estimates for such a structure, with the understanding that the total cost should not exceed three million dollars. Serrell went forward with none too great confidence for, even to an engineer, the prospect of ever bridging that great expanse of ship-crowded water seemed to enter the realm of the fantastic. His estimates and recommendations submitted, courage and capital were found to be utterly lacking, and the project dropped. Canada built her railway system on the south shore rather than the north shore of the river until finally the City of Montreal supplied the bridging point for the country's transportation facilities. There was still a great need, however, for a bridge at or near Quebec, and in the year 1882 the idea was revived, largely due no doubt to the development and recent completion

of a gigantic new type of structure over the Firth of Forth at Edinburgh. This revolutionary construction was termed 'cantilever', and to the untechnical mind a bridge of this type might be described as a group of two tremendous truss networks formed somewhat in the fashion of distorted diamonds, delicately balanced on huge off-shore concrete abutments. One arm of each stretched toward and was to be anchored on-shore, the other of each extended over the bridged water to be finally linked by a rigid centre span. Traffic lanes were designed on the plane of the centre span, the cantilever network therefore extending the same distance above the roadway as the water's surface lay below.

On the merits of this imposing new type of structure the Dominion Government at Ottawa issued a charter to the late Mr. M. W. Baby of Quebec for the erection of a bridge over the St. Lawrence River. Associated with him in the enterprise was Alexander Luders Light, a distinguished engineer who in turn interested Sir James Brunless, the man who had built the great Forth Bridge. Unfortunately there was much delay and inaction, with the result that the company was completely reorganized in 1897 with a New York engineer as chief and Mr. E. A. Hoare as local representative. This new Quebec Bridge Company received substantial Dominion and Provincial assistance, actual construction work starting in 1900.

During the first three years of operations \$1,-

400,000 worth of masonry was laid and, with the completion of this important work, steel was initially placed in the year 1904. The great bridge was to be one of the most remarkable structures in the world, with cantilevers 1,800 feet in length and over 400 feet high. The rigid centre span would be 150 feet above the surface of the river so that all types of shipping might have free passage, and there would be facilities for eight traffic lanes—two railway, two street-car, two vehicular and two foot-passenger. Work on the cantilevers progressed satisfactorily during the ensuing three years until the late summer of 1907 brought the first great disaster. On August 29th of that year, without warning, the huge network which formed the southern cantilever completely collapsed, killing sixty workmen and seriously wounding eleven others. \$1,500,000 worth of twisted, ruined steel sank in the rushing waters of the St. Lawrence and Canada mourned in the face of what seemed to be national calamity. Her greatest effort in the field of transportation had, for the time being at least, failed dismally.

The immediate investigation of a Royal Commission brought out the amazing information that errors of design on the part of the two chief engineers had been the principle cause of the disaster. The procedure at that time was to place a large quantity of steel, allow the weight of the bridge to squeeze its members into their final position and then rivet. Undoubtedly the huge girders had buck-

led before they could be permanently secured. It was felt that the ability of the engineers had been tried in one of the most difficult professional problems of the time, and had been found unequal to the task.

The Laurier Government, after due consideration, decided to undertake reconstruction of the bridge and allotted the task to the Department of Railways. A Commission was appointed to examine the fallen structure and its favourable report led to the appointment of a second Commission which would superintend the actual work. Tenders were accepted on April 4th, 1911, and the contract let to the St. Lawrence Bridge Company despite a good deal of criticism, particularly from the British press. This organization, especially chartered for the task, was jointly owned by the Dominion Bridge Company of Montreal and the Canadian Bridge Company of Walkerville, with Mr. Phelps Johnson of Montreal as President and designer. George Herrick Duggan of the Dominion Bridge Company was appointed chief engineer. The original site, located eight miles above the City of Quebec, was retained.

With the eyes of all Canada focused upon the daily press the new company announced its tentative plans for this second attempt. The new bridge, to be built at a cost of \$17,000,000, would be the largest in the world; 3,239 feet long, 400 feet high with a 640 foot centre span at a level of 150 feet above the water. 180,000,000 pounds of steel would be

required for the vast structure and it was estimated that a period of six years would elapse before the completion of the work. Under the careful supervision of the Department of Railways the site of this great enterprise became a hive of seething activity as the new company carefully prepared the abutments, two on-shore and two off-shore, which would support the tremendous weight of steel. Public interest in the project was aroused to an extent never before dreamed of in the history of the country, the more remarkable because of the fact that, during the later years, the world had been thrown into war. Girder grew upon girder as the gigantic cantilevers took more definite form under the creative skill of Phelps Johnson. Great arms of steel, anchored upon land and balanced upon concrete, stretched within 640 feet of each other over the blue waters of the St. Lawrence—640 feet into which space was to be placed the largest centre span in the history of bridge-building; a metal network which would fuse in union the great arching cantilevers.

Over at Sillery Cove, the St. Lawrence Bridge Company's temporary headquarters, work on the rigid centre span kept pace, with that down the river, and when all was ready, this latter member would be towed eastward and raised to position with delicate care.

The summer of 1916 saw the completion of the cantilevers and the president of the company announced to an eager people that the centre span

would be raised commencing on the morning of Monday, Sept. 11th of that year. Never before had such public interest been shown in the plans of a private construction company. Memory of the first great disaster seemingly had fused builder and citizen in a common bond of sympathetic understanding. It was proclaimed that on high tide of Monday morning the great centre span would be floated down the river on six steel-framed scows, each 165 feet long. Six tugs would tow the scows from Sillery Cove to the bridge site, at which point two additional tugs would join in holding the span during lifting operations. After it had been securely moored, four hoisting chains, each capable of lifting more than 1,000 tons would be fixed at the corners. The sixteen chains, under the power of giant compressed-air driven hydraulic jacks, would raise the span to its position 150 feet above the water's surface. Working pressure of the jacks was estimated at 4,000 pounds and each had been tested to 25 per cent over-load. Every man on the construction gang, an expert in his line, was detailed to his position and no element of chance was allowed to go unchallenged.

In preparation for the spectacle of the span-raising, the Dominion Government, through the Department of Railways, had invited hundreds of guests, members of Parliament, senators and journalists to witness the elevation and had provided accommodation for them. Ships were anchored in the

river at the bridge site. The Earl Grey and Lady Evelyn were reserved for members of the Dominion Cabinet and their friends, together with officials of the City of Quebec. The Rapids King and other boats of the Canada Steamship Lines were crowded with Montreal, Toronto and American guests, and anchored at points of vantage. Two hundred members of the Society of Canadian Engineers with their American guests among whom were a number of the most eminent bridge authorities in the world, gathered for the great event. Yachts, motor-boats, and small craft of every description dotted the waters of the St. Lawrence River and all shipping was suspended for the day. The scene was one of bewildering color and expectant anticipation.

At 5.00 A.M. the chugging tugs eased the great span into the centre of the river, and at 7.00 o'clock, with high tide and a minimum of current, it was fitted into position below the outstretched cantilever arms. The huge lifting chains snapped into position in the four corner castings and the slack was taken up by the hydraulic jacks. Slowly the great weight was transferred from the scows to the steel overhead and at 8.15 the pontoons drifted into the undercurrent and were guided by the tugs down stream. As the mighty span gradually mounted under the influence of compressed air a great wave of cheering swept the crowded river to be picked up by the milling throng which blackened the picturesque shores as far as the eye could see. Flags and handker-

chiefs danced and fluttered in the morning sunlight, but they fluttered too soon. Just fifteen feet above the water's surface the great mass of steel met disaster! With a crack as of a rifle shot that echoed and re-echoed up and down the crowded St. Lawrence, a corner casting snapped—the huge steel span shivered, swayed, hesitated; then with a sickening list, plunged, a buckled wreck of twisted metal to the 200 foot depths of the swirling river; and from the crowded waters where the floating ships lay, there arose one long continuous moan. \$600,000 worth of steel had carried thirteen more men to their death, and the Quebec Bridge project had, for the second time, failed!

Mourning Canadians viewed this second disaster with something akin to superstition. Why conduct another investigation—why risk life and money in a project which seems utterly impossible and forever destined to defeat? On the other hand, reasoned those of opposing view, surely it can be done; let us not give up now when we have gone this far. Let us try again rather than lose confidence in our engineering ability.

That confidence was in large measure restored when it was announced that an investigation would be unnecessary—that the St. Lawrence Bridge Company had taken full responsibility for the disaster and would proceed immediately with the construction of another span. It was made plain that the method of procedure had been correct; that it could

not be improved upon, and that similar methods would be used in the third attempt. A broken casting has caused the accident and in future the base of the span would be constructed in slightly different fashion. The Company announced that it would accept all financial responsibility; would commence work at Sillery Cove immediately and have the span ready for elevation in one year's time.

Again Canada waited as month after month passed with little or no word as to what if any progress was being made. Shipping passed up and down the great river, through the giant gap in the neglected cantilever arms. Passengers pointed to the unfinished project, some shook their heads, others voiced enthusiasm, all wondered. Finally on September 1st of 1917, the Quebec Bridge again broke into front page news with the announcement that the company had completed the construction of the second span and would proceed as before on an announced date. Peoples of Eastern Canada found pleasant if only temporary relief from thoughts of a war which wasn't going very well and turned their attention again to this interesting speculative channel. Would the project succeed—or would it fail? Only time could tell.

The drama was played with a similar successful start on September 15th, 1917. Down the river came the great span, an exact counterpart of the ill-fated web of steel which had floated those same waters but a year earlier. A flood of memory swept

over that vast assemblage of people, many of whom had been there before and hoped with all their hearts that the successful results of the day would preclude any possibility of their having to come again. Carefully the span was jockeyed into position; raised from its pontoons as the tugs chugged their way down the river with the now no longer needed scows. Slowly but surely the 640 foot span rose from the water's surface, resembling a mighty cat-walk as it hung suspended in the morning sunlight. Like steps in a ladder the succeeding days marked the progressive victory of the determined engineers. September 17th—28 feet; September 18th—32 feet; September 19th—126 feet, September 20th—150 feet and success! The final lift completed, the last master rivet was driven home at 2.30 P.M. Canada's confidence in her engineers had been well justified and they could ask no greater reward than that which stands to their credit today.

Canadian transportation enthusiasts of this generation may well look with pride to their own country—one which possesses the greatest inland system of waterways in the world, whose outlet to the sea is spanned by one of the greatest bridges in the world; a traffic artery which not only links the shores of the picturesque province of Quebec, but supplies a vital medium through which the closer knitting of the entire Dominion has been made possible.

Chapter VII

FRANZ SCHUBERT — GREAT WRITER OF SONGS

A LITTLE more than one hundred years ago a man, the spirit of whose genius lives for the world today in imperishable works of divine song and heavenly beauty, died tragically impoverished and alone at the age of thirty-one. With his death in gay Vienna, the city of his birth and everlasting affection, the knell was sounded for Viennese romanticism which, from that day, virtually disappeared to become just a name and nothing more. The life and death of this man, the period in which he lived and their relationship to one another, represent an extraordinarily interesting study in the realm of human complexities, a true interpretation of which may never be revealed. This tragic, immortal genius was the greatest song-writer the world has ever known—Franz Peter Schubert. He died on the 19th of November, 1828; and with his passing and the revelation of his mighty genius, the sentiment of a sorrowing people gained expression from the lips of that other master, Robert Schumann—

"However beautiful and varied the Harvest Time may have in store for us, it will not bring us another Schubert. There never was, nor can there

ever be another like him."

Here was a man who, in his tragic thirty-one years of mere existence, created an imperishable library of glorious music of amazing volume which included nine symphonies, a dozen or more operas, a host of chamber music and over six hundred songs which today form the greatest lieder collection in the world; a man who lived in a period when Vienna harbored a galaxy of genius in every branch of art --in music, in painting, the drama and poetry, the like of which is only met with in the most brilliant flowering epochs of human culture.

Schubert lived in the Vienna of Beethoven and Raimund; the Vienna, the gaiety of whose people blossomed forth under the influence of the Strauss waltz; it was the time when the poets Bauernfelt, Lenau, Nestroy and the painters Schwing and Waldmueller were young. Above all it was the Viennese-Schubert time, a time which to us has become a mere, mysterious echo of a bygone day, an echo which is most wonderfully expressed in music, the one imperishable universal language. Schubert is as inseparable from his time as the gay Vienna of the dawn of the nineteenth century is from him, and with the passing of that brightest star, so too passed that intangible something which, for lack of understanding, one may only term the 'Viennese-Schubert influence'.

The course of Franz Schubert's life, like that of those other great Austrian composers Haydn and

Mozart, was simple and uneventful. Outwardly his life presents nothing remarkable; it was one of poverty and introspection. It was a life that seems to discourage too careful analysis on the part of the worshipper of his art lest little save utter bewilderment remain as small consolation for the effort. For Schubert when he lived, was a hapless victim of circumstance, unheralded, unworshipped and unsung, save by his beloved group of friends and admirers whose attendance at the regular Schubert evenings was the one bright spot of his otherwise tragic existence. Spurned and exploited by European publishing houses, he was fated never to hear the public performance of any but a few of his compositions. Almost unattractive physically, and lacking in that peculiar gift of personality which would enable him to overcome an inherent natural shyness, Schubert was never to win the love of a woman, and yet few are the artists who have given more wonderful expression than he in his music to the sensation of love. Schubert too knew the poignancy of pain and the sorrow of tragic resignation, for he had no better fortune in love than in life.

Franz Schubert was born in Vienna, three years before the beginning of the new century—on January 31st, 1797. He was the son of the national schoolmaster and one of the younger of fourteen children. He received elementary instruction from his father and at the age of six was sent to school where he became a choir boy and a better than or-

dinary pianist and violinist. The boys at the school organized their own orchestra and young Franz took his place in the first violin section; advancing so rapidly that before long he was substituting on the dias in the absence of the regular conductor. His instructors found it utterly impossible to keep abreast of his already budding genius and the shy little lad frequently offered small orchestral works for the approval of the musicians. The art of composition, in which he had received little instruction, appeared to have come to him as naturally as did breathing. Schubert confided all the emotions and feelings of his precocious child soul to his dearest school chum Josef von Spaun, for whom he played the piano hour upon hour in the music room where there was no stove to fortify them against the winter cold. He neglected his school studies, for music had taken complete possession of his soul. He spent his little bit of money on music paper rather than on bread, and before he was twelve years of age had composed literally dozens of songs, short orchestral pieces and piano numbers. Salieri, who attempted to instruct him in the theory of music said—

"I can teach him nothing; he has learned everything from God."

In 1815 Schubert, in accordance with the wishes of his father who considered a musical career too uncertain, adopted the calling of a schoolmaster and attended a training course for teachers. For three years he conscientiously strove to initiate small

children in the rudiments of knowledge but in secret he lived a life devoted to the art of music. Again and again the slumbering creative power awoke within him and every bit of music paper he could lay his hand on was covered with the masses, songs, canatas and quartettes which he composed, and more and more frequently the dreamy youth fled from the suffocating schoolmaster's yoke to commune with the muse.

At this time Schubert exhibited an unexampled productivity in the history of music. By 1816 he had written several symphonies, an amazing volume of lieder, including the 'Erlking' which doubtless shows Schubert's sheer creative power at its high-water mark; and an innumerable quantity of sonatas, string quartettes and choral plays, many of which have been lost. In the fall of 1816 Schubert, through the kind graces of a group of newly acquired friends, was released from the distasteful drudgery of schoolmastering on which he was doubtless wasting time and energy. Those friends formed the nucleus of the amazing little band of worshipper who grew up around him—Franz von Schober, Josef von Spaun, the gifted writer Johann Mayrhofer and the great singer Michael Vogl. Schober arranged a room rent-free for Schubert in his parent's home and in other ways did all he could to help. He made Schubert acquainted in the exclusive circles of Viennese society and made representations for him before many and varied publishing houses—but those

representations were made in vain. Not one penny could Schubert earn with his art. Vogl, the outstanding lieder singer of the day, delighted in rendering the Schubert songs but very few of them issued from the publishing houses before the master's death, and when they did, the remuneration was little more than a charity donation.

Schubert, by his decision to give up the teaching profession, had incurred the ill-will of his father and had therefore no recourse to funds in that direction. Schober, Spaun and the young artist Schwind quietly gave the unfortunate young musician a helping hand. Finally Schubert, of necessity, followed the example of his great forerunners in the realm of music by giving lessons in order to earn the necessary means for a modest living. A favourable opportunity offered itself which, in addition to paying fairly well, opened a prospect of spending some time in the country. Franz Schubert was engaged as music teacher in the family of the Count Johann Karl Esterhazy von Galantha, and passed the summer of 1818 with this family on their estate in Hungary. His duties consisted in giving lessons to the two young countesses as well as taking part in the musical performances given in the castle.

It was there that Schubert met the young Countess Karoline Esterhazy. Is it true that his young pupil inspired him with an ideal passion? Can it be that she never understood that deep attachment, and the pain which his love caused him was buried

in the depths of his heart and only confided to his music? Vain questions these—for we shall probably never know. We have the record of his playing many duets with her; of his dedication of the F minor Fantasia, Opus 105 to her. We do know that von Schwind drew a portrait of the Countess Karoline Esterhazy and that it hung on the wall of the room where the Schubertians assembled to hear Vogl sing the master's lieder. But we know little else. Karoline Esterhazy has been immortalized in a perennial musical favourite based on the life of the master; her name has been linked with that of Schubert down through the years; it is said that a great deal of his never-to-be-forgotten 'Mueller-lieder' is a clear musical confession, bathed in the glow of a deep and real affection for the lovely young countess; and that his broken heart would not permit him to complete the glorious Symphony number 8 in B minor. The wish may be father to the thought, for indeed, all the world loves a romance.

Eventually Schubert returned to Vienna and again joined the circle of his friends who regularly found him in his nearly dark, unheated, damp little room, huddled up in an old threadbare dressing gown, his flimsy spectacles perched on his turned-up nose, his unruly hair curling on his high forehead, composing, composing and freezing. His room was an amazing clutter of manuscript; hundreds and hundreds of pages of the most glorious music the world has ever known, lying upon the floor, upon

chairs, under the bed, going begging for want of a man with vision enough and influence enough to give it to the world.

On October 30th, 1822, Schubert placed his autograph upon the title page of his eighth symphony, the major work by which he is best known to the musical world. It was never finished. We have an *Allegro*, an *Andante*, and nine measures of a *Scherzo*; music which for sheer beauty and originality has never been surpassed; music sadly full of agitation, distress and abandoned hopes. It is certain that Schubert never heard it played and that the new and delicate effects with which it is crowded were the result of his imagination alone.

The years 1825 to 1827 were memorable in Schubert's life; years when he found it well nigh impossible to make his pen keep pace with the pressing fire of his genius. He seemed torn between love and pain; love for we know not what; pain because of his thwarted hopes and aspirations. He succeeded in having a few groups of songs published but the financial reward served only to keep him out of debt and feed him none too well. He craved for recognition by the great gods in art, but succeeded only in further endearing himself to his staunch friends the Schubertians—Schober, Vogl, Spaun, Schwind and the others, who seemed to live but for the next meeting with the master that they might spend another delightful Schubert evening; those evenings which were taking such a vital part in Vienna cul-

ture.

In the last year of his life, with his health failing badly, Franz Schubert wrote his symphonic masterpiece, the great C Major, and again he never experienced the joy of hearing it performed. Literally dying at his work, he poured out his heart's blood and his soul in an endless flow of creative genius until the fires of his art threatened to consume his young life. Undernourished, unhappy, alone save for his few friends, he fell violently ill toward the end of October, 1828. He went to his bed and was never to rise again. They reverently buried him, separated by three graves from his idol, Beethoven.

So Schubert died at thirty-one—poor as he had been born, and had lived. He left behind no will and few personal possessions; old music, books and instruments of so little value that the whole fetched scarcely sixty-three guilden—about \$10.00. But he left posterity the fifty-nine folio volumes; immortal works of art; among them stacks of unpublished manuscripts, treasures which only after decades have gradually been unearthed. His tombstone was erected by subscription among his friends and inscribed—"Here the Art of Music has Buried a Rich Possession but still Greater Hopes."

A dull, rainy November day came; the last dry yellow leaves fell from the bows, and raindrops dripped from the branches of the bare trees. The quiet room itself seemed to mourn as once more the friends came together to hear Schober read to them,

in accents moved with emotion, his poem of farewell to the master. His broken voice droned on through stanza after stanza as he eulogized their adored genius, and finally.

And that which thou hast given us to keep,

 The warm love in thy works with pure power
 mated,

The holy truth, great and still uncreated,
We'll shut it in our souls, secure and deep.

And what thou wast to art, who was thy lord,
It is revealed in many a heavenly chord.

 And if we follow after that sweet strain,
 We shall find thee again.

It was the last meeting of the Schubertians. The blossoms of Vienna's romanticism shed their petals and fell. The sun of its genius had set and there were to be no more musical meetings. That wonderfully refined soul of old Vienna with its gaiety, its grace and its charm was buried in the same grave with the man who died of a broken heart; the greatest creator of pure melody the world has ever known
—Franz Schubert.

Chapter VIII

FIRE AT SEA — THE MORRO CASTLE

SOME few years ago through the medium of that elusive scientific achievement known as radio telegraphy, the North American continent was apprised of the bare details surrounding one of the most horrible sea disasters of modern times. Laid in a scene of such circumstances, the results of which proved utterly incredible at the time; quickly followed by sensational rumours, wild charges and conflicting reports, and eventually spot-lighted under the grim, analytical government investigator, this event in history represents in every way an incident upon which fate seemed to play with the cunning of diabolical ingenuity. On September 8th, 1934, the luxury Ward liner S.S. Morro Castle bound from Havana to New York with 500 souls on board, fell a victim of the mariner's greatest dread—fire at sea, and though but a short nine miles from coastal safety, with lifeboat accommodation for all passengers and crew, and surrounded by every safety device known to human ingenuity, 134 helpless persons lost their lives!

Hysterical sensationalism ruled unchallenged in the days immediately following the tragic passing of the Morro Castle; days during which the great liner

lay beached, a totally destroyed, sinister, incongruous hulk amid the gay surroundings of the New Jersey seaside resort, Asbury Park. Today, we enjoy a perspective which, linked with the completed official evidence, gives us sufficiently safe grounds upon which to base a reconstruction of the unfortunate incident.

The S. S. Morro Castle was built by the Newport News Ship-building and Dry Dock Company of Newport News, Virginia in 1930 and was launched on March 30th of that year. She was operated by the Ward line, the parent company of which was the New York and Cuba Mail Steamship Service. She was the third Ward liner to bear the name of the grim old fortress which guards the entrance to the harbour at Havana; a fine steamer boasting the last word in modern luxury, a vessel of which her designer, Naval Architect Theodore E. Ferris was justly proud.

On August 23rd, 1930 the Morro Castle slipped her pier in New York and, Havana bound, set out upon her maiden voyage as flagship of the line. Later in that year Capt. Robert R. Wilmott took command of the new ship and she became the hardest driven boat on coastal passenger service, having all but completed her 174th voyage when disaster overtook her off the gay beach of Asbury Park.

The specifications of the ill-fated vessel gave her a displacement of 11,520 tons, with a length of 550 feet and a service speed of 20 knots. The American

Bureau of Shipping granted her the highest possible construction rating with the additional honor of having been approved by the U. S. Navy as a Naval Auxiliary. There seems never to have been any question of her seaworthiness, soundness of fabrication, or adequacy of safety provisions, yet in consideration of what actually happened, one finds it ironical in the extreme to recall that this floating palace carried electrically controlled water-tight doors, steel deck houses, automatic electric fire-detecting apparatus, a smoke reporting system, carbon dioxide smothering system, no less than 73 portable fire extinguishers, 42 fire hydrants with hundreds of yards of hose; and ten, seventy-person, thirty-foot life boats. She carried the latest in radio equipment manned by three qualified operators so that a 24 hour watch might at all times be maintained. She was as supposedly foolproof as was the mighty *Titanic* of historic memory and yet, 134 lives were lost. Why did it have to happen you ask? Today we offer as the only sincere explanation—'the failure of the human equation'!

In the evening calm of September 5th, 1934, the great Morro Castle with five hundred holiday-makers aboard, pointed her sharp prow to the north, left romantic Havana in her steaming wake and commenced what was to be her last voyage toward New York City. Happy passengers thronged her decks and sumptuous lounges settling themselves in prospect of another picturesque voyage up the scenic At-

lantic coast. Captain Robert R. Wilmott paced the bridge with First Officer William F. Warms. In the radio room aft, chief wireless operator George Rogers sat at his post exchanging the regular routine of ship to shore traffic on six hundred meters. His assistants, George Alagna and Charles Maki, had turned in for the duration of their chief's watch. The great ship ploughed through an uneventful night maintaining an even speed of eighteen knots.

Friday morning dawned bright and clear with the promise of a fine day and a pleasurable cruise. Wilmott, an old sea-dog of many years experience, duly checked with compass and chart, then turned over to Chief Officer Warms so that he might go below again to consult with the ship's doctor. An attack of acute indigestion seemed to be more than ordinarily bothering him. So the hours passed; the sun, a great fiery ball, sank toward the western horizon and the evening of the final day on board approached, with its promise of happy revelry.

At 7.45 P.M. Chief Officer Warms made his way with some difficulty through groups of celebrating passengers to the Captain's quarters and knocked. Receiving no permission to enter, he took the liberty of opening the door to investigate. With his first step across the threshold, Warms became the leading actor in a grim, mysterious prelude to death, tragedy and disaster, for Captain Robert R. Wilmott lay dead in his bath. Thus by an act of God and the tradition of the sea, Warms was automatically

placed in complete charge of the vessel. His first move was to summon the ship's physician who conducted a hurried autopsy owing to the sudden and seemingly mysterious passing of the captain. Whether or not Wilmott died a violent death in the light of the tragedy to follow, is destined to remain the subject of controversy and conjecture, for the doctor who performed the autopsy was burned to death, and the body of the unfortunate Captain was cremated in the raging inferno.

The command having devolved on Warms, information of the Captain's death was conveyed to the passengers and crew with the result that the major portion of the former went to their cabins to spend the remainder of the evening quietly there out of respect for the late Wilmott. The Morro Castle was due in New York at 8 A.M. the next morning. Barnegat Light was passed at 1.55 at a distance of about three miles and the course set 1 degree for Ambrose Light and the entrance to New York Harbour. The weather was wet, the wind east 20 miles, and the sea choppy. Mariners called it a 'dirty night'. In the radio room third operator Maki sat at the key listening to passing traffic. Operators Rogers and Alagna slept.

At exactly 2.50 A.M. assistant beverage steward Daniel Campbell opened a locker door in the library on B promenade deck. Without warning his face and hands were smothered in a mass of flames. Before the unfortunate man could make his way to the

bridge, a deck watchman reported that smoke was seeping out of a ventilator. Acting Captain Warms immediately sent under-officers to investigate this amazing situation while he himself remained on the bridge as the vessel ploughed through the night in the teeth of a twenty mile wind at eighteen knots per hour. The rain swept the decks, the flames spread like wildfire and the radio operators, the connecting link between ship and shore, two asleep and one awake, remained innocent. So utterly incredible was the progress of the fire that one finds it hard to believe that it was not of incendiary origin. Within ten minutes it had gotten completely out of control, sweeping its way through the public rooms on B deck, attacking both forward and aft passenger stairways to lower decks in such fashion that it was absolutely impossible for the trapped sleepers to gain the upper promenade through use of the regular facilities. Still the doomed ship cut through the choppy water with unabated speed, fanning the consuming flames until the forward part of her superstructure became a gigantic torch.

With the sudden failure of the gyro pilot, the telemotor gear, and the electric lights, Warms cut his speed and altered his course, but the horrible damage had been done and he was too late. The fact that the Morro Castle had been built 'open' for the tropical trade, that she was furnished with highly polished woods, inflammable drapes and hangings, and that she travelled at least six miles before her

way was cut, definitely robs the rapid spread of the flames of its mystery.

At 3.00 A.M. wireless operator Maki became suddenly aware of the fire and hurriedly awakened his chief and the second operator. Alagna hastily dressed as the red glare of the shooting flames made grotesque monsters of the shadows in his cabin. Outside his window men dragged hoselines to the accompaniment of shouted orders and confusion. Rogers brushed Maki aside, took charge of the transmitter, and ordered him to stand by while Alagna went forward to take orders from Warms. The second operator glanced down the cross alleyway to the port side to find it in flames. On the dock below a lone man and woman stood at the rail looking to seaward; forward, utter confusion reigned with the cries of trapped passengers below mingling with hoarse orders from the officers to the bewildered crew. Alagna caught the figure of Warms outlined in the lurid glare, but there were no orders forthcoming and the call for help could not be sent without permission from the bridge.

Back to the radio room he went to find the choking fumes sweeping up through cracks in the floor and Rogers using a wet towel as an improvised smoke mask. Emergency power supplies were thrown on to maintain the radio equipment as Alagna made his second trip to the bridge for orders. Meanwhile Rogers at his post could do nothing save listen to the normal traffic on 600 meters as he

crouched over his desk. Three dots—three dashes—three dots, the sea's cry for help which every ship must heed, the life-giving SOS could be hurled a thousand miles through the ether in less than two seconds; a call which would instantly still all traffic and divert rescue ships to the side of the doomed Morro Castle—but Rogers had no orders—he could only wait—gasp through his wet towel—and wait! In spite of the fact that he heard the Andrea Luckenback ask the Tuckerton coast station whether or not he had any information on a burning vessel off the Jersey coast; in spite of the fact that fishing boats had relayed rumours to the mainland and Tuckerton replied that he had no official word—Rogers could do nothing. Bound by discipline, he could not even reveal that it was his ship which was on fire!

Alagna, choking with smoke, returned from his second fruitless trip forward with the information that utter confusion reigned on the bridge.

"They're running around like madmen and I can get no co-operation," he testified.

It was exactly 3.15 A.M., the beginning of a three minute silent listening period on the 600 meter channel. Now was Rogers' chance if only the skipper would free him—three minutes in which all radio receivers were concentrated by law on the one hand for the very purpose of listening for possible cries for help. Twice in every hour those silent periods came up—here was one of them; and if ever a doomed ship needed this chance, that vessel was

the Morro Castle. On his own initiative, Rogers sent out the general CQ in order to clear his way for the SOS which he felt sure could be but a moment in coming; but Warms sent no orders and the silent period passed. The feelings of those helpless radio operators can better be imagined than described.

Once again, and this time through corridors and decks choked with flames and smoke, dying men and women; through such a nightmare of horror as will cling with him to his last day, operator Alagna fought his way to the bridge and finally found Warms. Eventually he was able to impress upon the acting Captain the fact that if an SOS were not immediately sent, the radio room would become unbearable and the transmission of a call for help impossible at all. Warms, in a daze, at last realized that the ship was radio equipped and gave permission, with the position of the Morro Castle 20 miles south of Scotland Light. Alagna tried to phone through but the lines were down; smoke cut him off temporarily but then, with a providential change of the wind, he was able to get through to the smouldering radio room. In two seconds Rogers sent out his wild and belated call for help coupled with the Morro Castle's identification.

It was 3.23 A.M. when the Chatham Coastal station WIM received the SOS. The fire had started at 2.50 and had been definitely out of control since 3.00 o'clock. The radio operators had been forced to remain idle in the face of this terrible disaster for

23 minutes. Rogers, his feet in the rungs of his chair because the floor was too hot, pounded his key until 3.37 when bursting batteries flooded the cabin with sulphuric acid fumes and drove him from his post. But the *Monarch of Bermuda*, the *Andrea Luckenback* and the *City of Savannah*, with every ounce of steam up, were rushing to the stricken *Morro Castle*. Rogers had not failed altogether!

The three operators made their way to the f'o:c'sle head to find that the burning vessel had been brought to anchor and rode head to the wind. The aft end of the ship, a sea of fire, shooting flames into the sky, made a picture of horrible fascination with hundreds of passengers trapped and burning below. Porthole glasses cracked like snapping whips from the terrific heat; boats but half loaded were making for the Jersey shore; leaping figures splashed in the cold water and dotted it for half a mile. Four of the twelve lifeboats were never launched as panic and holocaust swept hand in hand over the great raging inferno.

Suddenly the 'Monarch of Bermuda' loomed out of the mist of early morning and 71 floating passengers were immediately picked up. The fishing craft 'Paramount' arrived and rescued 51. At 8 A.M. the U.S. Coast Guard Cutter 'Tampa' drew alongside and offered a free tow to New York. Daylight and aid had at last come to snatch the few remaining flame-scarred, half asphyxiated survivors from the very jaws of death. When all had been

taken aboard the rescue ships, the burning Ward liner followed her tow north but, perverse to the end, broke loose off Asbury Park and beached herself at that point. The Morro Castle had come to the end of her last journey; her \$5,500,000 charred skeleton beat upon the shore, a mute but impressive reminder of man's utter inadequacy. 134 precious lives had been carelessly, needlessly sacrificed on the altar of incompetence.

The immediate investigation of the Morro Castle disaster was conducted by Dickerson N. Hoover, Assistant Director of the Bureau of Navigation and Steamboat Inspection, with the result that acting Captain William F. Warms, Chief Engineer Eben S. Abbot and the executives of the parent company were committed for trial. Warms and Abbott were convicted of criminal negligence and sentenced to two and four years imprisonment respectively. The company received the maximum fine penalty of \$10,000. Thus has been closed another chapter in the annals of sea disaster, a chapter which still leaves much of mystery and dissatisfaction in the reading of its historic pages; for it is not known even to this day, how the disastrous fire started or in what manner the Captain died.

Chapter IX

THE TRAGEDY OF THE DARDANELLES

EARLY in 1915

the pages of world history were called upon to commence their inexorable record of the darkest days of the year and one of the most tragic tactical blunders of the entire World War. On March 5th, the first guns boomed to mark the starting of an ill-fated ten months campaign which, despite the black pencil of the keen-eyed censor, was to shock and appall the entire British nation. Years have passed since the enactment of that great tragedy, and with their passing men have come to realize the full import of the gigantic failure. And so, the story can now be told in all its pitiful detail, and one need no longer call upon the imagination to color the tragic circumstances. Great Britain's Gallipoli Campaign and the Dardanelles disaster will go down in history as the World War's crowning tragedy of errors!

In the telling of this story of defeat and disaster one cannot but be impressed by the instinctive feeling that the entire enterprise seemed fore-doomed by some colossal fate. Nothing was accomplished, everything went wrong; each new plan was put into action either at the wrong time or too late; every phase of the great fiasco was permeated with futile

'if's' and 'might have been's'. Those in high places were guilty of amazing errors in judgment, and through their utter inability to grasp the situation at the time, were never to know until years after the war that they had success within their grasp a dozen times over had they followed upon their advantage. And the terrible price of that supreme incompetence and lack of vision was paid, as it always has and always will be paid, in the human lives of those who asked no questions but simply obeyed orders. One hundred thousand allied soldiers were killed on the Gallipoli Peninsula, and they perished to no purpose.

On August 10, 1914, Admiral Souchon and the commanding officers of the two German cruisers, the "Goeben" and the "Breslau" were stationed before the Dardanelles anxiously awaiting authorization to proceed. At length a Turkish torpedo boat hoisted a 'follow' signal and their arrival in Constantinople immediately precipitated Turkey into the world war on the side of the Central Powers. The German government had accomplished a master stroke at the expense of the British and French navies and fate had decided that the only German sea raiders to be successful in escaping during those early days of the war were to be the very ones to play leading roles in this prelude to disaster. With Constantinople, one of the world's strategic capitals, in the hands of the enemy, Great Britain was automatically cut off from one of her most valuable allies; for Russia's gateway to the Atlantic lay through the

Sea of Marmora, the Dardanelles and the Aegean Sea. Russia's granaries were bursting with wheat while Britain and France were on short rations. To pierce those famous straits, locked hard and fast by the opposing Turks, meant not only bread for the harrassed allies, but also the opening of a passage for guns and munitions to the Russian Empire. The helpless Russian troops were being swept by hurricanes of German shell-fire without the means to reply. The Grand Duke Nicholas had sent a cry to England and Lord Kitchener had pledged his aid. The Dardanelles must be forced—at all costs.

So the die was cast with everything to gain and, so it was thought, nothing to lose. A victory would not only relieve Russia but would give the allies the world-famous city of Constantinople. It would bring the wavering Balkan States, Greece, Bulgaria and Roumania, over to the allied cause. Russia and Italy would put Austria out of the war in a few months, and Germany in single-handed combat would be forced to capitulate. The storming of the Dardanelles would win a speedy victory and save millions of lives. Yes, in theory it was an inspired idea with the prizes of success glittering with enticing brilliance, but in practise it was to prove to be one of the war's greatest tragedies.

In London, the War Council insisted upon a Dardanelles campaign with the impetuous First Lord of the Admiralty, Mr. Winston Churchill, supremely confident of an immediate triumph. Lord Kitchener

eventually agreed, but insisted that the navy should bear the brunt of the campaign, for he could not, and would not establish an army in Gallipoli at the expense of his activities on the western front. It was felt that it would be a fairly easy matter to storm the passage, blast the Turkish forts out of existence, and then send out a landing party to clean up the peninsula. But the war council had not provided itself with adequate maps of the territory in question. They did not know that Gallipoli's forbidding beaches led to rock bound precipices whose formidability made of the Dardanelles passage one of the greatest natural fortresses in the world. They did not realize that they were pitting a few puny ships, with their all too inadequate fighting force, against a sun-bleached, disease-infested land which was defended by a semi-barbarous people who had been goaded into a fury of fear and hatred by German tyranny. Mr. Churchill knew only that he had set his heart upon the taking of Constantinople, and issued his instructions accordingly. The Mediterranean fleet was to proceed into the Aegean to the mouth of the channel, silence the outer forts, and then push its way into the very heart of the German controlled Ottoman Empire.

On the morning of March 5th, 1915 therefore, a strong force of eight battleships attacked the outer forts at the entrance of the Dardanelles and it was soon discovered that the ship's guns outranged those of the forts to such an extent that they could blast

the shore with perfect security. British and French marines immediately landed and soon won the entrance. The main forts, however, lay some ten or fifteen miles still further up where there was a sharp kink in the waterway. Lying directly opposite at this point were the two formidable fortifications Khilid Bahr and Chanak, commanding the narrow mine infested channel with their guns. The allied fleet pressed closer and closer until the ill-fated day of March 18th found them with eighteen battleships sailing majestically up the narrow waterway to blast their way through to panic-stricken Constantinople and the relief of Russia.

Unknown to the British Admiral, however, a little Turkish steamer had laid a line of mines in a bay which had been reported clear. Aeroplanes circled overhead but the mines were too deep to be seen and an 'all clear' was reported. And so another costly error spelled disaster. At 2.00 o'clock the French ship "Bouvet" hit a mine and sank in two minutes with her entire crew. At 4.00 the British battleship "Inflexible" disappeared. Five minutes later the "Irresistable" followed her. The "Ocean" and the "Gaulois" were blown out of the water by Turkish gunfire and the fleet retired in confusion. Five battleships had been lost in that one afternoon of desperate fighting and the nerve of the British and French commanders was badly shaken. But they were ready and willing to gather themselves for an immediate counter-attack upon the following day.

had they not received orders to await further instructions. Another blunder on the part of the war council had still further enmeshed Britain's navy in that web of hapless circumstances. Had the counter attack been made, history now shows that it must have been overwhelmingly successful. To the German commander's utter amazement no attack was forthcoming, and in the ensuing days he massed his Turkish army in the hills and recesses of the Gallipoli wilds, and lay in wait for whatever might happen. The opportunity had been lost—the enemy was now ready. World history undoubtedly hinged on the narrow turn of circumstances of that first naval attack.

Meanwhile, day after day passed as the British naval command cried to Churchill and Kitchener for troops with which to assault the Peninsula, and the Cabinet, unable to come to a decision, wasted precious time in an effort to make up its mind. Finally Kitchener agreed to send the seasoned 29th division to Gallipoli but it was well on in April before it arrived. Meanwhile the Russian Empire, for whose very existence this tremendous sacrifice was being made, stupidly closed the door to another source of aid which must have spelled success. Greece offered an army corps of three divisions to assist the allies in taking Constantinople but Czar Nicholas, with the old jealousy between Russia and Greece springing up, refused the helping hand. Nicholas in his characteristically blundering fashion was not to know

that in his selfish covetousness of Constantinople he was merely sealing his own doom.

So, the 29th division of crack British troops arrived upon the scene in April. And if it had not been enough to have them come almost too late to be of service, what indeed must have been the reaction of the harrassed naval leaders to find that the twenty-two transports in which they had been loaded with their miscellaneous equipment had been sent out with no thought for order or method. It was found impossible to disembark speedily and get into action. Guns were in one ship and ammunition in another; nothing was where it should have been; arrangement or plan had played no part in the preparations. The entire army had to be taken to the nearest port of Alexandria in Egypt; disembarked, all stores sorted, and the entire expedition reloaded—and that complete process took place while every Turkish fisherman and every Turkish coastal vessel hastily took stock of the enemy's plans, then rushed with the tidings to Constantinople. Not a line of it was printed in the press of an allied land. The censor did his work well. No one knew a thing about it—except the Turks, and the Germans, and the Austrians, who at once began to scrape together all the available troops and guns at their disposal to meet this new danger. Constantinople and Berlin knew much more about the proposed attack than did London.

Three weeks later the allied expedition declared

itself ready for the great attempt and the German commander Liman von Sanders lay in wait. The story of that awful landing on the Gallipoli Peninsula on Sunday, April 25th is almost too ghastly to relate. Thousands of ambushed Turks swept the loaded boats and crowded beaches with a withering machine gun fire that seemed to blast all before it. Hundreds of British and Australian soldiers, hoping to swim under water to escape the rain of death were caught upon submerged barbed wire entanglements and drowned. The tremendous resistance of the enemy had been completely miscalculated, but the troops did not falter. They had been told to attack five beaches simultaneously and to hold them—and they took and held five beaches. Where the War Office had reckoned the cost at 5,000 casualties, it was 15,000. It was not the men who were found wanting.

But the landing was just a start. The beaches were under the direct observation and fire of the rocky heights of the peninsula, and every attempt to take that impregnable position failed dismally. Throughout the torrid months of May, June, and July, the bitter fighting continued under conditions that one can scarce comprehend. Sickness and disease took a horrible toll. Men died of raving thirst. In June the casualties were 38,000; in July 42,000; in August 50,000. To replace these, 50,000 new reinforcements arrived, but they simply made good the losses. Had one quarter of those men been

there three months earlier the British would have been in Constantinople. It was the old story, too late. Not only had the new troops come too late, but they were pitifully unseasoned, with untrained officers who were in no way competent to handle such a desperate campaign under such rigorous conditions.

Immediately, a new plan was evolved; one which must have been successful had not utter stupidity again lost the day. The British command decided upon a surprise attack upon Suvla Bay and the heights above. The plan was excellent. It was intended to land a large force secretly, rush the heights before the Turks could arrive, and then command the roads and the Dardanelles from above, and force the enemy off the Peninsula. The attack began on August 6th but the unseasoned Colonel of the Suvla expedition, for some reason that has never been explained, after landing his men, allowed them to rest for three days before attacking the heights. During that time the Turks rushed 30,000 men to the defense of ground that might easily have been taken without the loss of more than a company.

On the morning of the 9th the attack was made, in plain view of the watching Turks on the heights under the command of the redoubtable Mustapha Kemal. At the end of the day the British losses were 45,000, but there was an even greater tragedy. One British detachment gained the heights and thus possessed themselves of the key to the entire peninsula, but a British battery mistook them for Turks,

swept them with high explosive shells, and killed every man! Typical of the whole doomed enterprise was this mournful blunder. The Dardanelles campaign had failed!

Sporadic fighting continued until late in December at which time the War Council at last decided that an immediate evacuation was imperative. And in a brilliant achievement that is without parallel in military or naval history that evacuation took place with hardly the loss of a man, right beneath the muzzles of the Turkish guns. If one half the skill had been shown in attacking the Dardanelles that was displayed in getting away, the latter feat would have been unnecessary.

To Russia the failure at Gallipoli was a clear warning that her allies could send no help. To the wavering Balkans it was an indication that they should throw in their lot with Germany. To Turkey it meant license to wage a war of extinction upon Armenia. To Austria it meant an opportunity to crush Serbia; and to Germany—a promise of victory and world domination. 100,000 men killed;—British, French and Australian, without the compensation of a single ray of success; slaughtered because of a diabolical web of stupid circumstances woven of such stuff as incompetence, mismanagement and cupidity—the stuff of which war itself is made! Immortal are they, every one who died at Gallipoli, for their's was a triumph of loyalty and ineffectual heroism. But, to what end did they die? Answer

that question if you can, as you remember them as they started out those many years ago to play their part in that horrible chain of circumstances which had its inception in war!

Chapter X

SIR CHRISTOPHER WREN — BUILDER OF ST. PAUL'S

ON a winter day some two hundred years ago, an aged Englishman, following his late afternoon drive about the streets of London, returned to his home in Hampton and partook of his solitary evening meal. Two hours later his faithful manservant found his master asleep in his great chair before the fire. . deep in the rest from which there is no earthly awakening. It was the 25th of February in the year 1723, and the pages of history were called upon again to record the closing date in the life of another great man. Sir Christopher Wren was dead—he who had been Surveyor General of the City of London and probably the greatest architect the world has ever known. And with his passing the bells in the great towers and domes which he himself had created, mournfully rang their dirge in memory of a fine gentleman, a scholarly genius, a Knight of the Realm of King Charles II—builder of St. Paul's Cathedral.

The story of the life of almost any great man is invariably one in which circumstances play a significant part in determining its course. So it was with Christopher Wren in whose life hereditary tendencies and the force of circumstances were para-

mount for his amazing success as an architect was a result not so much of an instinctive genius for building as of a genius which happened to be guided in that direction. Wren's was the sort of genius which might have made anything of him for he was a remarkable man with amazing versatility of talents.

Christopher Wren was born in the year 1632 in the little vicarage of East Knoyle in Wiltshire. His father was the rector of East Knoyle and the boy was fortunate in being brought up in a home of utmost refinement. Early in life he exhibited remarkable powers, and strangely enough concentrated all his youthful talents upon the intricate subject of astronomy. Wren's father was a passionate Royalist, and when Christopher reached school age there was no question as to where he should be sent. Accordingly he was entered at Westminster under the famous Dr. Richard Busby, than whom there was no more staunch supporter of King Charles I in all England. Young Wren's amazing scholarship soon asserted itself and he not only maintained the leadership of his class but displayed elements of marked genius in every line. He took all courses that were available, and when he had exhausted the possibilities of the school and left it—he was just fourteen years of age.

At that time the civil war was in progress and the uncertainty of the future made it imperative that Wren spend some time in London before going up to Oxford. There, he came under the influence of

several outstanding men, many years his senior, but all of whom were forced to treat him with the respect of equality. He wrote treatises upon Trigonometry for them, and amazed them with his grasp of the subject. He studied astronomy voraciously and invented several pieces of apparatus to assist him. Then came the death of King Charles at the hands of the hated Cromwell. An epoch in British history had been closed, and by chance one had also closed in the life of Christopher Wren. He realized that the time had arrived when he must make a definite move toward choosing for himself a career that should befit a King's scholar of Westminster. Accordingly he went to Oxford, and in the year 1653, following a brilliant course, emerged with his Master's degree. It was there that Wren met the famous diarist John Evelyn, the man who was to become his dearest friend throughout his life, and who was destined to influence his career in a marked degree.

Immediately following his graduation from Oxford, Wren accepted the professorship of Astronomy at Gresham College and occupied that position for several years. Meanwhile the tyrant Cromwell had died in 1658, and there was talk in the air of a return to the throne of Charles II. Two months later the restoration took place, and it was about that time that Wren, whose amazing scholarship astonished his contemporaries, was offered the Savilian Chair of Astronomy at Oxford. He accepted with great

enthusiasm and immediately took up his new duties.

One of his first activities brought him into personal contact with the King when he presented His Majesty with a Lunar Globe which he had constructed. Wren's friend John Evelyn, who had frequent audiences with His Majesty, at that time interested himself in architecture and town planning as a hobby. Through his influence the King requested Wren to go to Tangier and, making use of his amazing mathematical knowledge, report upon the condition of the harbours and fortifications. Wren, however, had no desire to leave England, and in some fashion or other was successful in at one and the same time declining His Majesty's request and holding his favour. This incident is important in that it marks the first suggestion of architecture as Wren's career, and though King Charles was undoubtedly annoyed at his refusal, it is amazing to note that almost immediately thereafter he created the post of Deputy Surveyor of the King's Works and asked Wren to accept it. Wren did so much to John Evelyn's delight, but before he became settled in his new office the great plague of the year 1665 broke out and Wren fled to France to escape the ravages of disease.

Thus did destiny take hand in his affairs for it was the incident of his trip to Paris, together with the great impression which French architecture made upon him, that changed his entire life. He caught sight of stately French domes and at once became filled with creative ideas. Flamboyant Gothic an-

noyed him. He revelled in the beauty of the domes of St. Paul and St. Louis. The Facade of the Sorbonne fascinated him. This was Renaissance architecture in its purest form—this was what he wanted to take back to England with him. At the very impressionable age of thirty-three Christopher Wren, without any preconceived notion or idea, suddenly came face to face with something that made an architect of him in a second of time. The sight of a few domes had brought about a climax in his artistic career.

Upon his return to London, Wren as Deputy Surveyor, to his utter delight, was commissioned by the King to make a report upon the condition of old St. Paul's Cathedral which at that time was in an advanced stage of decay. Wren immediately set his heart upon the complete rebuilding of the cathedral so that he might construct one of his beloved domes. But the commission in charge of the work could not be convinced that rebuilding was necessary—a few repairs would suffice. Wren prepared plan after plan for converting the cathedral into a renaissance building but he was refused permission to commence the work along that line. His views of Gothic vs. renaissance were too radical. He modified his plan in an attempt to please both factions and then the question of money was used as an excuse. Complete rebuilding would be too costly. Wren despaired of ever having a chance to create the type of building upon which he had set his heart and then—came a

devastating stroke of fate which was to ultimately give him his great chance.

It is said that it is an ill wind that blows nobody good. A wind did blow only five days later, it blew from the east over the great city of London—steady and strong—and in its heart was a destroying flame. In the early hours of the morning of September 2nd, 1666 the great fire of London broke out—the most terrible conflagration in all history since the burning of Rome. It consumed five-sixths of the city over an area of 370 acres leaving 100,000 people homeless. 13,000 homes were destroyed, thousands of public buildings ruined and the countryside laid waste. For four days and four nights it raged, and then when the flame and smoke had abated, London set to work to rebuild her shattered city. But Christopher Wren journeyed to the smouldering pile that had been St. Paul's Cathedral. They would let him rebuild it now—there was nothing that could be placed in his way. *He* would start at St. Paul's on Ludgate Hill.

Almost immediately following the fire Wren, through Evelyn's overtures to the King, was raised to the position of Surveyor General of the King's Work, and the task of rebuilding St. Paul's Cathedral was officially placed in his charge. Wren's delight knew no bounds, but his troubles were by no means over. His plans for a purely renaissance cathedral were rejected upon ecclesiastical grounds. He prepared a model of his proposed cathedral, hand

carved in wood by himself—but the King preferred the gothic style. He altered his plan times without number until finally the famous Warrant Design was accepted by the King and the Commission. Wren had been forced to compromise—but he still had his dome. They had not been able to rob him of that.

Work of construction upon St. Paul's cathedral commenced under Wren's direction, with the laying of the foundation stone in 1675. It was to be thirty-five years before the church was completed. Wren was forty-three when he started his great work—he was seventy-eight when it was finished. The story of those years in the life of the great Surveyor General is one of tremendous labor and amazing concentration upon the task in hand. He personally supervised the digging of the foundation and the laying of the stone. At the same time he was busy upon the architectural supervision of some twenty additional churches and secular buildings. He seemed to be in all parts of London at once. No detail however insignificant escaped his notice. No architect in all history ever attempted such a gigantic task. But St. Paul's was his first love.

His plan had been cunningly devised so that the interior of the great church could not in any way offend those who had been steeped in tradition, and yet his actual design was of the very revolutionary nature upon the introduction of which he had set his heart. The great dome gradually took shape with

its inner skin visible from the floor of the church; its outer skin visible from the street, and its ingenious inner cone of massive brick completely invisible, and erected for the support of the 700 ton stone lantern with its ball and cross surmounting all. Two noble towers crowned the western elevation in one of which was placed Great Paul, the mighty bell which is rung each day at one o'clock. In the interior Wren allowed his amazing genius to run riot. His saucer domes in the great ceiling were made to play tricks with the imagination until one almost doubted that they were round. The illusion of perspective which he created was uncanny—520 feet the great church stretched in length, and the total height from the crypt floor, where now rests Nelson's body, to the top of the cross was 374 feet; 290 feet wide he made it, with a nave of 200 feet, and the area at the crossing under the huge vaulted dome was 142 feet square.

For thirty-five years Wren laboured scarce noticing that honors were being heaped upon him and that he had been knighted by His Majesty. Monarchs came and went but Sir Christopher Wren continued to build his church. Throughout the reigns of Charles II, James II, William III, Anne, and George I, he laboured rebuilding the great city of London, and in the year 1710 his son Christopher Wren Junior laid the top stone on the lantern of St. Paul's. His great task had been completed.

But a career of such a spectacular nature could

not but suffer from the petty jealousies of those in opposition to him. During the reign of George I, Wren was accused of not having completed some of his work within a reasonable time limit. The accusation was insultingly unjust. Added to this, King George who was of the house of Hanover and had surrounded himself with a German court, was persuaded to relieve Wren of the position of Surveyor General and substitute one of his own friends who was pitifully inadequate for the responsible office. Broken hearted, Wren retired into seclusion and spent his remaining days in loneliness. He went to a house on Hampton Court Green now known as Old Court House and there spent his last years.

His days were devoted to study and contemplation, the former upon scientific subjects, and the latter in deep reading of the scriptures. Once a year it became his custom to drive to St. Paul's that he might sit for a while beneath his great dome and think. For him the cathedral was a place of many memories. He must have cast his mind back over his ninety years and thought of all that had led up to the building of St. Paul's. Of his days at Oxford, the grey days of Cromwell, the return of Charles II and the wonderful goodness of John Evelyn. Most of all he must have contemplated his 48 years of Surveyorship and the crowning task of his life. St. Paul's was his, and his alone; no one, not even the King, could take that away from him.

The last time he visited the great dome was on February 25th, 1723. He returned home and quietly died—in his 92nd year. His long life had been filled to overflowing with the fruits of labor. They buried him in the crypt of the house which he himself had built, and for over a century no memorial was erected to him. Surely he needed none, surely the whole city was his memorial.

To enter the north transept of St. Paul's today and to read the old inscription which has now been placed over the door, is to gain some small realization of that tremendous import. "Beneath lies buried the founder of this Church and City, Christopher Wren, who lived more than ninety years, not for himself but for the public good. Reader—if it is a monument that you want—Gaze around you!" Of no other man in history could such an inscription have been penned. Sir Christopher Wren stands supreme in the respect and admiration of British peoples the world over as a genius and a scholarly gentleman; one who was ever ready to learn from those who could teach; to teach those who would learn; to render loyalty to the Kings who employed him, and enduring friendship to those who loved him.

Chapter XI

FLORENCE NIGHTINGALE — 'THE LADY WITH THE LAMP'

ON August 13th, 1910, the world mourned the passing of one of the greatest, if not the greatest woman in the history of civilization. Living as she did in a period of stolid Victorianism which expected, yes demanded, mere social decoration and the wit to look merry of its eligible young women of the upper class, and at the same time obsessed with the longing to bring help and comfort to a suffering world, this woman, by tearing herself free from the shackles of tradition, was destined to become the first missionary of the gospel of professional opportunity for women, the greatest emancipator of her sex who ever lived. She who will forever be known as the 'Lady with the Lamp' died at the age of ninety years. Her name was Florence Nightingale. Through her vision, determination and self-sacrifice during a lifetime of inspired devotion to her chosen profession, she has left a perpetual memorial in the form of our modern system of training for female nurses.

William Edward Nightingale and his bride went abroad immediately following their marriage and remained, principally in Italy, for a period of three years. It was in that country that their daugh-

ters were born, the elder Francis in 1818, and the younger Florence in 1820. Shortly thereafter the family returned to England and finally settled in picturesque Embley. Being of good circumstances the family usually spent a part of the season in London and, as the girls grew somewhat older, their general education was placed in the hands of a well-recommended governess. In her teens Florence had mastered the elements of Greek and Latin, had read some of the dialogue of Plato, a good deal of history, and in general had received a stimulating education consistently proper in every respect for a girl of her station. But already a characteristic habit of mind was beginning to show itself, one which, let it be said, was definitely disconcerting to her indulgent parents whose sole ambition for their attractive daughter was that she should grow to eligible womanhood, marry well, become a respected matron and the mother of beautiful children. After all that was a woman's lot in this world and one was not to consider stepping beyond the bounds.

Florence was a sensitive, shy and somewhat morbid child, fond of flowers, birds and beasts and of an eager, solid intelligence though much given to dreaming. In spite of her delightful sense of humour she was for the most part grave and introspective. Any waste of time was a sore trial for her and the life of a hospitable country house with its constant social calls was not less distracting than London in the season. Altogether Florence's un-

satisfied longings were a mystery and a disappointment to her worried parents. After all, they could not understand that a young man in her position and with her objects might have turned to politics, but for a girl there was no such outlook and her books only brought her back to the constant problem of how to serve or find a way out.

Peculiarly enough it was not as a social failure that Florence was turning from the usual life of a woman of her class, for she was not only admired but warmly loved by her many friends of all ages. It was an utter feeling of uselessness which assailed her at every turn; an insatiable desire to do something to aid suffering humanity which drove her on through days and weeks of mental torture. At the age of twenty-four Florence had decided that she should most like to devote her life to the care of the sick and her first scheme was to learn nursing at the Salisbury Infirmary, but Mrs. Nightingale was not to be persuaded. Her daughter's purpose, however, was to become more fixed in spite of the fact that it was carefully brought to her attention that such work was distinctly unworthy of an educated gentlewoman. It involved companionship with medical students and nurses of whose manners and deportment Mr. Nightingale had received very unsatisfactory accounts. One can understand the attitude of these worried parents when one recalls the fact that hospital conditions even in the nineteenth century bordered on the disgraceful in many instances. In-

sobriety and personal neglect, together with lack of training, were the distinguishing marks of many who laboured in the so-called houses of mercy, yet Florence Nightingale's one thought for these dreadful persons, as they were referred to, was that they too might have had troubles of their own.

Finally in 1850, when she was taking a trip abroad with some friends of the family, Florence was permitted to stay at the hospital in Kaiserswerth for a period of three months. At least, her parents reasoned, no one will know where she is. The three months at that institution were the turning point in Florence Nightingale's life. On her return to England she studied intensely nor could her parents sway her from her purpose.

Her experience at the hospital in Kaiserswerth had appalled her, finding as she did, that the institution was little more than a hot-bed of filth and disease. Sanitation and hygienic methods were unknown and sneered at. Patients were taken to the hospital under violent protest, knowing full well that death would be their only release. Yet in spite of the horror of her experience, regardless of the shock which her sensitive soul must have received, Florence Nightingale, much less dismayed, went forward with new vigor and determination. Come what may, she would be a nurse—yes, she *was* a nurse, for she had taken her training. But what a pitiful training, and where to find work so that some experience might be gained which would give her the

golden opportunity to introduce some of those reforms which she knew in her heart were so necessary. Finally, with the outbreak of an epidemic of cholera in London, Florence Nightingale volunteered to assist at the Middlesex Hospital; her application was accepted and her great opportunity had come.

Six days after the first landing of the British and French forces in the Crimea, the battle of the Alma was fought. Rejoicings in a swift and brilliant victory however gave way to a mood of anxious expectation when it was understood that the battle was to be by no means the first step in a rapid, triumphal progress to victory. Reports in *'The Times'* too, of the neglect of the wounded began to arouse resentment and pity, for it was the first war in which the newspaper 'special correspondent' had played any conspicuous part and many letters were subject to no censor.

"Have we no sisters of charity!" said *'The Times'*.

"Must wounded soldiers, wallowing in their own filth, attend one another while useless pensioners, sent out to aid the wounded, stand by in complete ignorance and watch them die like flies! Have we no clean sheets in England that can be sent to Scutari? Have we no women of courage who will come out here and comfort our brave wounded? Has not the expedition to the Crimea been the talk of the last four months? Why then this disgraceful neglect and seeming innocence of conditions as they

really exist?"

Two days after the appearance of '*The Times*' letter, Florence Nightingale, shocked beyond words at the horror of which she had read, offered herself, together with a party of fourteen women which she had organized, in an official letter which she addressed to the Secretary at War. On October 19th, 1854 she was appointed Superintendent of the female nursing establishment in the English General Military Hospitals under the chief Army Medical Officer at Scutari.

During the days of preparation the labour which fell upon Miss Nightingale was enormous but no one was more equal to the task than was she. With her remarkable stamina and determination nothing was neglected; no available opportunity to more thoroughly equip her expedition was ignored, and yet there was no bustle or hurry—just calm, composed leadership of the most dynamic quality. The fourteen volunteers grew to twenty, then to thirty, and finally to thirty-eight. With a few exceptions they were not of gentle birth, but all were of one determined purpose; all were united in their love and admiration for their young superintendent. The party left for the Crimea on October 21st, just five days after Florence Nightingale had offered her services to her country, and reached Scutari on November 5th.

There were two hospitals at Scutari in both of which Miss Nightingale carried on her labours. Her

headquarters was the great Barrack Hospital which had been made over following lack of sufficient accommodation at the General Hospital. Immediately nurses were told off to attend to the worst cases in the wards, if they could be so called, so that something might be done to provide the sick men with food which they could swallow. It was quite evident to Miss Nightingale that many patients must have been lost from want of nourishment, for it was absolutely impossible for them to feed themselves and when food was brought to them, day in and day out, nothing else, for there was nothing else to give them. It was great pieces of boiled meat. They received

In the hospital, which consisted of wards facing outward and corridors facing the courtyard, almost everything that made a hospital was lacking. It had been transformed from a barrack by the simple expedient of an application of questionable whitewash, and beneath its putrifying mass were sewers of the worst possible construction, loaded with filth, mere cesspools in fact, through which every breeze blew foul air up the pipes into the wards and corridors where the wounded lay. Sickness, overcrowding and want of proper ventilation added to the repulsiveness of the atmosphere. The nights were an indescribable horror with the first shadow of evening serving as a signal for the advance of an army of rats, mice and vermin of every description. Canvas was the only type of sheeting available for the beds of the unfortunate men, nor were there suffici-

ent bed-steads. Surgical and medical supplies were at a premium and the cooking arrangements were devised for ordinary meals only.

This, then, was the hospital at which the unfortunate wounded arrived for humane treatment at the hands of male nurses who had no equipment and who themselves were not fit to administer normal first-aid to an indisposed horse, much less to a human being. This was the hospital to which brave Florence Nightingale, with her little band of noble souls, came on the evening of November 5th. This was the inhuman torture-chamber upon which the War Office had placed its official stamp of approval and whose representatives, in the form of medical officers, deeply resented the intrusion of a group of fanatical, weak-livered females whose efforts at best could do nought but undermine the morale of England's fighting men.

But Florence Nightingale was not to be turned aside. She took all opposition with a grim sort of patience, quietly giving her orders and seeing that they were carried out.

"I suppose she'll be teaching our men how to fight next!" caustically commented one doctor, but Miss Nightingale said not a word, smiled quietly and continued her business of floor scrubbing, wall scrubbing and general cleaning. She rebuilt the kitchens with the aid of a group of sympathetic orderlies and within ten days of her arrival, had opened two extra diet kitchens in different wings of

the building. Three supplementary boilers for the washing of bedding were installed. When the government stores of supplies failed her she produced the necessary materials from her private stock. Every wounded man was given a cot to himself and every man lay on clean sheets—yet in spite of her super-human efforts the death-rate increased appallingly, for the defective walls and floors, sodden with filth, and the increasingly loaded sewers, grew more and more deadly.

Finally, through Lord Shaftsbury, Miss Nightingale was successful in having all red-tape set aside so that some emergency reconstruction work could be done on her hospital. With the completion of that work the death-rate immediately fell from 420 per thousand in February to 107 per thousand in April and to 22 per thousand in June! Florence Nightingale's efforts were being nobly rewarded.

Behind the scenes it was her tremendous administrative power and her ability to maintain a personal contact which made the deepest impression. To the sick and wounded she was the tender, compassionate nurse who, each night before retiring, if she retired at all, would take up her midnight watch throughout the four miles of corridor of that great hospital carrying her ordinary camp lantern so that she might see her way; tucking a sheet around a poor unfortunate here, whispering a kind word there, a smile of encouragement for another; on and on she went tirelessly caring for her children, as she called

them. This was the compassionate 'Lady with the Lamp'—this was the real Florence Nightingale—unknown and unrecognized in any other capacity than as administrator and phenomenal organizer by the world at large—but known and loved by her unfortunate wounded as the kindest, most compassionate human being in all the universe—yes, strangely enough, in all that welter of blood and pain and death, they found a human being.

Peace was signed at Paris on March 30th, 1856 and Florence Nightingale, despite the impressive reception which had been prepared for her home-coming, secretly arrived in London and retired immediately to her own home.

The story of her fight for hospital reform and military investigation now fills many glorious pages of England's history. Her audiences with Her Majesty the Queen—her sympathetic reception by the beloved monarch—her pleadings for action on the strength of her accomplishments in the Crimea—her promise of a life of devotion to the great cause which obsessed her during every waking hour—her ultimate success and the reforms which resulted therefrom—these are great pages in the history of social reform; pages which have made the name of Florence Nightingale forever immortal. Here was indomitable courage on the part of a noble personality through whose inspiration and vision the door of probationership in our great modern hospitals has been perpetually opened to woman—heroic minister

to the sick and wounded.

Florence Nightingale died on August 13th, 1910 and her great spirit passed on. The offer of burial in Westminster Abbey was declined for she had left instructions that her interment should be of the simplest. She was buried beside her father and mother in the little country churchyard near Embley, and on their monument was placed the inscription which she wished—the letters F.N. and the dates of birth and death. Many years have passed but the spirit of the 'Lady with the Lamp' marches on through city and hamlet—her light has not dimmed—her work is not spent.

Lo! in that house of misery
A lady with a Lamp I see
Pass through the glimmering gloom,
And flit from room to room.
And slow as in a dream of bliss,
The speechless sufferer turns to kiss
Her shadow as it falls
Upon the darkening walls.
On England's annals through the long
Hereafter of her speech and song,
That light its rays shall cast
From portals of the past.
A lady with a lamp shall stand
In the great history of the land,
A noble type of good
Heroic womanhood.

Chapter XII

THE SHOT THAT KILLED TEN MILLION MEN

IT was on a lovely June Sunday of 1914 that an apprehensive Europe was startled and horrified by the dramatic news of an event in history which ultimately was destined to rank among the major catastrophes of civilization. Receiving as it did but scant attention in the press of the world, no one was to dream of, much less foretell the magnitude of the fateful act. True, a ghastly situation existed among the great European powers; a situation which more than one diplomatic genius of the time deplored and set his mind and heart to unravel; but the dice had been loaded by the war-lords, explosive Europe with its time fuse set, awaited but any monstrously insignificant act which would apply the torch and release the passion of the cruel god of Mars. On Sunday, June 28th, 1914, the stage was set for the first act of the world's greatest drama in the curious little city of Serajevo. At 11 a.m., the action had been played through with a pistol shot and the Archduke Franz Ferdinand, Heir-Presumptive to the throne of the Dual Monarchy, Austria-Hungary, lay dead in his ornate carriage—the victim of a Serbian assassin's bullet! Precisely one month following the unfortunate incident, Austria declared war on Serbia; Rus-

sia flew to the defence of her Slavic neighbor; Germany declared war on Russia and France with the avowed intention of ignoring an historic scrap of paper so that she might the better attack her western foe through neutral Belgium. On August 4th, 1914, with Belgium blasted by the Kaiser's grey hordes, Great Britain issued her ultimatum to the Central Powers and the great world war had begun!

Many years have passed since the assassination of the Archduke Ferdinand took place, and today we look back upon that event with an understanding which time has done much to clarify. Nor do we doubt or misconstrue the truth in any way when we assure ourselves that the pretext which actually threw the nations of the world into war might just as easily have been one thing as another, for in the late years of the last and the early years of this century, Germany played her diplomatic cards with amazing craft. In brief then, what were the remote conditions underlying this fascinatingly dramatic state of affairs which culminated in the royal assassination at Serajevo? What circumstances lent themselves so admirably to Austria's purpose when, goaded by Germany, she was able to declare war on Serbia?

In the summer of 1908, His Majesty Edward VII of England, with his Queen, suggested a visit to Russia, the first ever paid by an English King; and it was deemed expedient to hold the meeting at Revel, on the shores of the Finland Gulf. There they were received by the Czar Nicholas and the

Czarina Alexandra after a separation of seven years. It was a meeting with far-reaching results, for soon the news ran through Europe that the two countries, England and Russia, were in complete accord on all points. Nor did the agreement end with these two countries, for a Triple Entente was created with France as the third nation; a union of great powers set up in opposition to the Triple Alliance of Germany, Austria and Italy. But the rejoicing at the resultant prospect of assured peace was indeed short-lived for but two months following the meeting at Revel, news like a bombshell spread throughout Europe that the Emperor Franz Joseph of Austria-Hungary had annexed two of the Balkan States—Bosnia and Herzegovina, with their little mountain capital of Serajevo. Little could men then foresee that but six years later the heir to the Austrian throne would be assassinated in that very city, thus precipitating a war that was to blaze over Europe for four long years.

The annexation of Bosnia and Herzegovina was effected with supreme disregard on the part of the Austrian monarch for the fact that he was not entitled to the sovereignty of the two provinces; that an annexation would be a flagrant breach of international law and treaty; and that all the powers, with the notable exception of his ally, the German Emperor, were bitterly opposed to his unlawful proceedings. All that Franz Joseph was entitled to do was what he had deliberately refrained from doing,

that is to say, occupy and administer those two provinces in accordance with the provisions of the Treaty of Berlin of 1878, with a view primarily to their well-being, and secondarily to the settlement as far as possible through this action, of the incessant Balkan difficulty. However, and inevitably, the House of Hapsburg could not resist its hereditary predatory instinct, with the result that the Bosnians found themselves subject to the dreaded power of the hated Franz Joseph.

The predominant race in Bosnia is the Slav—a man whose one all-pervading passion is political and religious freedom. So Bosnia was not only in its racial and political aspirations in complete harmony with the surrounding Slavs, but was naturally sympathetic to the Pan-Slav movement of which its neighbor Servia—or Serbia—was a strenuous missionary. It is of prime importance, in view of events to come, that we keep this fact fresh in our minds. The Bosnians were definitely one with the Serbians in thought, nor were the latter blind to the unfortunate conditions which had been forced on their neighbors through the Austrian Emperor's annexation of the two provinces. Serbia, having acquired and maintained her own independence as a Slav State, had naturally become, in the Balkans, a centre of all Slav, and particularly Serb, political aspirations. So far, therefore, as Slavism may have been regarded as a disrupting element in Austria-Hungary, so Serbia was to be regarded in her turn as a most unsatisfac-

tory, and even dangerous neighbor to Bosnia—that is, as far as the Emperor Franz Joseph and the House of Hapsburg were concerned. Such was the situation which existed in the Balkans in the spring of 1914.

Meanwhile, as the Balkan tangle grew in the near east, what of Germany and her national thought and action? Indeed rumours of coming war were in the air. "The barometer has moved from rain and wind to changeable," remarked the German Chancellor. "Time and patience are needed." At the same time, the German Navy grew with a rapidity that seemed out of all proportion to her needs in time of peace, nor did Germany take kindly to any thought of disarmament as proposed through the Hague Conference of the late ninety's. The Emperor of all the Russia's, a misguided, futile soul at best, worked as valiantly as was humanly possible to avoid war at all cost, but Germany pleaded for naval armament like a spoiled child and succeeded in carrying out her purpose. Silently she sat back with a wary eye on the Austro-Hungarian-Balkan situation, watching like a hawk, secretly goading her ally. Silently she watched Britain in the Irish crisis, completely misinterpreting the final result if and when a national demand arose.

This then was Germany, a nation whose people represented a growth and efficiency unequalled in the world's history, but a nation dissatisfied, a nation hungering for more—a world empire, that was it,

if not in the west, then in the east where a much-dreamed-of railway from Berlin to Bagdad should carry her teeming millions to new lands beyond the frontier—a place in the sun! Germany was ready to preserve peace on her own terms; terms that should allow her to be so strong by land and sea that she could swagger down the high street of the world making her will prevail at every turn. So William II, Emperor of Germany, chose the slippery slope down which his nation slowly but surely glided into the holocaust of war.

On Sunday morning, the 28th of June, 1914, a National Fete Day, Serajevo, the capital city of Bosnia and Herzegovina was arrayed in its best, with flags flying and colors streaming. Its streets were thronged with people intent on enjoying the national holiday, though it must be admitted that the great majority of them awaited with eager anticipation, the passing of some great spectacle. Excitement reigned as excitement will, particularly in that corner of Europe where any matter of political importance arouses the blood of the Slav all too readily. Nor are we to assume that this particular type of anticipation was altogether pleasurable. Shall we attribute it partially to a sense of well-nigh morbid curiosity? For the air was tensely charged with a strange, expectant dread; a military inspection with a subsequent reception at the town hall was due to take place at any moment. Serajevo awaited the arrival and the parade through its streets of the Heir-

Presumptive to the Crown of the Dual-Monarchy—the Archduke Franz-Ferdinand, accompanied by his Consort, the Duchess of Hohenburg!

Here was a man whose coming instinctively drew these simple Slav people from their homes to take part in the so-called reception, yet his views and actions were such as to draw anything but sympathy and affection from a nation which was subject to the domination of his house. In the Balkans religious questions were of prime importance, and most certainly in the City of Serajevo, church differences were heated in the extreme. The Archduke, a devoted adherent to the Roman Catholic faith, believed that with that Church was bound up the welfare of his country and dynasty. Yet he could still have been a devout Roman Catholic and at the same time, an acceptable prince to a people such as the Bosnians. His religious convictions, however, carried with them certain unloveable characteristics. At best he was merely tolerant to the Greek church because of circumstances which demanded at least a pretence of toleration, for this was the Church which, in one form or another, was a supreme object of Serb devotion. Moreover, he had a violent antipathy toward the Jews and was an active supporter of the Austrian Christian Social Anti-Semite Party. Mohammedans he regarded as a dangerous element to the state. Politically, he was first and foremost a Hapsburg, a man with one object and that, to attain power and territory for his dynasty. Could

he reduce the Slavs to a state of subjection, all would be well; after all, that was where an inferior race belonged. But the Slavs refused to remain passive, nor did they intend to be so reduced.

This was the expectant people who lined the streets on the 28th day of June, 1914, to watch the parade which would be headed by another Hapsburg. How much of that excitement was due to pleasurable anticipation? Very little, we are assured, for there was anarchy afoot. Somewhere in that crowd stood two men, insignificant in appearance but Serbs to the core; men with a purpose, be it ever so drastic. The one, Cabrinovic, a young Slav printer, his pocket bulging with a bomb; the other a Serb student named Princep, a martyr's fire gleaming from his eye as he secretly fondled a carefully loaded automatic. Both men were of the Greek Orthodox faith. The stage was set for the action which would that day set the world's greatest powers at each other's throats. The assassins awaited but the victim of their foul plot! Behind the scenes sat the war-lord of Germany, unaware at the moment that the fruits of the day would provide the long-awaited pretext for mass murder. It was ten o'clock on the morning of a perfect June Sunday.

The Archduke with his Consort arrived at the railway station of Serajevo and, having successfully held his military inspection, was driven through crowded streets in a motor car to the town hall. Cheers prompted by fear rather than loyalty, greeted

his party on every side as he bowed and saluted his new subjects. The procession majestically approached and turned the corner which led to the civic building and Cabrinovic, with his bomb, wedged through to the front of the cheering mob. With a muffled curse, he let go directly at the royal carriage and his missile lit with a dull thud on the floor of the vehicle. With an amazing flash of speed and courage, one of the Archduke's Aides swept the lethal monster away just as it burst; swept it away in time to save his Royal charges, but not quickly enough to escape serious injury to himself. Pandemonium reigned both in the crowd and among those taking part in the procession. The wounded Aide was rushed to a nearby hospital. The Archduke comforted his wife as those in charge wildly sought to return something of order to the disrupted cavalcade. Finally the party, in much disarray, arrived at its destination and Princep, with his charged automatic, waited patiently in the panic-stricken crowd.

The Archduke Ferdinand, furious at the reception and the attempt on his life, raged on the steps of the town hall. His address to the Burgomaster was highly insulting to that officer who, as a Bosnian, was entirely innocent of and helpless to suppress any insurrection which might be caused by members of the Serbian nation. Nevertheless the Burgomaster presented what proved to be a rather ironical address of welcome to His Highness as the crowd cheered and the ruffled nerves of the Royal

party became somewhat soothed. But the Archduke Ferdinand insisted on upsetting the routine of the day to journey to the hospital that he might visit his wounded Aide. Nothing that might be said could dissuade him, for neither the narrow streets nor the impossibility of stationing proper guards would turn him from his purpose. A short announcement was made, the Archduke in company with his wife and the Chief of the Administration moved off, and Princep with his automatic, shuffled away to take up his station at a convenient point of vantage.

At eleven o'clock with the car moving slowly along the narrow streets to the hospital, Princep, insanity gleaming from his burning eyes, fired the shot that rang around the world. It killed the Archduke Franz Ferdinand. The Duchess, seeking to cover his body, threw herself in front of him and clasped her husband in her arms. Princep's second and third shots found their mark in her body, and she, too, died. General Potiorch, Chief of the Administration, who was sitting in the Archduke's motor car, escaped injury.

In death the Archduke showed the noblest side of his much maligned character. Strong-willed and determined in all things during his life, he met his death as a strong man should, with perfect bravery. That his wife should have died with him under such unfortunate circumstances is, perhaps, as she would have wished, for she was morganatic and only inso-

far as was possible, had she been advanced to a position of equality with her husband. The union had ended in tragedy.

On the 28th day of July, 1914, Austria declared war on Serbia, one month exactly having intervened since the date of the assassination of the Archduke. Undoubtedly the impossible nature of the ultimatum which Austria issued to Serbia is proof positive that the incident was seized upon as a pretext for war. Austria wanted war with Serbia and Germany stood shoulder to shoulder with Austria, for here indeed seemed to be the Heaven-sent excuse for which Germany searched. Nor did she have any doubt, although Austria was innocent, that the Balkan affair would have far-reaching results, undreamed of by any but the most sagacious. That the assassination of the Archduke Ferdinand was criminal and none the less criminal because of its political nature, no one can deny. The fact that the Archduke personified dynastic autocracy and selfishness as against national popular rights and aspirations may explain the crime, but cannot excuse it.

The greater crime, however, can be laid at the door of militaristic despotism, envy and ambition for world power engendered in the very soul of a ruthless nation whose all-consuming purpose at that time was the discovery of a reasonable pretext for war.

Chapter XIII

DISASTER ON PARLIAMENT HILL

ON the morning of February 4th, 1916, anxious citizens of the Dominion of Canada regarded the screaming headline of their morning newspaper with feelings akin to personal fear. Through many months of trial and worry they had become somewhat hardened to endless hostile propaganda and the stereotyped reporting of events as they progressed on the battlefields of France. But this was different; this was a personal blow; an attempt to undermine the morale of the nation by striking at its capital. On the previous evening the Dominion Houses of Parliament at Ottawa had been burned to the ground. Half a dozen lives had been lost; scores injured, and the stately Gothic structure crowning Tower Hill a total, irrevocable loss.

More alarming even than this, the press claimed editorially that, without shadow of doubt, the great disaster had been the carefully planned work of enemy secret agents! Public men in various stations of authority for the most part supported this drastic view, and though they were opposed by a few who made a valiant attempt to consider the unfortunate affair with some degree of calmness and san-

ity, the seed had been sown and the public mind ran riot. Wild rumour and conjecture spread throughout the country unleashed. It was even picked up by the press and peoples of the neutral United States. Reports of earlier secret warnings of such a disaster appeared miraculously. An explanation as to why such information had not been treated with caution was demanded. The Parliament Buildings in the City of Toronto were to be next—then the great harbour at Halifax, the winter quarters of Britain's North Atlantic Squadron. Toronto's City Hall took on the appearance of a barracks lest some stranger gain access and attempt to blow it up. Platoons of soldiers marched upon fire-drenched Parliament Hill, and upon the sidewalk, watching them pass, a man remarked to his friend, "They know in Berlin by now that their reprisals on Canada have started!"

That was on February 4th, 1916. Today we live sufficiently far removed from those worrying years to be able to regard them with more careful analysis, and one is prompted to again recall the tragic events which led up to, and surrounded, the terrible fire which wiped out Canada's Houses of Parliament on that cold winter night of 1916.

Construction work on the Parliament Buildings at Ottawa commenced in the year 1859, and the corner stone of the central building was laid by Edward VII—then Prince of Wales—in 1860. In 1867, when Confederation became an accomplished

fact, the buildings were taken over and made the Federal Capital of the Dominion of Canada. They were an excellent example of Italian Gothic architecture and represented, without doubt, Canada's most gorgeous memorial to our age of wood. Even the roof of the great central tower which housed Big Ben, was carried upon an oaken dome-shaped frame. Probably the most interesting member of the entire block of buildings was the graceful Gothic library which housed the hundreds of thousands of priceless volumes and manuscripts of the government. Said to be the most exquisite variation of 12th century Gothic on the continent, the parliamentary library combined strength with grace and its great dome, 140 feet high, was supported by massive buttresses, lightened by delicate pinnacles.

Equally imposing was the interior of the library, with its floor inlaid with Canadian woods and its bookshelves richly carved of Canadian white pine rising in three tiers with galleries for access to the volumes. This building, ideally adapted to its uses and absolutely complete in itself, occupied the choice site, overlooking the cliff, and exactly midway between the House of Commons and Senate chambers.

The great main building of the Houses of Parliament was rectangular in shape with the tower rising from the centre front of one of the long faces. On either side of the tower stretched the main wings of the building containing, on the left, the Commons Chamber, and on the right the Senate. Straight

through toward the rear, one passed through the Commons reading room to gain access to the library, which, though self-contained, was connected to the reading room by means of a short corridor. Behind the entire building the lawns and cliffs descended steeply to the waters of the Ottawa River.

On February 3rd, 1916, the House of Commons of Canada's Parliament assembled in the early evening for its regular session. There were about fifty members present and, owing to the fact that few matters of vital importance were due to come up, the galleries were practically empty. Following the disposal of routine business, the New Brunswick member, Mr. W. S. Loggie rose to address the house upon the subject of fish conservation and improvement. It was then 8.30 P.M.

At that moment several members, together with certain government officials, were consulting files of newspapers and old documents in the Commons reading room. They were seated in an historic chamber surrounded by fifty-year-old racks and sloping stands of newspaper files which covered its four walls. Some few of the occupants may or may not have been smoking; in any case the no-smoking rule as applied to the Commons reading room was not strictly adhered to. The old chamber, its woodwork gleaming in the electric light under the influence of many coats of varnish, had been just recently shellacked, and the odor of turpentine and alcohol still permeated the dry air. Papers rustled and the

members chatted in low tones.

At exactly 8.50 an official wheeled in his chair and shouted. Not ten feet away from him a small fire had burst out upon the floor. He called to the constable on duty at the reading room door and as that representative of the law reached for a fire extinguisher, Mayor Martin of Montreal appeared in the corridor. His Worship had just come from the House of Commons Chamber. Taking in the situation at a glance, he retraced his steps with all haste and cried a warning to the sitting house. Not thirty-seconds had elapsed before that warning was given, and yet Martin had scarce spoken when great billowing clouds of black smoke rolled up behind him to choke the fleeing members. Seven hundred feet of newspapers hung upon seven hundred feet of shellacked and varnished wood dried for fifty years had been all too perfect breeding place for the demon fire. The Houses of Parliament were doomed to speedy destruction.

Members and officials rushed headlong from the raging inferno that had been the reading room. The constable threw the fire extinguisher from him and ran for his life. And the leaping flames licked his heels, crackling and darting along the shellacked floors and up the varnished wooden panels of the walls. The narrow tortuous corridors and blind passages of the great building became natural draft-swept channels of tinder, through which the flames roared with the intensity of a blow-torch, consuming

everything as they scudded along the baseboards, up the walls to leap across the beamed ceilings with evil intent. The house, in wild confusion, sought the nearest exit with all dispatch. Papers and documents were left behind. Hats and coats were forgotten, for lives were at stake and there was no time for any delay. Newspaper representatives in the Press gallery could scarce believe their eyes as they gazed down on the clouds of smoke which rolled into the chamber below them. Grasping those things nearest at hand, they dashed through their exit, down the narrow stairs, and made their way to the street and safety through a side door. Guests and friends in the galleries became panic stricken and one or two leaped over the rails to the floor below. Some became lost in the smoke laden, blackened corridors and died of suffocation. Prime Minister, Sir Robert Borden, in his office located not far from the flaming reading room, managed to escape with his life. Had he waited to secure his hat and coat and certain valuable papers, he must surely have been trapped by those leaping flames and the choking smoke. Fortunately the Senate was not sitting at the time, for it was but a matter of minutes until that historic red chamber was a mass of fire.

Outside, the stillness of the cold winter night was shattered by the hoarse shouts of a gathering crowd, the cries of terror of those fleeing for their lives, and the shrill scream of sirens, as the fire department's apparatus was rushed toward Parliament

Hill. Before hose-lines could be run to the doomed building, the flames had broken through heat-shattered windows. The entire police department and several military detachments joined in the fire-fighting, but their efforts to save the flaming building were hopeless. Spray from the great nozzles froze almost in mid air and the rubber coats of the firemen became ice-encrusted. Water froze upon the roof and walls of the structure, the very elements themselves conspiring against any hope of victory. The only thing of good in the whole terrible disaster was that the flames seemed to be driving laterally and toward the tower. Quick to analyze this development, those in charge determined that at all costs, the beautiful library with its priceless contents must be saved. Hose-lines were hurriedly run to the rear of the building and played upon the smoking, dome-shaped roof. Hour after hour, hundreds upon hundreds of gallons of water were poured upon it until the library resembled a great house of ice. And then the fire-fighters could not be sure that they had won even this partial victory.

At nine-thirty the glass roof of the Commons Chamber fell in with a mighty ringing crash and the roaring flames within burst forth in a raging torrent, hurling sparks and embers a hundred feet in the air. At midnight, with the lights of the great tower twinkling valiantly through clouds of smoke and leaping flames; with the crowds backed right to Wellington Street and the roof of the entire building

a veritable sea of fire—Big Ben struck his last hour. Twelve strokes the great bell boomed out, and as the significance of that last defiant effort of the faithful old clock to defeat the elements themselves penetrated the minds of the vast watching crowd, a hush fell upon the winter air. Even the flames seemed to cease their endless, unrelenting roar so that each stroke might be heard. But there was ominous glare in those tower windows and it could not be long before the lofty pile would bow its head. Firefighters concentrated upon the smoking library and upon the rescue of certain employees who had been trapped in the restaurant on an upper floor. They were carefully brought to earth by means of extension ladders and immediately rushed to places of warmth and safety.

At one-thirty the great tower, gutted with flames, supporting a now silent Big Ben, tottered upon its foundations, and with a mighty crash that echoed and re-echoed throughout the city, collapsed into the raging inferno below. Flame, spark and smoke billowed into the air in a vast pyrotechnic display and the embers slowly settled to earth. By early morning the entire building had been completely gutted, and the flames, for want of fresh food, died down. The well nigh spent firemen and their courageous assistants relaxed to take their first breathing spell. They had lost the greater fight but they had succeeded in saving the precious library. Today it stands, a significant part of a glorious new

structure, a monument to the courage and resource of those who would not give up.

It was a sad and fearful morning that dawned in the Capital City of Ottawa on the next day. The Houses of Parliament valued at \$5,000,000, and representative of the entire legislative life of the Dominion of Canada, lay a ghastly smouldering pile of ice-encrusted ruins. Of the once-splendid tower only the jagged outline of a base remained. The clock faces lay amid skeleton walls like grinning skulls, and the wind moaned desolately through charred timbers. The beautiful red Senate Chamber which had witnessed so many openings of Parliament by Their Excellencies the Governors General of Canada was no more. One could scarce recognize any part of it. It was as if a gigantic consuming monster had breathed upon the doomed edifice and silently disappeared, leaving only a few wisps of curling smoke to mark his passing. One thing only remained,—the Gothic library around which the flames had leaped in vain, and which stood alone, undaunted and victorious among the ruins of its sister building. Water alone had destroyed a portion of the basement. The fire had made no progress. Martial law reigned on Parliament Hill and detachments of troops patrolled the desolate area.

A lengthy investigation into the causes of the fire was immediately ordered, and although the committee agreed that the state of war which then

existed between the Dominion of Canada and the Central Powers might have prompted sabotage by enemy agents, nothing conclusive was ever proven. It was admitted that the building had been a horrible fire-trap and that nothing short of a miracle had prevented a far greater loss of life. Unofficially, a carelessly dropped cigar or cigarette was said to have been the cause of the conflagration. But the man in the street had other views, and those same sentiments exist in many quarters to this day.

It is not for us to express an opinion as to their truth or fallacy for we do not know. But we are certain of this. Canada's sorrow at the loss of her beautiful legislative buildings in the Dominion's Capital was expressed in peculiarly inspiring fashion. If you fail to understand, go to Ottawa today. Ascend historic Parliament Hill, then stop and look straight before you. There you will see an heroic edifice of solid stone, dedicated to the spirit of democracy and built by Canada in the name of her people. Look up toward the blue sky, and there you will see the Peace Tower, dedicated to the spirit of freedom and built by Canada in the name of her glorious dead. Then perhaps you will understand, and will be a little more proud of a heritage which has been reborn and invigorated times without number through the influence of such tragic events as this.

Chapter XIV

THE GERMAN REVOLUTION OF 1918

SOME few years ago there occurred an event in history which may be said to represent the first of a series of climatic episodes in the annals of a great nation. Coming as it did, at a time when the entire world was hopelessly muddled and distorted, at a time when our vital problems obsessed us to the exclusion of everything else, it is small wonder that we find our minds sketchy upon the details of the contributing factors. On November 28th, 1918, William II, Emperor of Germany, formally abdicated, fled to Holland an exile, and the Imperial Regime yielded to democracy. Another monarchy had fallen in tortured Europe.

Today we find ourselves in the fortunate situation of being able to look back upon the events which culminated in the fall of the German Empire without having our perspective distorted by too close a view. On the other hand, with the memory of the war years from our own standpoint, still so vividly fresh in our minds, how many of us have considered just what may have been taking place in Germany during the period of hostilities? With what mingled feelings did the German people receive the tidings that Germany was at War? In what regard did they hold their Emperor during those

trying years? What were the political and economic conditions of the German Empire, and why did Germany fail, and her ruler flee his country? Fascinating questions these; questions the answer to which one cannot possibly do justice in my short space, for a tracing of the intricate workings of the revolt against the Regime is a task to which several volumes might well be devoted. It must suffice merely to sketch it in the broadest of outline.

On August 4th, 1914, the Imperial Regime in Germany reached its zenith. For the first time since the foundation of the Empire, the whole nation, an insignificant fraction excepted, stood solidly behind the Imperial Government and the Emperor, and when the latter, with his usual sense of the dramatic, declared, "I know no more parties!" he expressed fairly accurately the sense of unity with which the German nation confronted the peril its short-sighted statesmen had brought upon it. On August 4th the German democracy in the Reichstag virtually abdicated its function in a manner which may only be described as, and attributed to, a chivalrous surrender to patriotism.

This is the more surprising when one considers that Germany in 1914 harboured an exceedingly powerful democratic movement comprising the conventional type of continental liberalism, and the equally conventional type of continental socialism. It had been extremely critical of the Imperial rule and had made its voice heard effectively on num-

erous occasions, particularly in 1908 when William II gave his now famous Daily Telegraph interview—a masterpiece of tactless ill-chosen words. Nevertheless, democracy quietly recognized the emergency and gave way to the Imperialistic Regime which in turn, accepted matters with careless nonchalance, never for a moment realizing that democracy expected and would demand repayment for its sacrifice. Had the Regime there and then recognized the fact that cherished principles had been surrendered on the grounds of patriotism; had William II been far-sighted enough to realize that the time had come when a unifying act on the part of the government was imperative; that the Social Democrats were demanding recognition within the state; then the root cause of the collapse might have been removed permanently. But no modifying act was ever voluntarily attempted—the unification never took place. Even if brilliant success had attended Germany's war effort, the attitude of the Regime at the crisis would in the end have destroyed it, but the destruction was made absolutely certain when it gave failure instead of success.

Reaction to the inability of the Regime to act in the spirit of August 4th began before the war was a year old simply because the one essential to ultimate and speedy victory failed, thus prolonging the war, and giving the Democratic element time to think, and the Government did nothing to distract that reflection. That important essential which

failed so dismally was the famous Schlieffen Plan of conducting the war.

Building upon her traditional fear of Russia and her Eastern frontiers, Germany's Schlieffen Plan called for a large army which, within six weeks, would smash France, the lesser of her enemies. This accomplished, she could turn her full attention to the east, where presumably the greater threat lay. How little Belgium and Britain's Old Contemptables thwarted von Moltke and the German High Command is now a matter of history. Throughout the winter of 1914-15 the utter folly of the plan was amply demonstrated. The main German forces were held on the Western Front without having achieved any impressive victory at a time when the Russian millions took the offensive in order to overthrow the Austrian and German troops in the east by sheer numerical superiority.

If the Russians had achieved their object, an immediate and crushing German defeat would have resulted, but the arrival of Hindenburg and Ludendorff on the Eastern Front and their tremendous victory at the Battle of Tannenberg swayed the immediate issue. Not only did the battle of Tannenberg seal the doom of the Russian Monarchy by virtue of the slaughter of the Czar's first line troops, but it showed the German High Command the tactical blunder which it had made in failing to recognize the fundamental weaknesses in a plan which had done anything but that which it was meant to

do—assure speedy victory. Germany's war was settling down to a slaughter of horrible proportions; one the length of which would be measured not in days or in months, but in years.

That being so, it followed that the war must end either in decisive defeat or in peace by compromise; and the internal movement of resistance to the Regime strengthened in direct proportion to the definite increase in hardship and economic strain in the Fatherland. To avoid defeat would demand a national effort of superhuman type; to secure peace, an immediate declaration on war aims was urgently necessary. Neither the one nor the other could be expected from the Regime, and hence the opposition took the form of a peace movement together with such constitutional reform as would realize national unity.

In January 1916, the extremists founded the Sparticus League which aimed at sabotaging the war, and six months later came the first strike—that of metal workers. Simultaneously the unfortunate Imperialist Regime virtually sealed its own fate by splitting against itself. While the Chancellor, Bethmann-Holweg, firmly believed that decisive victory was impossible; that it was important to state Germany's war aims in a manner calculated to influence favourable neutral opinion, and that peace with the United States of America must be maintained; the military leaders were still confident of victory! Ludendorff believed that, with intensive

submarine warfare, the war could be ended in three months. So confident indeed were the military leaders, that they accepted cheerfully the risk of adding the United States to the ranks of Germany's enemies, and were almost drunk with annexationist plans. The struggle suddenly resolved itself into one between a military dictatorship and a so-called parliamentary rule with Bethmann-Holweg vainly trying to maintain the decrepit Bismarckian system as it was in 1914.

Into this electric atmosphere, charged with military, political and economic dynamite, came the bombshell of the Russian Revolution. And from the European standpoint the most amazing thing was that, although everyone confidently prophesied its coming, its actual arrival and triumph in forty-eight hours took everyone by surprise. Its effect was swift and great, for the fall of Czardom to Europe was precisely what the fall of the Bastille had been to France. The Central Powers, after the March Revolution, were left the sole remaining stronghold of autocratic reaction on the continent.

Within a month additional strikes broke out and the Socialist Left Wing broke definitely from the party and formed a new organization whose peace policy bordered dangerously upon a revolutionary policy. Ludendorff, military strategist supreme, but a child in the realm of diplomacy, failing to see the handwriting on the wall, well-nigh shattered his country by transporting the germ of Com-

manism in the person of Nicholas Lenin through Germany to his native Russia. Extremism reigned victorious and a gospel of world revolution which called on the proletariat to rise in arms shook Germany's great neighbor to her very foundations. The radicals in Germany had at last a concrete basis to work upon and a definite end to gain.

Ludendorff by his stupid assumption that a revolutionary Russia would contribute toward a Central Power victory had utterly failed to recognize the vastly more important issues; had simply contributed toward the wrecking of another civilization, repercussions of which were to direly threaten Germany herself, for Ludendorff was innocent of the fact that he could not destroy the system in another country without seriously undermining that in his own. The revolutionary challenge in Germany could not be mistaken, but it was completely ignored by the Imperialist Party which believed, despite strikes, propoganda and mutiny, that whatever menace there was could be dispersed by a free use of discipline.

The Government was denounced for its failure to take drastic measures and the Democratic opposition closed its ranks and demanded a peace resolution. The Kaiser wavered pathetically, and as a sop to the democracy came the Easter declaration from the throne that the work of constitutional reform should be taken in hand. There was no mention of a peace resolution however; and caught be-

tween two fires, Bethmann-Holweg drew upon himself hostility to such an extent that he was forced to resign. His disappearance left the militarists the sole support of the Regime which now became identified with Imperial headquarters. Two solutions presented themselves. One was the proclamation of a military dictatorship, the other, the appointment of a Ministry based on the new Reichstag majority. William II would consent to neither, and the internal war against the system continued.

Such was the situation in the spring of 1918 when Hindenburg and Ludendorff planned their big military push on the Western Front. The great offensive achieved something of success and then wore itself out. The gamble had failed, and Ludendorff passed into exhaustion. His great defeat of August 8th meant nothing but a transition to dogged defense, and that transition from anxious hope to the contemplation of disaster had a devastating effect on the German nation whose people were starving and emaciated as a result of the pitiless Allied blockade.

Characteristically, Ludendorff upon realization that the war was lost, took a view of extreme pessimism, and in a nervous crisis, sent a depairing appeal for immediate overtures for an armistice. Headquarters, after having practically ruled the country, abdicated in confusion. Their rule had destroyed alike the prestige of the Throne, the Regime, and the so-called Government. There was

no leader left to take control. The nation wanted a democratic regime and to that end Prince Max of Baden, with the approval of the Kaiser, formed a popular government to conduct immediate peace negotiations and transform Germany into a constitutional monarchy. The victory of democracy had been won! Without revolution, the regime had discredited itself and had fallen unregretted and unregarded. Ludendorff resigned and the last dangerous enemy of the new government disappeared, for there was nothing to fear from the Right which had to support Prince Max lest a worse fate overtake it. Even the Left confined itself to growling and grumbling, for it could not create a revolutionary situation.

The revolutionary situation however, created itself, and then the crash came. The Admiralty, in the fall of 1918, decided to make a last effort against the Allied Fleet. In spite of the fact that armistice negotiations were in progress they resolved to carry through with a last 'death-ride' of the German Battle Squadrons.

On October 28th, 1918, when a portion of the fleet was already in battle position, the crews of three battleships refused to weigh anchor. The mutiny was the work of a minority but the officers did not grapple with it. On the 30th, the plan of the Admiralty became generally known and mutiny broke throughout the fleet at Wilhelmshaven. The civil population took the side of the mutineers, and

fficers who attempted to put down the revolt were shot. The movement spread to Kiel and Hamburg and the revolution had come. The effect on the government was immediate. The outbreak of revolt ended at once any possibility of making a last desperate national effort; the war was lost; it remained only to save Germany from chaos. The government could not lead or attempt to guide the revolution but the majority socialists could, and did. It was only necessary to find a procedure capable of facilitating the transition from the Parliamentary Government to Revolutionary Dictatorship.

On November 7th a demand was addressed to Prince Max on behalf of the party that the Kaiser should abdicate. The Kaiser returned no answer and the demand became an ultimatum. William II fled the country and on November 28th the formal note of his abdication was read to the Peoples' Party and Prince Max resigned. President Ebert ascended the rostrum and assumed the role of dictator.

The Imperial Regime had yielded to democracy; before constitutional democracy could be established it was forced aside by a revolutionary dictatorship. William II had abdicated; the throne of the Hohenzollerns was thrown into the Imperialistic scrap-heap which had so lately claimed the throne of the Romanoff's, and another monarchy had passed from the face of Europe.

Chapter XV

THE GREAT TAY BRIDGE DISASTER

ON a cold, wind-swept night of the late seventy's, under circumstances which stand out as peculiarly unique on the pages of history, the country of Scotland was the scene of one of the greatest railway disasters in the history of transportation. On December 28th, 1879, under the infuriated blast of one of the worst storms in the country's annals, the massive centre section of the great two-mile Tay Bridge was swept from its anchoring abutments to be engulfed, a twisted shambles of wrecked metal, in the deep waters of the great river below. And in the exact centre of that doomed span, at the very moment when it gave way, the fates had placed the one element which turned disaster into holocaust—a train of seven coaches roaring through the night with seventy-five persons bound for Dundee. Bridge-span, train, passengers and crew were pitched into the dark waters below, and the great disaster gave up not one survivor. Unique in all disaster records is the tragedy of the Tay Bridge for there were no wounded and no survivors; seventy-five involved and seventy-five killed. No one remained to give a thrilling account of those awful moments—no one to even theorize at first

hand as to just exactly what took place. We do know that there were certain eye witnesses who saw the great bridge go down in the dark, forbidding, wind-swept night; and that fact, too, adds another peculiarly sardonic angle to the whole horrible affair, for they went out of morbid curiosity to see whether or not this new bridge could survive such a ravaging storm. Without shadow of doubt the elements involved in the Tay Bridge disaster were so profoundly impressive as to provoke not only world-wide interest, but almost universal consternation, and the story surrounding this terrible tragedy is one of severe, dramatic fascination.

The railway bridge spanning the River Tay at Dundee was opened to traffic on June 1st, 1878, with colorful ceremonieis which climaxed a difficult building programme of seven years. It was to be just a little over a year from that happy day to this other wind-swept night of ruin and disaster on the River Tay. The great bridge had been designed by, and built under the personal supervision of Sir Thomas Bouch, a highly regarded, reputable transportation engineer. Many of his constructions had been higher than the Tay, but none so long, for it was two miles from shore to shore, and consisted of a superstructure of lattice iron girders resting on eighty-five piers. The spans inshore were short, but across the navigable part of the channel they were long; eleven of them 245 feet from pier to pier, and two, 227 feet. In order to afford headroom for the

proper passage of shipping, the girders in these long spans were raised so that the road-bed was carried by their lower edges. In other words, no supporting girders were allowed to protrude below the level of the railway track to act as a menace to ships. In-shore, in the shallow portions of the river where navigation was impossible, the girders came down so that the road-bed was carried by their upper edges. Across the long spans the girders were 27 feet deep and, as they rose above the floor by that full amount, the bridge, as seen from the side, was noticeably raised in that portion of it which spanned the deep water channel. These were the 'high girder' spans—3,150 feet in total length—that portion of the bridge which gave way on the fatal night of December 28th.

During the construction of the bridge, certain grave difficulties were encountered in the laying of the piers and this unfortunate episode gave rise to a dogged theory among the local residents that the structure would never be really safe. The tremendous mass of steel, according to original design, was to have been carried on piers of brick, but before the work had progressed to any extent it was found that the river bed was not firm enough to bear their weight. It was therefore decided to substitute piers formed of cast iron pillars resting on bases of brick-work extending but five feet above the water level. From that point upward, the iron members extended 83 feet to lend their support to the bridge. In the

centre of the river there were six of these iron pillars to each pier and the whole effect, surmounted by a super-structure of very open lattice-work, was one of singular lightness. Old timers in the district gravely shook their heads, and even the newspapers described the new structure as one of gossamer-like appearance.

The authorities carried out a series of exhaustive tests before the bridge was officially opened, and although they could find no semblance of weakness in any part of it, they allowed no element of chance, so they thought, to cast a blanket of suspicion or nervous mistrust upon their enterprise. As a result of the tests, and owing to the fact that the bridge had an actual grade on its right-of-way, a strict ruling was handed down to all locomotive engineers that an average speed of 25 miles per hour was not to be exceeded at any time; and, in addition to this, all trains were required to stop at the specially erected signalman's cabins, one at each end of the bridge, and report, before proceeding out over the deep waters of the River Tay. But there was an unfortunate loop-hole in that speed ruling and engineers were wont to take advantage of it. The word 'average', together with the grade on the bridge, meant that a much greater speed could be attained on the high girders where the right-of-way was level, without actually exceeding the over-all speed limit. Trains therefore were regularly traversing the centre span of the Tay Bridge at speeds

in excess of 40 miles per hour without contravening the law. Notwithstanding these speeds, railwaymen found no cause for anxiety; inspectors smiled at dire rumours; the line was well patronized; but residents along the banks of the River Tay, refusing to be convinced, watched and waited as the great trains swept over this newly created medium of transportation. So came the fateful day of December 28th, 1879, 18 months following the gala opening of the great Tay Bridge.

Ominous, scudding clouds swept the county of Forfar on that wintry morning. It was cold and bleak with the wind increasing in intensity with the passage of every hour. It swept up the eight miles of the Firth of Tay from the open sea, driving great mountainous waves before it, and as early evening came on, the howling gale had assumed the proportions of a hurricane.

John Watt, a railway employee, bent into the fury of the blast as he headed for the south-shore signal cabin to spend a few hours with his friend the signalman. Mentally he recalled that the time must be about fifteen minutes before seven and that the north bound train would be due at the south end of the bridge in less than thirty minutes. He slammed the door of the cabin in the teeth of the gale, exchanged a greeting with the man on duty and gratefully warmed his hands over the little stove. Shortly thereafter the doomed train stopped at St. Fort Station, the last before crossing the bridge, and there,

as was the custom, the tickets of passengers for Dundee were collected. It was a Sunday evening, the train was small and there were few on board—six coaches and a brake van, five of the company's servants and seventy passengers all bound for Dundee, the terminus of the run.

The train left St. Fort on time and proceeded slowly along the single track in the face of a sweeping cross wind which almost threatened to take it bodily from the rails. It was due at the south end cabin of the bridge at 7.13 P.M.

John Watt, suppressing a peculiar excitement, talked with the signalman; glanced at his watch, and strained his ears in an effort to distinguish the rumble of the approaching train from the roar of the wind. Finally the headlight winked in the distance, the great locomotive snorted defiantly as the brakes bit into the steel tires and the northbound train came to a screeching stop at the signalman's cabin. The 'train-staff', without which the train could not proceed, was transferred to the engineer; the signalman returned to his cabin—gave the locomotive the right of way and signalled him on to the north cabin at the other end of the bridge.

Having nothing else to do in the matter, he busied himself with his other duties and paid no further attention. But John Watt, submitting to an indescribable sensation of curiosity mingled with dread, left his warm seat by the little fire and glued his eyes on the north window of the cabin. Strain-

ing his vision that he might catch the tail lights of the retreating train in the darkness, he expressed his fears to the man on duty, but there was no answer from that long-experienced cabin signalman. After all, the Tay Bridge had been constructed by an experienced bridge-builder; it had been tested most exhaustively with no room left for doubt, and though it was admittedly a fact that tonight's storm was more than ordinarily violent, trains had been passing safely for a year and a half, thereby in the most positive manner giving convincing proof that the regular round of stories and fears simply had their origin in superstition and hysteria.

But as John Watt peered into the night over the spans of that great bridge he was by no means alone in his doubts and fears. Two miles to the north on the far shore of the river stood a little knot of anxious people who had braved the violence of the storm to watch the train pass over. With mingled feelings their eyes jerked from the black girders to their watches. The wind howled through the bridge and the breakers roared on the rocks below.

On the south side of the Firth stood the home of the Provost of Newport, a practising engineer of Dundee who used the bridge twice daily. His home commanded a good view, and with his family, he sat at an upper window, doubly anxious, not only because past experience had convinced him that the bridge actually vibrated under the influence of a

moving train, but tonight unfortunately his own son was a passenger.

So the doomed train gathered speed on the southern grade and approached the level stretch known as the 'high girders'. John Watt, concentrating on the flickering tail lights, caught the flash of sparks from the wheels, doubtless caused by the extreme force of the wind binding the wheel flanges against the lee rail. Such was the force of the wind as the great locomotive accelerated to the usual speed of some forty miles per hour. It flashed onto the great centre spans and then, as an almost hysterical Watt rubbed his aching, unbelieving eyes, the lights disappeared!

Reassuring himself in an attempt at a certain element of self-control, he mentally reasoned that the train had passed over the peak of the grade and that the roadbed had cut off his vision. In that case the train would appear at any moment now around the curve at the far end; a curve which would carry it to the far signal cabin. The Provost of Newport reasoned similarly and shifted his gaze to the dim outline of the far end. But the little knot of people gathered on the south shore waiting and watching for they knew not what, but hoping and expecting to see the train approach them, could now have told the whole world that those tail lights would never be seen again. Right before their horrified gaze, away out in the centre of that great bridge, strained now beyond the breaking point,

there arose a gigantic shower of sparks. The structure shivered; shrieking steam mingled with the roar of the hurricane and the beating of the waves; the gas main burst and friction sparks sent up a mighty blast of flame as the seven coaches, linked by steel couplings, relentlessly pulled one another snake-like over the shattered brink. Down eighty-eight feet the mass of broken wreckage hurtled, carrying with it over 3,000 feet of wind-twisted bridge and seventy-five human lives. There was a mighty devastating splash as the cruel waters of the Tay closed over; spray beat the tortured air, and then all was quiet save the shriek of the destructive wind as it moaned a dirge for the dead.

The great Tay Bridge had failed to survive the awful test, and the local residents sorrowfully shook their heads as they realized the futility of even an attempt at rescue. Men ran to the Harbor Master's office to get the tug out, but it was close on low water, the tug was aground, and there was no other steamer available. Over an hour later the ferry boat from Fife came in, and it was at once dispatched to the scene of the disaster. But the severity of the storm and the ignorance of the actual spot where the sunken wreckage lay made it a dangerous and fruitless act of service. Nothing could be seen beyond what was already known, and nothing could be done.

The resultant investigation into the Tay Bridge disaster aroused world-wide interest because of the

fact that all those involved had been killed; that many people had been self-appointed eye witnesses—an unprecedented occurrence; and that it was doubtful as to whether the train or the wind, or a combination of both had done the mischief. The Tayport Lighthouse Keeper testified in defence of the bridge that no structure could live in that wind—that it had shaken his lantern, a thing that had not happened since 1859. On the other hand the Provost of Newport testified that on his many trips over the bridge he had frequently felt the vibration of its steel lattice work.

Divers were sent to the bottom of the Tay to investigate the sunken wreckage, but their reports were unsatisfactory. The administrative system of the bridge was closely analyzed without one sensational development. Witness after witness was called and the highly contradictory evidence collected. But no one knew what had happened, because no one had lived to tell the story. It was assumed that a combination of co-incidental circumstances had contributed to the disaster, and that the wind and weight of the train had taken down a bridge which itself was not adequate for its task.

Further than that no definite conclusions have ever been drawn other than the fact that the Tay Bridge disaster was one of the greatest tragedies of modern times.

Chapter XVI

DAVID THOMPSON—CANADIAN EXPLORER

A LITTLE more

than a century and a quarter ago a rugged pioneer in the history of Canadian exploration battled his way through the last few miles of the great western unknown to the foot of the mighty barrier known as the Rocky Mountains, and succeeded in discovering a new pass through that formidable wall which led to the sea. His name was David Thompson, one of the greatest explorers ever to set foot upon Canadian soil; a man the memory of whose heroic achievements all but perished with him, and one whose contribution toward the opening of the great Canadian west has probably never been equalled by any individual. The crowning effort of Thompson's long and outstanding career was reached in the year 1811, when he discovered the Athabasca Pass through the Rocky Mountains; descended the beautiful valley of the Columbia, and followed the mighty river to the Pacific Ocean.

The story of David Thompson's exploits; his almost miraculous ability as surveyor, astronomer and explorer; his mapping of the west; the vast length of his journeys, and the unvarying exactitude of his conclusions, is one to quicken the pulse of any

adventure hunter. And with it all we have a story which concerns a man of noble character; a veritable Empire Builder, the degree of whose greatness and the magnitude of whose work it has now become possible to estimate as befits him.

In December of 1783 the Hudson's Bay Company made overtures to the Governors of Grey Coat School, Westminster, England regarding the possibility of a few lads, trained in navigation, taking posts with the company in North America. David Thompson, of Welsh parentage, then fourteen years of age, was one of those chosen, and before the following June had arrived he was aboard the ship Prince Rupert, westward bound. Thompson was never to see his beloved England again. Two months later the Company's fleet made harbour at Fort Prince of Wales five miles up the Churchill River and the boy set foot upon what is now Canadian soil. Within ten days the Prince Rupert had sailed away, leaving him to face the rigours of his new life on the forbidding shores of Hudson Bay.

His first two years of service brought bitter disappointment and discontent to David Thompson for, young as he was, he longed to journey far afield in this land of mystery; to discover things, not to sit before a rude desk and add columns of figures. He chafed and fretted until finally, to his utter delight, he was commissioned in 1786 to establish a trading post on the Saskatchewan River west of those already occupied by the company.

For over one hundred years that famous company of gentleman adventurers trading into Hudson's Bay had maintained their factories on the coast, allowing the Indians of the interior to come to them for trade. Great rivers flowed in all directions but their courses were unknown, for they had never been explored or mapped. Their headquarters was surrounded by a mighty barrier of forest-covered-rock whose formidability they had no desire to test so long as the red man was content to push his way through and carry on the trading at the Company's door. But David Thompson yearned to explore those great rivers and at last his opportunity had come. Nor was it simply a question of exploration, for the Hudson's Bay Company's monopoly was being questioned by rival interests—the great North West Company, with its headquarters in Montreal, and it became imperative that the Hudson's Bay territories be pushed further afield to head off trade which might fall to the competitor.

On this first expedition Thompson pushed his way up the Saskatchewan River to a point which marked the limit of country at that time familiar to civilized man, and established what afterwards became Manchester House near the present site of Battleford. Thompson learned the ritual of Indian barter quickly and, on his return to headquarters one year later, was well received and commended for his efforts. During succeeding years he made short journeys of exploration and began to keep a meteor-

ological journal. This was supplemented by a series of astronomical observations taken under the guidance of Philip Turnor, a man who had been sent out to North America as surveyor and astronomer with the company. Thompson's meeting with Turnor solved all doubts which might have arisen in the young man's mind. He acquired a few precious instruments and they became his inseparable companions in travels which carried him in later years through thousands of miles of the wildest parts of the unknown west. Armed with sextant, compass, telescope and other devices he succeeded in serving a creditable apprenticeship of seven years, at the end of which time he became an official trader and surveyor.

But Thompson's valuable work as an explorer occasioned little enthusiasm at headquarters and through sheer disappointment he decided to resign and offer his services to the rival organization—the North West Co.

In 1797 he proceeded to Grand Portage at the west end of Lake Superior and joined the ranks of Roderick MacKenzie, Simon Fraser, the Hon. William McGillivray and Sir Alexander MacKenzie himself. This was the North West Company of Canadian gentlemen among whom Thompson was well received, and in whom he immediately recognized a spirit of enterprise and vision which had been totally lacking in his former associates. His arrival was indeed timely for at that moment the North

West Co. was sadly in need of a surveyor and astronomer.

By the treaty which closed the American Revolutionary War the boundary between the British possessions and the United States had been fixed on a line joining the Lake of the Woods and the source of the Mississippi River. Accordingly, all British trading posts south of this line were to be withdrawn, and the North West Company's officials sought the true source of the Mississippi so that they might proceed within the law. Thompson was engaged to attempt the work, and after a year of hardship and privation, directed only by his somewhat crude instruments, he decided that Turtle Lake was the true source of the Mississippi. Years later American surveyors reached the conclusion that a small lake a few miles away from Turtle was the source, but this fact scarcely seems sufficient to rob Thompson of the honor of having been the first to determine the point of origin of the great Father of Waters.

On his return to Grand Portage, Thompson received the congratulations of his superiors and his future with the North West Company was assured. During the ensuing eight years Thompson's activities as trader and surveyor carried him far and wide along the great waterways of the interior, and it was here that the magnitude of his ability and the strength of his noble character made themselves apparent. His bulky note-books were ever at his side,

crammed with data and memoranda of every description. He prepared a map upon which each new venture was recorded in exact scale, and with each report to headquarters the picture of the great west gradually took shape. All features were analyzed and represented, no detail ignored. Wild life, native population, languages and customs were described to the utter amazement of his French-Canadian and Indian followers who attributed to this man a strange wizardry and an almost supernatural instinct for accuracy. But it was the world of science only to which Thompson did homage and through the medium of which he was enabled to base his calculations and conclusions.

Throughout those years his every relationship with the Indians was carried out on the highest plane. Never once did Thompson cast a reflection on his employers nor was he ever known to offer intoxicating liquor to a native as an incentive to trade. Wherever he went he was received as a friend, and even the most hostile tribes treated him with profound respect.

In the year 1806 Canadian interests in North America had become so solidified and competition was becoming so keen that it was felt that the long anticipated conquest of the Rockies could be pushed forward with vigor. John Jacob Astor, the great American merchant, was exerting all his strength to build up a fur-trading headquarters on the Pacific coast, and the Hudson's Bay Company had been

knocking dangerously at the barrier for some time. Fraser, for the North West Company, had succeeded in descending the Fraser River, but south of there no white man had ever penetrated. Further, the American boundary extended only as far west as the Rockies, and all territory beyond was free for the taking. David Thompson was hurriedly instructed to proceed to Rocky Mountain House with definite orders to cross the barrier and lay claim to any territory in the name of the King and the North West Company. His ultimate conquest of the great unknown was to occupy him for many years and was destined to be the greatest feat of his outstanding career.

In the spring of 1807 he penetrated the mountains, built a small outpost, and came in contact with the Kootenay Indians. Descending into a fertile valley he gave it the name Kootenay Plains and incorporated this information in his map. During the next year he discovered great tributaries which he felt must flow into the Columbia River. Thompson carried out his explorations in that area for an additional two years and then returned to headquarters. By the middle of October 1810, he rushed back to the foot of the Rockies, this time en route for the Columbia River and the Pacific Coast, for he had learned that a vessel chartered by John Jacob Astor was on its way around Cape Horn to establish a post at the mouth of the River. He was anxious to penetrate the passes without delay and win the

race with the Americans.

Thompson and his party battled their way through the Athabasca Pass not far from the point where the present transcontinental line of the C.N.R. runs, and this time were successful in working through to the beautiful valley of the Columbia which Thompson was the first man to enter. In later years this became the regular route of the Hudson's Bay Company to the Pacific Ocean. Day after day, week after week, he toiled west and south until finally he reached the Spokane River, a tributary of the Columbia, located a few miles from the present site of Spokane. With five French Canadians, two Iroquois Indians and two native interpreters, Thompson now embarked on the last stage of his race to the sea. Down the mighty river he paddled with the Union Jack floating proudly at the stern of his canoe, and at each stopping place he tacked a written notice in the name of the North West Company, taking possession of all land for His Majesty King George III. With long, swinging strokes the elated party sped west until the heaving bosom of the mighty Pacific came into view—and then the paddles stopped. To the left, not more than one mile distant, they made out four log huts—the famous Fort Astoria of John Jacob Astor of the United States. Thompson had been beaten to the coast, but he had accomplished his feat overland, and through a section of the great west which had never been explored before. No one could deprive him of that honor.

David Thompson arrived at Fort William in the summer of 1812 after his last journey from beyond the Rockies. He felt that his work of exploration had been completed and that he could now devote the balance of his life to the editing of his maps and manuscripts. He therefore joined the annual brigade of canoes bound for Montreal. So David Thompson turned his back on the great North West and was never to see it again.

Following the war of 1812 he prepared the final draft of his map and accepted the position of British representative on the commission which surveyed the international boundary from the St. Lawrence River to the Lake of the Woods. This task occupied him for ten years and was completed in 1826, at which time Thompson retired and spent the greater portion of his later years in an effort to hold the territory which he had explored for the British Crown. Financial reverses and the ignorance of British statesmen of the vast natural resources of the North American west harried him day in and day out and the just claims of British America, as seen by the one man who knew every inch of the country, were completely ignored. Battle as he would Thompson could not impress the authorities that the Americans would have been amply satisfied with a boundary line drawn due west from Lake Champlain. In the meantime the United States commissioners had availed themselves of the services of a notorious character by the name of Peter Pond, who stood second

only to Thompson in knowledge of the Northwest. On the advice of Pond the 49th parallel right through to the coast was demanded by the American interests and, in spite of Thompson, the British Commissioners accepted the agreement. David Thompson suffered the keen disappointment of seeing the fabulously wealthy territory which he alone had discovered and mapped, handed over to a foreign nation through sheer ignorance and indifference on the part of the Crown.

Such was the reward meted out to a great man whose amazing accomplishments in exploration and surveying have never been equalled in this country. He travelled over 50,000 miles, much of which was through country never before seen, let alone surveyed, by white men. He mapped the vast area so accurately that a retracing of his expeditions a century later occasioned sensational surprise and, as many of the districts which he visited have never been re-surveyed, some of his work appears to this day on the published maps of Canada.

Throughout his long life he was driven by a restless desire to discover and to reveal, until not a square inch of the vast land remained a mystery, and with it all he was a man of such great heart and generous spirit that when he gave up this life in his 87th year he was so poor that it was not possible to erect a headstone to mark his grave.

For many years after his death, David Thompson's achievements seemed to have passed with him,

but today his fame has risen and we are beginning to realize that such sterling qualities as his are encountered all too seldom in a nation's life. Today we enjoy the many benefits and advantages of a modern civilization which blossoms forth in a great land, linked from coast to coast by the inventive genius of man. And although David Thompson's dream of the future could never have envisioned the Dominion of Canada as we know it today, it is not for us to forget the courage and resource of such men as he, through whose heroic pioneer efforts we have been permitted to inherit a great land.

Chapter XVII

WOODROW WILSON AND AMERICA'S DECLARATION OF WAR

IN the spring of 1917 the globe-girdling news services of the world flashed long awaited tidings of momentous import to the allied nations. For two and a half long years they had stood, with their backs to the wall, fighting a death struggle against a determined enemy. And during those dark years the inquiring, anxious glance of millions of eyes swept with feelings akin to doubt and fear over the greatest neutral country of the world. What would the United States of America do? . . That was the question! And if any action at all was contemplated . . when might it be expected to take place? The great American Republic answered those vital questions on April 6th, 1917, when Woodrow Wilson, the leading player in that great drama of neutrality, made his long awaited decision as the chief executive of his nation. The United States of America declared war on the German Imperial Government. Less than two years later the Allied cause was crowned with success and the great world war ended.

Today, the student of history who finds interest in international diplomacy and economics will

encounter no more thrilling study than is involved in the question of American neutrality and ultimate American declaration of war. And standing head and shoulders above the world of affairs in which he moved, and the destiny of which he attempted to control, was that powerful idealist, Woodrow Wilson . . one of the greatest Presidents who ever sat in the White House . . a man whose true worth to his nation cannot be overestimated.

In a study of the causes of American declaration of war, one is confronted with the question as to why and how the United States developed an anti-German spirit in 1913 and 1915 when her sympathies were overwhelmingly pro-German during the Franco-Prussian War of 1870. The reasons for this transformation are many and varied. There was unquestionably some development of antipathy because of Bismarkian autocracy and militarism, and Theodore Roosevelt's fiery comment upon certain remarks of the German Emperor made excellent newspaper copy. Trade rivalry grew and developed by leaps and bounds and the commercial development of both the United States and Germany prior to the war was tremendous. German Imperialism associated with trade expansion caused a certain element of coolness. Germany's conquest of the Latin American markets stirred the envy of American merchants.

In the year 1912 when Woodrow Wilson first assumed the Presidency, a peculiar situation existed with regard to his ambassadors both to the Court

of St. James and in Berlin. The former post was occupied by Walter Hines Page, a brilliant man who, in Wilson's own opinion, became so pro-British as to be almost anti-American. The Berlin post was occupied by Mr. J. W. Gerard who, throughout his tenure of office, showed marked anti-German tendencies. And though in view of respective developments in world affairs as they were taking place, it was only natural to expect such reaction on the part of his ambassadors; Mr. Wilson and the American people nevertheless displayed a certain measure of irritation at the manner in which they became grossly biased. The situation therefore in 1914 at the outbreak of war was one which found American sympathies largely pro-British, or to use the term of wider significance, pro-Entente. Nevertheless, Woodrow Wilson, even had he not been an idealist at heart and a man governed by pacifist intentions, was the first to recognize the grave truth that the republic numbered among its loyal citizens thousands upon thousands of German and Irish Americans whose sympathies, if not entirely pro-German, were certainly anti-British. Wilson's first conviction was that, at all costs, he must preserve equilibrium within his country and if possible keep it out of a European war. Uncompromising neutrality was therefore declared against each of the belligerents.

Immediately upon the declaration of war Great Britain instituted a gigantic naval blockade of Germany which naturally involved the neutral countries

of the world, with particular effect upon the United States. According to International law with effect to neutrals, that blockade was admittedly illegal, and Wilson refused to allow the order to pass without official protest. The British people resented Wilson's notes, arguing that Great Britain was fighting the battle of civilization, and that the United States should not annoy the British Navy with precedents or legal arguments. In that opinion American Ambassador Walter Hines Page enthusiastically shared and wrote many emphatic letters to the President urging that Britain be left alone. And Wilson, pacifist though he was, demonstrated his human accord with the allied cause by tempering his protests and concentrating all his energies upon the question of preserving American neutrality, if not for the entire duration of the war, at least until he could provide a united front.

And then came the dramatic blow to American hopes for peace . . . the sinking of the Lusitania! With heavy heart and scarce able to trust himself lest suppressed anger prove his undoing, Woodrow Wilson addressed his first note of denunciation and protest to the Imperial German Government. William Jennings Bryan pleaded with the President to temper his note lest it provoke war. He argued that America had committed herself to a pacifist position and that, with the great majority of the nations of the world at war, America should keep her head and stand aloof. He impressed Mr. Wilson with the

grave truth that America was composed of a heterogeneous mass of people unable to understand the complexities of a European conflict. President Wilson yielded to Mr. Bryan's persuasive arguments and permitted him to draft an instruction to Ambassador Gerard. It was to be sent simultaneously with the Lusitania note advising the German Government of the willingness of the United States to submit the questions at issue to a commission of investigation. But that supplementary instruction was never sent to Germany. Members of Wilson's cabinet demanded that the undiluted denunciation should be officially forwarded lest the German Government gain the impression that the United States would not fight for her rights, and that it was essential that American interests be respected without equivocation.

Throughout the year 1915 and the early part of 1916 Woodrow Wilson was subjected to such pressure of divided opinion and the criticism of war and anti-war factions as had never before been brought to bear upon any American President. In his heart he desired peace, and thousands of loyal Americans shared with him that view. The pacifist element of his government stood staunchly behind its President. The country seemed determined upon a non-intervention course. And yet, insidious forces were at work to bring about the downfall of that idealistic plan. Epithets were hurled at Wilson by belligerent nations. The accusation of fear was flung across the Atlantic to sting him like a burning lash. It

was said that America stood proud and aloof—afraid to fight in a world cause, victory in which would be her only salvation; that America was afraid to come out in the open lest she disclose her pro-German sympathies.

Within the country Wilson began to feel the ominous pressure of great American financial interests and their subsidized press. From the very beginning the international banking houses of the United States had made tremendous investments in the bonds of Allied countries. American industry, owing to the British blockade, became desperately involved with allied nations. Upon the prospects of their success in the war and their ability to actually prolong the conflict, depended the relative amount of American profits, and the probability of America receiving payment for goods sold to the Entente powers. In 1916 the problem of American bankers regarding Allied credit became dangerously acute. Ability to raise further loans from private credit was practically at an end and Wall Street was in despair. Their only hope of relief lay in the possibility of shifting the burden from their own shoulders to those of the United States treasury . . and that feat could only be accomplished by forcing the republic to abandon a pretense of formal neutrality and enter the war.

Into that strange maelstrom of diabolical intrigue, international complexity and conflicting opinion, Woodrow Wilson threw all his energy into the

Presidential campaign of 1916 that he might be accorded a second term. He made a great tour throughout the entire country in an effort to convince his people that, come what may, a united front was imperative. Abhoring the thought of war, yet convinced in his heart that his country was being driven slowly to the brink of the abyss, he declared in favour of armed neutrality. His party leaders screamed the catch phrase, "He Kept Us Out of War" from a thousand platforms and Wilson shuddered at the implication, but could do nothing. Enormous crowds greeted him whenever he spoke. He swayed them with the power of his oratory.

"No man in the United States knows what a single day or a single hour may bring."

With bated breath America listened to one of her greatest Presidents as he warned of the possible spreading of Europe's conflagration.

"America is not afraid of anybody" . . . and the din of mighty applause shattered his ears.

"I know that I express your feelings when I say that my only fear is of not being prepared to do my duty. I am afraid of the danger of shame and of inadequacy. I am afraid of not being able to express the great character of this country with tremendous might and effectiveness whenever we are called upon to act in the field of world affairs."

"We don't need fighting men, but we do need men who are ready to fight!"

The vast crowd caught the subtle distinction and

howled its approval.

Wilson knew what he was saying but we shall never know what it cost him to accept the inevitable. The nation swept him into office for a second term, and from coast to coast of that great republic a new sentiment had arisen.

"Mr. President, we are relying upon you to keep us out of war . . . but we are charging you with the sacred duty of keeping the honor of the nation unstained!" The United States was no longer a divided country! Wilson's all-powerful logic had won an unprecedented victory.

Immediately, American armed neutrality was proclaimed in a desperate but futile effort to avert hostilities. As each day passed, an increasing delicacy in the handling of foreign affairs became imperative. In connection with her submarine warfare Germany insisted that America define her distinction between armed and unarmed merchant-men, and her placing of responsibility for offensive and defensive action at sea. Wilson staked his faith on negotiation and compromise. Congress, unstable and stormy, became a constant worry to the chief executive. Members and representatives argued the question of American travellers using foreign ships to the point of hysterical exhaustion. But as abuse after abuse continued to fall upon American heads at the instigation of the Central Powers, the temper of the House and Senate became unmistakably significant. There was an atmosphere of tension every-

where.

In the early weeks of 1917 Germany reiterated her intention of waging uncompromising submarine warfare upon merchantmen. Wilson saw the fortunes of war turning from the allies. He viewed with alarm the forces of extremism gaining in Germany. He thought of dismissing Count von Bernstorff, the German Ambassador, as a warning that America would not countenance further depredations on the high seas. He felt that a declaration of war might break German morale before it became necessary to actively engage as a belligerent. And while Wilson struggled with his problem, his heart breaking at the thought of his shattered dreams and the utter futility of his position, American financial interests secretly gloated at the assurance of continued submarine warfare on the part of Germany. The United States would be forced into war . . . the government would share their burden . . . their credit position would be safe.

Woodrow Wilson took his oath of office upon the 4th day of a month that will be ever unique in American history . . . the Month of March, 1917. Two days later, the idealistic pacifist, whose campaign slogan "He Kept Us Out of War" had swept the country,—and himself into the presidential chair, was forced to sign the proclamation that destroyed the peace for which he had so zealously fought. Nowhere in all the history of international politics can there be found a more poignant episode. The publi-

cation of Germany's foolish Zimmerman note suggesting collusion between Mexico and Japan with regard to the United States had inflamed the country. In private and without ceremony, the President affixed his signature on April 6th, 1917. The joint resolution had been unanimously adopted by the Senate and the House of Representatives. Whistles were blown in the navy yard at Washington and the Arlington wireless towers flashed the news to the ships of the United States navy at sea. So the United States of America entered the Great World War in the interests of the allied cause.

The oft debated question as to the actual part played by the United States in the defeat of the Central Powers cannot come within the compass of this short study. At best it is an unimportant issue in itself, discourse upon which seems to be peculiarly dear to the hearts of over-zealous patriots who are by no means confined to the United States. Thinking Americans today recall not only their participation in the World war, but the vital factors which caused that entry . . . and they recall them in terms of the third member of a great triumvirate Woodrow Wilson. George Washington founded the American Republic; Abraham Lincoln moulded it into a single union; and Woodrow Wilson, through his amazing wartime leadership, may well have saved the world from the horror of military autocracy. At least it may be said, that had he not been repudiated by the great majority of the nations of the world,

including his own; today's threat of economic disaster and organized murder would not exist. In the very glory of his failure, Woodrow Wilson did more to give the world an international conscience than has any other statesman in history.

Chapter XVIII

DEATH IN ANTARCTICA — THE STORY OF ROBERT SCOTT

TRAGEDY and lonely death in the far outposts of civilization has always captured the imagination and sympathetic response of the entire world. A little more than twenty-five years ago there occurred just such an event in history which, although news of it was, of necessity, withheld for many months, was to shock the peoples of two continents.

A famed Antarctic explorer, the second expedition leader to gaze upon the forbidding south pole, had perished with four heroic companions upon the return journey when within only eleven miles of a supply depot. His name was Robert Falcon Scott. Based upon the last entries in more than a thousand precious pages of the diary which he kept, his death has been recorded as March 29th, 1912. The passing of Captain Scott in the cruel wastes of Antarctica touched the public imagination more than has any other similar event; his heroic losing race with the great Amundsen to be the first to gaze upon the South Pole has become a classic in the history of discovery; and the story of that mighty dash into the unknown is now a national epic. And although Scott was not fated to be the discoverer of the pole,

much less destined to be spared that he might give personal testimony, the great heart of the man and his tribute to Amundsen have been imperishably preserved in his amazing diary, no counterpart of which exists today in the realm of literature. Scott's mute story, portions of which are a pitiable blurr of soiled paper and ink, has made a marked contribution to the emotional enrichment of mankind.

In the year 1900 Sir Clements Markham acquired the famous ship 'Discovery', fitted it for an Antarctic expedition, and after careful investigation, chose a young British Naval Officer to be her commander. Thus did Robert Falcon Scott enter upon a career that was to take him to the furthest reaches of the earth, and which was to place him in the forefront of land explorers of the Antarctic.

In that first expedition, which was brought to a successful termination, Scott discovered King Edward VII Land and began to unveil the mysteries of the great Ross Barrier. He travelled upon it for hundreds of miles and charted much of its western coastline. Composed completely of eternal ice, the barrier drove itself wedge-like into the shores of Antarctica. Those shores rose for eleven thousand feet; a mountain fastness, penetrable only through the pass which had been cut by the gigantic Beardmore Glacier. And from his own calculations, together with those of Sir Ernest Shackelton, he determined that the geographic south pole lay some four hundred miles still further away, centred in a

howling, frozen plateau. It seemed as though nature's cunning fortifications of that tantalizing goal had been prepared for the sole purpose of mocking puny man, and yet, when Robert Scott returned to civilization in 1906 it was with a mind intent not only upon reaching the south pole, but upon acquiring sufficient scientific data to be of some real value to mariners of the southern seas. To that end, therefore, he was successful in personally organizing an expedition which set out for Antarctica on June 1st, 1910. His ship was the now famous *Terra Nova*, a strong old Scottish whaler. On October 12th, Scott reached Australia where he was given a cablegram which contained the startling information; "Beg leave to inform you proceeding Antarctica SIGNED Amundsen". The race was on. Amundsen, having found that Peary had successfully discovered the North Pole, abandoned his operations at one end of the earth to take them up at the other. And Scott knew that no worthier opponent in such a race could ever be found. He was pitted against a mighty Norwegian who knew not the meaning of defeat.

Scott pushed forward with all dispatch, and upon January 4th, 1911, had reached the Ross Barrier. He chose as his wintering quarters a location in McMurdo Sound which he named Cape Evans after the second-in-command of the expedition. All materials were safely disembarked, the *Terra Nova* turned north, and the little company prepared to dig

itself in for the long Antarctic winter. Before winter set in however, Scott decided to lay several depots upon the barrier between his main camp and the foot of the mountains. These he would use in his journey to the pole the next summer.

During the following two months he set up these stores of provisions and fuel at six points over a distance of four hundred miles. During the winter he laid his careful plans for the journey to the pole. The heavy sledges laden with tons of supplies were to be hauled by ponies and dogs to the foot of the mountains. From there the men themselves would haul their burden up the steep slopes of Beardmore Glacier and across the four hundred miles of the great plateau to the pole. Depots for the return trip would be laid as the party progressed. It was a prodigious task that Scott had chosen for himself and his men, but there was not a dissenting voice. They were informed that the object would be to transport three units of four men each to the Beardmore Glacier. Then two of them, as supporting parties, would assist the third or Polar Party, to within striking distance of the goal. The second and third parties would then turn back, and the polar party, stripped of every ounce of superfluous gear, would make the final dash. Depots all along the line would protect their hazardous return journey. Scott had planned well, but he could not know that the very elements themselves had foredoomed his courageous little party to lonely death in the most

desolate spot on the earth.

Scott's last week at Cape Evans was filled with final preparations, and on November 3rd, 1911, the Polar expedition left camp and started south. By regular marches they passed depot after depot in comparative ease, and on December 11th they had reached the foot of the Beardmore Glacier. It was there that the first of many cruel blows hit Scott's stalwart little party. A howling, raging four-day blizzard swept down upon them, to be immediately followed by a disastrous mild spell. The wretched men and ponies suffered terribly and were forced to delay their progress at the grave expense of their precious food supply. Eventually they were allowed to go forward only to be faced with the problem of manually hauling their cumbersome sledges up the steep Beardmore Glacier, through the mountains to the polar plateau above. In the mountains Scott set up two depots and reorganized his crews. One unit was sent back to Cape Evans and the polar unit, with one supporting party, continued to the bottom of the earth.

On midsummer day, December 21st, Scott reached the top of the glacier, and on Christmas Day they celebrated their arrival at the edge of the vast plateau with the rationing of a stick of chocolate and two spoonfuls of raisins apiece. Pipes were lit and Christmas's both past and future discussed. Thoughts turned to home and loved ones and happy expression was given to plans and dreams for the

future. But to only three of those eight brave men was the welcoming door of civilization to be opened again. Destiny had made other plans for the five.

The march over the plateau continued without event, but despite a certain cheerfulness there was an apparent note of gloom, for every man in that party knew that their commander must yet make his choice of the few men who would accompany him on the final dash. The fateful announcement was made on January 3rd with the party within two hundred miles of its goal. There were still nearly a thousand statute miles to be covered to the pole and back to Cape Evans; a nightmare of weary slogging in harness with the footing almost impossible and the temperatures menacingly low. It was at that point that Robert Scott made the most important decision in his career . . . and one which he magnanimously recorded in his extensive diary as a fatal mistake. While his entire equipment had been built to accommodate four men in the polar party, his inability to cope with the pleading of one of those men allowed him to include a fifth and therein he probably doomed the entire expedition. The fifth man was Lieut. H. R. Bowers. The other four were Captain Robert Scott; Captain L. E. G. Oates; Petty Officer Edgar Evans, and Dr. E. A. Wilson.

On January 11th Scott recorded the pulling as bad, and the dangerous sign that they were feeling the cold. On the 15th Evans cut his hand rather badly . . an unfortunate accident to happen on the

plateau. On the 17th they walked seven and a half miles and took observations, and there they discovered the first ominous sign of defeat . . . a black flag surrounded by many foot and dog tracks. Amundsen had beaten them. Scott wrote feelingly: "Great God, this is an awful place and terrible enough for us to have labored to without the reward of priority. Now for the run home and a desperate struggle. I wonder if we can do it!" Dire words those; the first admission of possible tragedy. Scott knew that there was scant hope of their duplicating the outward march of over 900 miles.

But the heroic attitude of the men would not countenance a discussion of their plight. On the next day they reached the polar area, discovered Amundsen's tent in which he had left two letters; one addressed to Scott and the other to King Haakon VII of Norway. The Norwegian flag on its tall bamboo pole whipped and cracked violently in the icy wind. With heavy hearts Scott and his party erected a huge cairn surmounted with Queen Alexandra's British Flag, took several photographs, made many observations, and then the wayworn party marched seven miles back in its outward tracks and camped. Their lives henceforward depended upon the food in the depots, none of which they missed, but their utter fatigue slowed their daily marches to such an extent that the depot supplies could not be sufficient to span them from point to point. Short rations were ordered and this additional hardship

tortured them violently. Evans and Oates became badly frostbitten and at the end of January Scott and Bowers were the only men without a serious ailment. Wilson had strained a tendon in his leg and, although it improved, Scott's serious fall on February second still left three injured men. Evans began to fail mentally following a loss of his fingernails, and Oates' feet became gangrenous, and although the ill-fated little party was escaping the inhospitable plateau as fast as possible they had still to contend with the treacherous crevasses of the Beardmore Glacier.

On February 12th with one bare meal on hand the little band struggled into the Middle Glacier depot with Edward Evans desperately ill. His mind had completely gone, and on the 16th he became a raving maniac. The next day Evans fell badly, and died within a few hours. With what remaining strength the four survivors could muster they buried their lost comrade and struggled on. On February 22nd they reached the Barrier, broken men, with four hundred long miles between them and home. From then on, with an utter lack of realization of their waning strength, Scott's diary became a constant pathetic refrain regarding the heavy haulage. Their sledges seemed as though on sand. Their backs were breaking as the demon friction dragged them into the loose snow. Early in March Oates became unable to pull and his added weight upon the sledges practically halted the party. And still they struggled on, slogging, slogging, with

great tears of agony freezing upon their blackened faces. Their sun-glasses fogged and froze. They removed them and became partially snow-blind. The pain in their eyes was maddening. Oates crawled on his knees mile after mile when he refused to be hauled.

On March 15 with the party just sixty miles from one Ton Depot, Titus Oates made his great sacrifice. In all the annals of British heroism there is no record of a braver act. With no worshipping throng to cheer and no witness save the lonely stretches of a vast desert of swirling, blinding snow, he opened the flap of the little drift-swept tent and with the casual words, "I am going outside and may be some time!" he faced the raging blizzard. Titus Oates would be a burden no longer. He had gone voluntarily to his death and his companions were powerless to prevent him. Oates was never heard of again . . . his body was never found. Scott wrote in his diary, "We all hope to meet the end with a similar spirit and assuredly the end is not far".

Ten days later Scott, Wilson and Bowers, all three dying of scurvy, starvation and exhaustion had reached a point within eleven miles of their precious depot and just 142 miles from their base and safety. But the eleven miles might have been eleven thousand, for the odds were too great and the battle had been lost. On March 29th, with a ten day blizzard raging in all its fury, Scott laboriously clutched his pencil in his frozen hands and wrote his last words,

"It seems a pity that I cannot write more . . for God's sake look after our people!" So passed a noble and heroic soul . . a brilliant explorer and a great man.

On November 12th, 1912, the Cape Evans search party passed One Ton Depot and most unexpectedly came upon a huge natural cairn. With heavy hearts they dug it out and identified the bodies of their beloved leader and his two companions. Wilson and Bowers lay as though asleep in their bags while Scott, with his bag open, lay with one hand beneath each of their heads. His diaries, with his pipe and tobacco, were found in the snow beneath him. Everything was neat and orderly. The bodies were not moved. The funeral service was read; all gear and letters reverently removed including thirty-five pounds of invaluable geological specimens from Beardmore Glacier the abandonment of which might well have saved their lives. A mighty cairn of snow was reared over their tent, surmounted by a cross near which was buried a record enclosed in a metal cylinder. On the following day the search party, directed by Scott's diary, made a futile effort to locate Oates' body. Thirteen miles further south they went, but nothing was ever seen. On their return they passed and saluted the polar mausoleum of Scott, Wilson and Bowers, and there alone in their greatness they will lie without change or bodily decay, with the most fitting monument in the world above them.

In four hundred years, when nature brings them to the edge of that mighty barrier, they will be consigned to the deep with a finer salute than could be given by all the guns in the British fleet . . . the titanic roar of glacial ice as it breaks free upon the bosom of the heaving Antarctic. Today, upon Observation Hill near Cape Evans, there stands Scott Cross, one thousand feet above the sea, visible for nine miles in every direction. In the gleaming gold of the evening sunlight, against the leaden southern sky it stands a guardian symbol, at the threshold of the great unknown, in respectful memory of a noble man . . . Robert Falcon Scott.

Chapter XIX

THE STORMING OF ZEEBRUGGE

MIGHTY battle waged in Europe in the war-torn year of 1918. One felt that civilization itself swayed perilously in the balance; that men had gone mad with a strange lust to kill. And so, the innocent fought and died; and in so doing, made heroes of themselves that the world might find itself again.

On St. George's Day, April 23rd, and continuing until the early hours of the 24th, the British Navy swept through to success in the most heroic and audacious manoeuvre of the entire war at sea;—the storming of the Zeebrugge Mole, and the blocking of the Bruges Canal! With preparations veiled in the utmost secrecy; plans constructed on colossal proportions; and the actual attack carried out with supreme success, there is no more thrilling story of heroic endeavour and sacrifice in the history of the World War.

Germany's attempted submarine blockade of the merchantmen of the world depended to a large extent upon the impregnability of her base at Zeebrugge. Long a thorn in British flesh, it was decided in November of 1917, in the absence of any more certain method, to make plans for the early blocking of

the Flanders port. The Mole at Zeebrugge consisted of a long curved breakwater of solid concrete 80 yards wide, jutting out into the sea for a distance of one mile. It afforded the necessary protection for the twin piers guarding the entrance to the Bruges Canal. At the shore end of the Mole, a lattice-work viaduct had been introduced to allow for free tidal flow, and the complete structure was studded with guns and searchlights of all sizes.

In preparation of the plan to block the canal it was immediately realized that, unless attention was diverted by some other means, the manoeuvre could never be successful. It was therefore decided to approach the fortification while carrying on a running gun-fire from the depths of a great smoke screen in the dead of night; tie up at the mole by means of grapnels, and storm it. Obsolete submarines loaded with high explosive would blow themselves up beneath the lattice-work viaduct so that reinforcements might not be able to come to the assistance of the surprised enemy. At the height of the battle the three great block ships, loaded to the water line with concrete, would enter the basin, take up their positions in the mouth of the canal, and, having been abandoned by their skeleton crews, would be sunk there. Small motor craft would be available to pick up members of the submarine and block ship crews. Immediately upon the sinking of the block-ships the storming party would retire.

Such was the audacious plan for the blocking of

the Bruges Canal, the great submarine base of the German Navy. And so, commencing in November of 1917, shrouded in the utmost secrecy, the preparation of ships and the training of crews commenced. Every man chosen was a volunteer who had willingly engaged himself in a project of which he knew nothing. They were chosen secretly, and from every section of the navy. They were carefully trained in the execution of such peculiar manoeuvres that they were inclined to agree with the most prevalent rumour—that Britain planned to lay down a huge landing force upon the coast of France. Strange obsolete ships were treated in most amazing fashion. The old *Vindictive* had her masts cut off to her fighting top and huge ramps, or brows, built on her one side until she listed perilously in the water. Three old vessels, the *Thetis*, *Intrepid* and *Iphigenia*, were filled with tons of rubble and cement after having been stripped of all fittings and provided with protection for their bridges. Old ferry boats—the *Iris* and *Daffodil*—strange single-funnelled, stubby looking little craft which had been superannuated years before, snorted and puffed about in performance of their duty—whatever that might be. Never had such a bewildering naval force gazed upon such a strange and incongruous sight, and never was a project planned with more precision and caution.

Day after day the men trained on land not knowing that they were working upon a full scale model of the Zeebrugge Mole. Rehearsal after re-

hearsal was held with full equipment. Detailed working parties made final preparations upon ship-board. Fenders were erected on the *Vindictive*, the storming ship. Hinged brows were attached to assist the storming parties. Numerous motor craft were fitted with special smoke throwing apparatus. And still the veil of secrecy remained impenetrable.

Those in command, realizing the importance of time and tide, studied astronomical maps with regard to the phases of the moon. The seven hour journey to Zeebrugge had to be effected in the dead of a black night so that the arrival would be guarded by darkness, assisted by smoke screens. No moon could be allowed to interfere with the surprise of the attack. The manoeuvre had to be carried out in a fairly quiet sea lest the heavily loaded block-ships founder or the small ferry-boats become swamped. Wind, weather and visibility were of utmost importance, any one of which might defeat the plan. Finally on the eve of St. George's day, 1918, the order came through from headquarters, the volunteer force went on board ship, and the strange concourse of fighting vessels steamed slowly past the wind swept cliffs by the North Foreland Lighthouse. It was five o'clock in the afternoon. Captain Carpenter of the *Vindictive* planned to throw his grapnels out upon the Zeebrugge Mole at midnight.

At eleven o'clock the great flotilla had successfully run the mined area, and the motor launches had gone on ahead to lay the smoke screen floats.

Aerial bombardment of Zeebrugge had commenced. Presently the deep throbbing of heavy gun-fire, with the unearthly brilliance of star-shells bursting in the sky to the south west indicated that the motor craft had been seen and were being fired upon. Forty-five minutes later the *Vindictive* ran through a great cloud of man-made smoke and emerged in the blackness of night within two hundred yards of the lighthouse at the head of the mole. Captain Carpenter increased his speed to go alongside. Immediately he was identified as almost every enemy weapon was turned upon him. The gallant *Vindictive* replied, as in an instant the night became hideous with the deep thudding roll of the discharges and the nerve-shattering roar of bursting projectiles. Star shells and flaming onions soared skyward to bathe the scene in their dazzling eery greenish white glare. Search-lights danced inquisitively and swept wildly over the mole in an attempt to seek out this audacious enemy.

Slowly but surely the *Vindictive* approached the mole, her great storming party standing ready for the order to lower the brows and land. Hostile guns fired point blank but there was no wavering. In a brief five minutes she had moved from the protecting smoke screen to the edge of the concrete mole, her ghostly grey shape, accentuated out of all proportion by her proximity, striking fear into the hearts of the enemy. Wreathed in a turbulent cloud of reeking gun smoke and sparkling with wicked looking flashes of explosives she came alongside, rubbed with

scarcely a tremor, and orders were given to let go the anchor. The Daffodil, and the Iris, the two little ferry passenger tenders, nosed into the sides of the Vindictive to hold her against the mole. With their propellers churning the water they eased her in and held her there. Those brows that had not been destroyed by gun-fire were immediately lowered and the storming party made ready to land in the face of enemy fire.

Just how the men actually landed seems little short of a miracle. The Vindictive rolled so heavily in backwash that at one moment the brows crashed against the mole, and in the next they swung eight feet above it. Blue jackets and marines in full fighting equipment, facing a rain of death from the enemy, made their way along the wildly swinging platforms at the peril of their lives. Shells dropped around them and burst overhead, while below yawned a thirty foot chasm waiting to receive those who made one false step. From the Iris and Daffodil men swarmed to the decks of the Vindictive and from there to the mole.

No description can ever convey an adequate idea of the awful nature of the fighting itself on that great concrete pier. And yet it was all a blind to disguise the greater purpose. At the very moment the storming party made its first attack, the obsolete submarine C.3—loaded with high explosive and guided by a few volunteers, swung at full speed in the direction of the lattice-work viaduct. The enemy

watched in fascinated suspense until the under-sea craft, which they assumed was hopelessly out of control, should crash and surrender. But before their very eyes her crew abandoned her to be immediately picked up by a darting motor boat. The submarine headed straight for the bridge and then blew up with a deafening report. Debris was thrown high in the air as the mighty explosion told the storming party that the viaduct had been successfully destroyed and no reinforcements could come to the aid of the enemy. Rousing British cheers rang to the skies as the attack was renewed with tremendous force, and at that moment the three great block-ships appeared off the light house at the end of the mole and slowly made their way toward the entrance to the canal.

It was thirty minutes past midnight when the *Thetis*—the leading block-ship—steamed past the mole, closely followed by the *Intrepid* and the *Iphigenia*. Thus commenced the most important phase of the entire operation. Rockets fired from the *Vindictive* gave the *Intrepid* her bearings and, having rounded the mole, she steamed at full speed for the canal piers. Her guns roared as she came in and her fire was returned with devastating effect by the enemy. Hit repeatedly she listed badly but refused to falter. On and on she came like some great ghost ship immune to the destructive agencies of man. Small motor boats swarmed about her to take off her crew. Finally she grounded and her

commander pressed the key that blew out her bottom. And as her brave crew abandoned her, she heeled and sank. The enemy had been taken completely by surprise, and now that realization had come, it was too late to seriously contend with the other block-ships for the fighting on the mole was going badly. Time after time the bluejackets attacked and repulsed the enemy while the great guns on the *Vindictive* continued their business of silencing the shore batteries. The second block-ship steamed past the sinking *Intrepid* and in a matter of moments had taken her position in the very mouth of the Canal. Abandoning her with all dispatch her crew sent her to the bottom just as the *Iphigenia*, the last blockship, swung across the remaining expanse of clear water. Her commander manoeuvred her directly between the *Intrepid* and the eastern Canal bank, and having rung the alarm gong for the crew to abandon, blew her charges. Thus the third blockship sank in the Bruges Canal.

At ten minutes before one, with the work successfully completed, the order to retire rang out. Fifteen minutes later the wounded had been taken aboard and every living man had left the Mole. In another five minutes the *Daffodil* commenced to tow the *Vindictive*'s bows away from the wall. Then she was cast off. Blazing like a furnace, her flaming funnels torn and battered, her decks a twisted shambles of steel, the *Vindictive* wheeled and disappeared into the great smoke screen.

When the sun rose on St. George's day an antiquated cruiser, many destroyers, two shattered ferry-boats and a host of bobbing motor craft steamed past the wind swept cliffs by the North Foreland Lighthouse. But there were three ships missing. Charred, shell-riven wrecks they lay, with their broken masts piercing the surface of the Bruges Canal, their concrete-filled hulls completely blocking the great enemy submarine base. Slowly the strange cavalcade steamed on toward home and its protective harbours. The sun rose and shone with great brilliance, and at that moment something completely imperishable seemed to rise from those battered ships. Perhaps it was a note of pride—pride in the fact that the most successful sea action of the British Navy in the World War had been fought and won on St. George's Day.

Chapter XX

THE GREAT CHICAGO FIRE

T HE year 1871

represents a time in the history of the North American continent the memory of which may be enjoyed only by those venerable folk who, with admirable grace, elect to be termed elderly. Stories have ever been, and ever will be told of the so-called 'good old days'; the stories of parents and grandparents which will forever stand out as high spots in the realm of recollection. There comes to my mind just such an incident; one which, for sheer horror and stark realism alone, might have claimed no other qualification to merit ranking as one of the greatest tragedies of the past century. But fate stirred into the sinister potion, the additional element of sardonic humour and thereby, so 'tis said, made doubly certain that memories would live—memories of Mrs. O'Leary's cow and the great Chicago Fire!

On October 9th, 1871, the relentless, wind-driven monster was in its 22nd hour of unchecked destruction. On the next day the charred, ruined city took stock of itself, but there was little consolation to be found, for Chicago, the great boom town of the late sixties, lay a \$200,000,000 derelict on the

shores of Lake Michigan. She had carried 250 identified dead and 57 fire insurance companies down with her, and the inevitable investigating committee was never able to determine whether or not the charge of incendiarism could be rightly laid at the door of Mrs. O'Leary's cow. The grim story of the great Chicago Fire is one that will be long remembered in the annals of American history.

It is said that the booming city of Chicago was a sight for wondering eyes in the year 1871. Theatres, stores and hotels crowded a down-town area three-quarters of a mile square with property valued at a thousand dollars a foot. Outside this district the city spread its fan-like, densely-populated arms in three directions for two solid miles. Along the lake lived the first families in princely structures of brick and stone. West of LaSalle lived the workers in the shadow and noise of the clanging machine-shops and foundries, residing in a district which was rapidly spreading north and south. Magnificent were the hotels and theatres in this Chicago of '71 when one considers that they were supported by what was little more than a frontier city of 306,000 in population. Yet those people were living in what was popularly known as the golden-crowned glorious Chicago; the queen of the north and west; the gateway of opportunity! They built seventeen grain elevators which linked the railways with their fourteen miles of river wharves. They built 27 bridges over the Chicago River. Parks north, west and

south occupied 36 square miles and with connecting boulevards, were regarded as the finest in the world. Merchant princes, railroad kings, gamblers, confidence men and toilers rubbed shoulder to shoulder in this great frontier melting-pot, proud of themselves and of their fine city because they were among the chosen few who might term themselves 'Chicagoans'.

But Chicago, in her serious moments, failed to mislead even herself in knowledge of the truth, for she was a veritable city of veneered shambles, a pompous, puffed-up flimsy shell which did but feebly disguise the fact that anything might be forgiven provided it made money. As late as September of 1871 her newspaper the Tribune gave warning of mile upon mile of fire traps which did nought but please the eye as their hundred-foot walls of single brick thickness rose, box-like to the blue sky. Among and behind the hastily built, money-grabbing commercial structures were hundreds of rotting shanties where squatted the destitute and criminal classes, nor were these pitiful ramshackle dwellings less fire-proof than many of the great public buildings whose imposing marble fronts were at best thin and weak. No fire laws were observed. Landlords, through bribery and political corruption, maintained and exacted exorbitant rents for fire-traps in the very centre of the city.

Such things as regulations were not to be allowed to interfere with Chicago's prosperity and progress. Because of the cheapness and availability of

lumber 40,000 of the city's 60,000 buildings were constructed wholly of wood, and but a handful of the remainder were fireproof, for roofs were universally constructed of felt and tar or shingles. The frequency of fires was accepted and dismissed in the usual pioneer fashion. Of course they were to be expected and that was why one carried fire insurance, but unfortunately there wasn't enough fire insurance in the entire area to offset the hazard of Chicago's tinder-box; a vital fact which was to be brought home in cruelly convincing manner.

There was music and merriment in the DeKoven Street home of Patrick O'Leary on the fatal night of October 8th, 1871. Guests were being entertained with the fiddling of McLaughlin, the lodger, whose ability was recognized far and wide in the neighborhood. Catherine, his wife, served refreshments as the evening progressed and the music was struck up again. Mr. O'Leary tended his cow which was housed in a small barn at the rear of the property, then, retired early as was his custom, and the music and dancing continued in the rented front rooms.

At ten o'clock neighbor Daniel Sullivan burst through his back door and rushed to the rear of his yard as fast as the handicap of a wooden leg would permit. He had seen fire in the O'Leary barn and closer inspection convinced him that an alarm should be given immediately. Sullivan glanced at the starless sky, and as a menacing gust of wind tore at his great shock of hair, cupped his hands and gave vent

to a piercing roar of warning. Before Patrick O'Leary, eyes heavy with sleep, could answer neighbour Sullivan's call, the barn was smothered in a mass of dancing, wind-driven flames as crackling embers rose high in the sky to deposit themselves on adjacent roofs. The great Chicago fire had started.

There was no time for fixing responsibility or hunting clues that windy night of October 8th. Within half an hour the fire had spread its gigantic, consuming tentacles across the west side in two swaths so far and wide that every available engine in the city was clanging in its direction and the court-house bell down-town boomed an unceasing warning. Even conceding the fact that Chicago's mushroom growth had provided admirable food for the flames, one finds it difficult to conceive that a fire which resembled nothing so much as a gigantic blow-torch could sweep unchecked with such rapidity; and yet, many things seem to have conspired unfavourably with almost sinister purpose. The neighbourhood of origin was one of pine shanties. The watchman on the city hall tower had misjudged its location and had called for a fire company a mile and a half out of the way with a resultant ruinous delay. A terrific southwest wind was blowing. Nor was that all. The entire fire department, exhausted from fighting a \$750,000 west side blaze the previous day, was in no condition to answer an alarm of such urgency. The general psychological reaction of the inhabitants too, played a distinct part in early

tardiness for, in spite of the fact that fires had been bad all summer; that Illinois had passed through the worst drought in its history and that only one inch of rain had fallen between July and October; still the city of sham and shingle was convinced that it would never burn. Fires might devastate the smaller neighborhoods but this could be nothing more than just another blaze on the west side.

But stark, horrifying panic struck unbelieving Chicago at ten-thirty on that awful night, when flames miles wide and a hundred feet high lashed their way down-town on the crest of that relentless southern gale. Blazing embers shot yards ahead of the inferno like heralds of doom, starting myriad miniature fires which required but a few moments to stretch their flaming arms and make way for the onrushing demon. All Chicago thronged the streets; cries of terror contorting fear-stricken faces which stood out ghost-like in the eerie reflection of the great leaping flames. Scant hope of the burned-out area of the night before stopping the fire was lost when the force of a hundred and fifty blazing acres of buildings literally blasted the inferno to the very edges of the Chicago River, licked up the grain elevators and fell upon the Union Station. The west side crowds turned and fled down-town in terror.

Even the river failed to act as a barrier, for a flaming board rode the wind from shore to shore and settled on a shanty roof one third of a mile from any burning building. Had that ember been sighted

from a gun it could not have fallen in a more damaging spot and the flames scuttled directly north-east across the business section as though through a field of straw. Over the west side bridges came the screaming fire engines crushing down helpless refugees in their path, and in moments when the cruel wind hesitated, the futile clanging of the court-house bell hopelessly penetrated the roar of the flames. At one-thirty that building itself fell and 350 elated prisoners were set free that they might not be burned to death. Their appreciation was immediately expressed in despicable terms for they became ring-leaders in an orgy of pillaging and looting the equal of which has never been seen in the history of any major disaster. Great masses of flame seemed to drive the ruthless men crazy and more than one pitiful family which had lost all, was done to death because it had nothing more to give to these criminal maniacs. Hoodlums and vagrants whose dens had been burned swarmed upon shops and stores like locusts and their numbers were increased by weaklings gone mad. Staid men got drunk in desperation as saloons kept open ahead of the fire, scooping up money until the flames literally blasted them out. Hollow-eyed, hysterical women roamed the devastated streets like an army of sleep-walkers as panic and doom swept all before it.

In the small hours of the morning of the 9th the flames jumped the river to the north and raged through that area of 75,000 inhabitants as fast as a

man could run. Daylight brought no cessation, nor did the wind abate. Thousands of refugees swarmed the lake front. Men buried their wives and children in the sand, with a hole for air, and stood guard with buckets or splashed water over them with their hands. Before noon the city water works had fallen and the firefighters were robbed of their chief method of attack. They turned, as a last resort, to dynamite in an effort to blast a barren trench before the onrushing flames, but their efforts seemed but to serve as a maddening spur to the already menacing determination of the fire. All day long the monster kept to its wind-driven task and before nightfall only six structures stood in the combined business and northside areas. On the sands by the river, thousands of rich and poor alike squatted beside their bundles, fighting for breath in the suffocating heat. Thirty thousand people cowered among the smouldering wooden monuments in the cemetery at Lincoln Park. Inconceivable as it may seem, the wind from Chicago was so hot the next afternoon at Holland, Michigan, one hundred miles across the lake, that men were forced to lie down in ditches or behind hedges as the scorching blasts passed over them. But the wind finally blew itself out and the great fire died to a smoulder on the morning of the third day.

Dimly and fearfully Chicago regarded itself on the 10th of October. Three and one-half square miles of its area had been blackened and charred by

the great fire which had burned 98,500 people out of their homes. 17,400 buildings had fallen before the flames and \$200,000,000 worth of property literally turned to vapor by the tremendous heat. The business section had been almost completely wiped out, and of the dead, 250 were counted and identified, but the actual loss has been estimated at more than three times that number. As a result of the catastrophe, 57 fire insurance companies were forced to suspend business and Chicago, in an effort to collect on 88 millions in policies, was never able to realize even one half of that amount.

The resultant investigation which took place immediately following the great fire produced no satisfactory explanation other than proof that the point of origin was the O'Leary barn. Patrick O'Leary and his household survived the disaster but the manner in which their evidence was given showed much of evasion and indecision. Even to this day it is said with a certain degree of conviction, that Mrs. O'Leary paid a nocturnal visit to her cow so that she might have fresh milk for an oyster stew. The remnants of a broken lantern in the charred barn gave rise to the theory that the animal had kicked it over and started the great Chicago Fire. In the last analysis however, the truth or fallacy of the many famous legends surrounding Mrs. O'Leary's cow must forever remain a mystery. They have done little more than to inject a questionable element of grim humor into the records of what

was one of the most disastrous fires in all history.

The aftermath demonstrated conclusively the peculiarity of man and the workings of his mind for the great fire, which seemed to have ruined Chicago forever, became a grotesque form of invaluable advertising which, probably more than any other single thing, provided the initiative which resulted in amazing and almost immediate regrowth. The Tribune in an editorial published two days after, expressed perfectly the sentiment of the entire countryside. "In the midst of a calamity without parallel in history, looking upon the ashes of thirty years' accumulation, the people of this once beautiful city have resolved that Chicago shall rise again!" And from the charred embers of her pioneer glory Chicago did rise again, to become today's third city of the world.