CHAPTER THE SECOND

THE LAST WAR

Section 1

Viewed from the standpoint of a sane and ambitious social order, it is difficult to understand, and it would be tedious to follow, the motives that plunged mankind into the war that fills the histories of the middle decades of the twentieth century.

It must always be remembered that the political structure of the world at that time was everywhere extraordinarily behind the collective intelligence. That is the central fact of that history. For two hundred years there had been no great changes in political or legal methods and pretensions, the utmost change had been a certain shifting of boundaries and slight readjustment of procedure, while in nearly every other aspect of life there had been fundamental revolutions, gigantic releases, and an enormous enlargement of scope and outlook. The absurdities of courts and the indignities of representative parliamentary government, coupled with the opening of vast fields of opportunity in other directions, had withdrawn the best intelligences more and more from public affairs. The ostensible governments of the world in the twentieth century were following in the wake of the ostensible religions. They were ceasing to command the services of any but second-rate men. After the middle of the eighteenth century there are no more great ecclesiastics upon the

world's memory, after the opening of the twentieth no more statesmen. Everywhere one finds an energetic, ambitious, short-sighted, common-place type in the seats of authority, blind to the new possibilities and litigiously reliant upon the traditions of the past.

Perhaps the most dangerous of those outworn traditions were the boundaries of the various 'sovereign states,' and the conception of a general predominance in human affairs on the part of some one particular state. The memory of the empires of Rome and Alexander squatted, an unlaid carnivorous ghost, in the human imagination--it bored into the human brain like some grisly parasite and filled it with disordered thoughts and violent impulses. For more than a century the French system exhausted its vitality in belligerent convulsions, and then the infection passed to the German-speaking peoples who were the heart and centre of Europe, and from them onward to the Slavs. Later ages were to store and neglect the vast insane literature of this obsession, the intricate treaties, the secret agreements, the infinite knowingness of the political writer, the cunning refusals to accept plain facts, the strategic devices, the tactical manoeuvres, the records of mobilisations and counter-mobilisations. It ceased to be credible almost as soon as it ceased to happen, but in the very dawn of the new age their state craftsmen sat with their historical candles burning, and, in spite of strange, new reflections and unfamiliar lights and shadows, still wrangling and planning to rearrange the maps of Europe and the world.

It was to become a matter for subtle inquiry how far the millions of men

and women outside the world of these specialists sympathised and agreed with their portentous activities. One school of psychologists inclined to minimise this participation, but the balance of evidence goes to show that there were massive responses to these suggestions of the belligerent schemer. Primitive man had been a fiercely combative animal; innumerable generations had passed their lives in tribal warfare, and the weight of tradition, the example of history, the ideals of loyalty and devotion fell in easily enough with the incitements of the international mischief-maker. The political ideas of the common man were picked up haphazard, there was practically nothing in such education as he was given that was ever intended to fit him for citizenship as such (that conception only appeared, indeed, with the development of Modern State ideas), and it was therefore a comparatively easy matter to fill his vacant mind with the sounds and fury of exasperated suspicion and national aggression.

For example, Barnet describes the London crowd as noisily patriotic when presently his battalion came up from the depot to London, to entrain for the French frontier. He tells of children and women and lads and old men cheering and shouting, of the streets and rows hung with the flags of the Allied Powers, of a real enthusiasm even among the destitute and unemployed. The Labour Bureaux were now partially transformed into enrolment offices, and were centres of hotly patriotic excitement.
At every convenient place upon the line on either side of the Channel Tunnel there were enthusiastic spectators, and the feeling in the regiment, if a little stiffened and darkened by grim anticipations, was

none the less warlike.

But all this emotion was the fickle emotion of minds without established ideas; it was with most of them, Barnet says, as it was with himself, a natural response to collective movement, and to martial sounds and colours, and the exhilarating challenge of vague dangers. And people had been so long oppressed by the threat of and preparation for war that its arrival came with an effect of positive relief.

Section 2

The plan of campaign of the Allies assigned the defence of the lower Meuse to the English, and the troop-trains were run direct from the various British depots to the points in the Ardennes where they were intended to entrench themselves.

Most of the documents bearing upon the campaign were destroyed during the war, from the first the scheme of the Allies seems to have been confused, but it is highly probable that the formation of an aerial park in this region, from which attacks could be made upon the vast industrial plant of the lower Rhine, and a flanking raid through Holland upon the German naval establishments at the mouth of the Elbe, were integral parts of the original project. Nothing of this was known to such pawns in the game as Barnet and his company, whose business it was to do what they were told by the mysterious intelligences at the direction of things in Paris, to which city the Whitehall staff had

also been transferred. From first to last these directing intelligences remained mysterious to the body of the army, veiled under the name of 'Orders.' There was no Napoleon, no Caesar to embody enthusiasm. Barnet says, 'We talked of Them. THEY are sending us up into Luxembourg. THEY are going to turn the Central European right.'

Behind the veil of this vagueness the little group of more or less worthy men which constituted Headquarters was beginning to realise the enormity of the thing it was supposed to control....

In the great hall of the War Control, whose windows looked out across the Seine to the Trocadero and the palaces of the western quarter, a series of big-scale relief maps were laid out upon tables to display the whole seat of war, and the staff-officers of the control were continually busy shifting the little blocks which represented the contending troops, as the reports and intelligence came drifting in to the various telegraphic bureaux in the adjacent rooms. In other smaller apartments there were maps of a less detailed sort, upon which, for example, the reports of the British Admiralty and of the Slav commanders were recorded as they kept coming to hand. Upon these maps, as upon chessboards, Marshal Dubois, in consultation with General Viard and the Earl of Delhi, was to play the great game for world supremacy against the Central European powers. Very probably he had a definite idea of his game; very probably he had a coherent and admirable plan.

But he had reckoned without a proper estimate either of the new strategy

of aviation or of the possibilities of atomic energy that Holsten had opened for mankind. While he planned entrenchments and invasions and a frontier war, the Central European generalship was striking at the eyes and the brain. And while, with a certain diffident hesitation, he developed his gambit that night upon the lines laid down by Napoleon and Moltke, his own scientific corps in a state of mutinous activity was preparing a blow for Berlin. 'These old fools!' was the key in which the scientific corps was thinking.

The War Control in Paris, on the night of July the second, was an impressive display of the paraphernalia of scientific military organisation, as the first half of the twentieth century understood it. To one human being at least the consulting commanders had the likeness of world-wielding gods.

She was a skilled typist, capable of nearly sixty words a minute, and she had been engaged in relay with other similar women to take down orders in duplicate and hand them over to the junior officers in attendance, to be forwarded and filed. There had come a lull, and she had been sent out from the dictating room to take the air upon the terrace before the great hall and to eat such scanty refreshment as she had brought with her until her services were required again.

From her position upon the terrace this young woman had a view not only of the wide sweep of the river below her, and all the eastward side of Paris from the Arc de Triomphe to Saint Cloud, great blocks and masses

of black or pale darkness with pink and golden flashes of illumination and endless interlacing bands of dotted lights under a still and starless sky, but also the whole spacious interior of the great hall with its slender pillars and gracious arching and clustering lamps was visible to her. There, over a wilderness of tables, lay the huge maps, done on so large a scale that one might fancy them small countries; the messengers and attendants went and came perpetually, altering, moving the little pieces that signified hundreds and thousands of men, and the great commander and his two consultants stood amidst all these things and near where the fighting was nearest, scheming, directing. They had but to breathe a word and presently away there, in the world of reality, the punctual myriads moved. Men rose up and went forward and died. The fate of nations lay behind the eyes of these three men. Indeed they were like gods.

Most godlike of the three was Dubois. It was for him to decide; the others at most might suggest. Her woman's soul went out to this grave, handsome, still, old man, in a passion of instinctive worship.

Once she had taken words of instruction from him direct. She had awaited them in an ecstasy of happiness--and fear. For her exaltation was made terrible by the dread that some error might dishonour her....

She watched him now through the glass with all the unpenetrating minuteness of an impassioned woman's observation.

He said little, she remarked. He looked but little at the maps. The tall Englishman beside him was manifestly troubled by a swarm of ideas, conflicting ideas; he craned his neck at every shifting of the little red, blue, black, and yellow pieces on the board, and wanted to draw the commander's attention to this and that. Dubois listened, nodded, emitted a word and became still again, brooding like the national eagle.

His eyes were so deeply sunken under his white eyebrows that she could not see his eyes; his moustache overhung the mouth from which those words of decision came. Viard, too, said little; he was a dark man with a drooping head and melancholy, watchful eyes. He was more intent upon the French right, which was feeling its way now through Alsace to the Rhine. He was, she knew, an old colleague of Dubois; he knew him better, she decided, he trusted him more than this unfamiliar Englishman....

Not to talk, to remain impassive and as far as possible in profile; these were the lessons that old Dubois had mastered years ago. To seem to know all, to betray no surprise, to refuse to hurry--itself a confession of miscalculation; by attention to these simple rules, Dubois had built up a steady reputation from the days when he had been a promising junior officer, a still, almost abstracted young man, deliberate but ready. Even then men had looked at him and said: 'He will go far.' Through fifty years of peace he had never once been found wanting, and at manoeuvres his impassive persistence had perplexed and hypnotised and defeated many a more actively intelligent man. Deep in his soul Dubois had hidden his one profound discovery about the modern

art of warfare, the key to his career. And this discovery was that NOBODY KNEW, that to act therefore was to blunder, that to talk was to confess; and that the man who acted slowly and steadfastly and above all silently, had the best chance of winning through. Meanwhile one fed the men. Now by this same strategy he hoped to shatter those mysterious unknowns of the Central European command. Delhi might talk of a great flank march through Holland, with all the British submarines and hydroplanes and torpedo craft pouring up the Rhine in support of it; Viard might crave for brilliance with the motor bicycles, aeroplanes, and ski-men among the Swiss mountains, and a sudden swoop upon Vienna; the thing was to listen--and wait for the other side to begin experimenting. It was all experimenting. And meanwhile he remained in profile, with an air of assurance--like a man who sits in an automobile after the chauffeur has had his directions.

And every one about him was the stronger and surer for that quiet face, that air of knowledge and unruffled confidence. The clustering lights threw a score of shadows of him upon the maps, great bunches of him, versions of a commanding presence, lighter or darker, dominated the field, and pointed in every direction. Those shadows symbolised his control. When a messenger came from the wireless room to shift this or that piece in the game, to replace under amended reports one Central European regiment by a score, to draw back or thrust out or distribute this or that force of the Allies, the Marshal would turn his head and seem not to see, or look and nod slightly, as a master nods who approves a pupil's self-correction. 'Yes, that's better.'

How wonderful he was, thought the woman at the window, how wonderful it all was. This was the brain of the western world, this was Olympus with the warring earth at its feet. And he was guiding France, France so long a resentful exile from imperialism, back to her old predominance.

It seemed to her beyond the desert of a woman that she should be privileged to participate....

It is hard to be a woman, full of the stormy impulse to personal devotion, and to have to be impersonal, abstract, exact, punctual. She must control herself....

She gave herself up to fantastic dreams, dreams of the days when the war would be over and victory enthroned. Then perhaps this harshness, this armour would be put aside and the gods might unbend. Her eyelids drooped....

She roused herself with a start. She became aware that the night outside was no longer still. That there was an excitement down below on the bridge and a running in the street and a flickering of searchlights among the clouds from some high place away beyond the Trocadero. And then the excitement came surging up past her and invaded the hall within.

One of the sentinels from the terrace stood at the upper end of the

room, gesticulating and shouting something.

And all the world had changed. A kind of throbbing. She couldn't understand. It was as if all the water-pipes and concealed machinery and cables of the ways beneath, were beating--as pulses beat. And about her blew something like a wind--a wind that was dismay.

Her eyes went to the face of the Marshal as a frightened child might look towards its mother.

He was still serene. He was frowning slightly, she thought, but that was natural enough, for the Earl of Delhi, with one hand gauntly gesticulating, had taken him by the arm and was all too manifestly disposed to drag him towards the great door that opened on the terrace. And Viard was hurrying towards the huge windows and doing so in the strangest of attitudes, bent forward and with eyes upturned.

Something up there?

And then it was as if thunder broke overhead.

The sound struck her like a blow. She crouched together against the masonry and looked up. She saw three black shapes swooping down through the torn clouds, and from a point a little below two of them, there had already started curling trails of red....

Everything else in her being was paralysed, she hung through moments that seemed infinities, watching those red missiles whirl down towards her.

She felt torn out of the world. There was nothing else in the world but a crimson-purple glare and sound, deafening, all-embracing, continuing sound. Every other light had gone out about her and against this glare hung slanting walls, pirouetting pillars, projecting fragments of cornices, and a disorderly flight of huge angular sheets of glass. She had an impression of a great ball of crimson-purple fire like a maddened living thing that seemed to be whirling about very rapidly amidst a chaos of falling masonry, that seemed to be attacking the earth furiously, that seemed to be burrowing into it like a blazing rabbit....

She had all the sensations of waking up out of a dream.

She found she was lying face downward on a bank of mould and that a little rivulet of hot water was running over one foot. She tried to raise herself and found her leg was very painful. She was not clear whether it was night or day nor where she was; she made a second effort, wincing and groaning, and turned over and got into a sitting position and looked about her.

Everything seemed very silent. She was, in fact, in the midst of a vast uproar, but she did not realise this because her hearing had been destroyed.

At first she could not join on what she saw to any previous experience.

She seemed to be in a strange world, a soundless, ruinous world, a world of heaped broken things. And it was lit--and somehow this was more familiar to her mind than any other fact about her--by a flickering, purplish-crimson light. Then close to her, rising above a confusion of debris, she recognised the Trocadero; it was changed, something had gone from it, but its outline was unmistakable. It stood out against a streaming, whirling uprush of red-lit steam. And with that she recalled Paris and the Seine and the warm, overcast evening and the beautiful, luminous organisation of the War Control....

She drew herself a little way up the slope of earth on which she lay, and examined her surroundings with an increasing understanding....

The earth on which she was lying projected like a cape into the river. Quite close to her was a brimming lake of dammed-up water, from which these warm rivulets and torrents were trickling. Wisps of vapour came into circling existence a foot or so from its mirror-surface. Near at hand and reflected exactly in the water was the upper part of a familiar-looking stone pillar. On the side of her away from the water the heaped ruins rose steeply in a confused slope up to a glaring crest. Above and reflecting this glare towered pillowed masses of steam rolling swiftly upward to the zenith. It was from this crest that the livid glow that lit the world about her proceeded, and slowly her mind connected

this mound with the vanished buildings of the War Control.

'Mais!' she whispered, and remained with staring eyes quite motionless for a time, crouching close to the warm earth.

Then presently this dim, broken human thing began to look about it again. She began to feel the need of fellowship. She wanted to question, wanted to speak, wanted to relate her experience. And her foot hurt her atrociously. There ought to be an ambulance. A little gust of querulous criticisms blew across her mind. This surely was a disaster! Always after a disaster there should be ambulances and helpers moving about....

She craned her head. There was something there. But everything was so still!

'Monsieur!' she cried. Her ears, she noted, felt queer, and she began to suspect that all was not well with them.

It was terribly lonely in this chaotic strangeness, and perhaps this man--if it was a man, for it was difficult to see--might for all his stillness be merely insensible. He might have been stunned....

The leaping glare beyond sent a ray into his corner and for a moment every little detail was distinct. It was Marshal Dubois. He was lying against a huge slab of the war map. To it there stuck and from it there dangled little wooden objects, the symbols of infantry and cavalry and

guns, as they were disposed upon the frontier. He did not seem to be aware of this at his back, he had an effect of inattention, not indifferent attention, but as if he were thinking....

She could not see the eyes beneath his shaggy brows, but it was evident he frowned. He frowned slightly, he had an air of not wanting to be disturbed. His face still bore that expression of assured confidence, that conviction that if things were left to him France might obey in security....

She did not cry out to him again, but she crept a little nearer. A strange surmise made her eyes dilate. With a painful wrench she pulled herself up so that she could see completely over the intervening lumps of smashed-up masonry. Her hand touched something wet, and after one convulsive movement she became rigid.

It was not a whole man there; it was a piece of a man, the head and shoulders of a man that trailed down into a ragged darkness and a pool of shining black....

And even as she stared the mound above her swayed and crumbled, and a rush of hot water came pouring over her. Then it seemed to her that she was dragged downward....

Section 3

When the rather brutish young aviator with the bullet head and the black hair close-cropped en brosse, who was in charge of the French special scientific corps, heard presently of this disaster to the War Control, he was so wanting in imagination in any sphere but his own, that he laughed. Small matter to him that Paris was burning. His mother and father and sister lived at Caudebec; and the only sweetheart he had ever had, and it was poor love-making then, was a girl in Rouen. He slapped his second-in-command on the shoulder. 'Now,' he said, 'there's nothing on earth to stop us going to Berlin and giving them tit-for-tat.... Strategy and reasons of state--they're over.... Come along, my boy, and we'll just show these old women what we can do when they let us have our heads.'

He spent five minutes telephoning and then he went out into the courtyard of the chateau in which he had been installed and shouted for his automobile. Things would have to move quickly because there was scarcely an hour and a half before dawn. He looked at the sky and noted with satisfaction a heavy bank of clouds athwart the pallid east.

He was a young man of infinite shrewdness, and his material and aeroplanes were scattered all over the country-side, stuck away in barns, covered with hay, hidden in woods. A hawk could not have discovered any of them without coming within reach of a gun. But that night he only wanted one of the machines, and it was handy and quite prepared under a tarpaulin between two ricks not a couple of miles away; he was going to Berlin with that and just one other man. Two men would

be enough for what he meant to do....

He had in his hands the black complement to all those other gifts science was urging upon unregenerate mankind, the gift of destruction, and he was an adventurous rather than a sympathetic type....

He was a dark young man with something negroid about his gleaming face. He smiled like one who is favoured and anticipates great pleasures. There was an exotic richness, a chuckling flavour, about the voice in which he gave his orders, and he pointed his remarks with the long finger of a hand that was hairy and exceptionally big.

'We'll give them tit-for-tat,' he said. 'We'll give them tit-for-tat. No time to lose, boys....'

And presently over the cloud-banks that lay above Westphalia and Saxony the swift aeroplane, with its atomic engine as noiseless as a dancing sunbeam and its phosphorescent gyroscopic compass, flew like an arrow to the heart of the Central European hosts.

It did not soar very high; it skimmed a few hundred feet above the banked darknesses of cumulus that hid the world, ready to plunge at once into their wet obscurities should some hostile flier range into vision. The tense young steersman divided his attention between the guiding stars above and the level, tumbled surfaces of the vapour strata that hid the world below. Over great spaces those banks lay as even as a

frozen lava-flow and almost as still, and then they were rent by ragged areas of translucency, pierced by clear chasms, so that dim patches of the land below gleamed remotely through abysses. Once he saw quite distinctly the plan of a big railway station outlined in lamps and signals, and once the flames of a burning rick showing livid through a boiling drift of smoke on the side of some great hill. But if the world was masked it was alive with sounds. Up through that vapour floor came the deep roar of trains, the whistles of horns of motor-cars, a sound of rifle fire away to the south, and as he drew near his destination the crowing of cocks....

The sky above the indistinct horizons of this cloud sea was at first starry and then paler with a light that crept from north to east as the dawn came on. The Milky Way was invisible in the blue, and the lesser stars vanished. The face of the adventurer at the steering-wheel, darkly visible ever and again by the oval greenish glow of the compass face, had something of that firm beauty which all concentrated purpose gives, and something of the happiness of an idiot child that has at last got hold of the matches. His companion, a less imaginative type, sat with his legs spread wide over the long, coffin-shaped box which contained in its compartments the three atomic bombs, the new bombs that would continue to explode indefinitely and which no one so far had ever seen in action. Hitherto Carolinum, their essential substance, had been tested only in almost infinitesimal quantities within steel chambers embedded in lead. Beyond the thought of great destruction slumbering in the black spheres between his legs, and a keen resolve to follow out

very exactly the instructions that had been given him, the man's mind was a blank. His aquiline profile against the starlight expressed nothing but a profound gloom.

The sky below grew clearer as the Central European capital was approached.

So far they had been singularly lucky and had been challenged by no aeroplanes at all. The frontier scouts they must have passed in the night; probably these were mostly under the clouds; the world was wide and they had had luck in not coming close to any soaring sentinel. Their machine was painted a pale gray, that lay almost invisibly over the cloud levels below. But now the east was flushing with the near ascent of the sun, Berlin was but a score of miles ahead, and the luck of the Frenchmen held. By imperceptible degrees the clouds below dissolved....

Away to the north-eastward, in a cloudless pool of gathering light and with all its nocturnal illuminations still blazing, was Berlin. The left finger of the steersman verified roads and open spaces below upon the mica-covered square of map that was fastened by his wheel. There in a series of lake-like expansions was the Havel away to the right; over by those forests must be Spandau; there the river split about the Potsdam island; and right ahead was Charlottenburg cleft by a great thoroughfare that fell like an indicating beam of light straight to the imperial headquarters. There, plain enough, was the Thiergarten; beyond rose the imperial palace, and to the right those tall buildings, those

clustering, beflagged, bemasted roofs, must be the offices in which the Central European staff was housed. It was all coldly clear and colourless in the dawn.

He looked up suddenly as a humming sound grew out of nothing and became swiftly louder. Nearly overhead a German aeroplane was circling down from an immense height to challenge him. He made a gesture with his left arm to the gloomy man behind and then gripped his little wheel with both hands, crouched over it, and twisted his neck to look upward. He was attentive, tightly strung, but quite contemptuous of their ability to hurt him. No German alive, he was assured, could outfly him, or indeed any one of the best Frenchmen. He imagined they might strike at him as a hawk strikes, but they were men coming down out of the bitter cold up there, in a hungry, spiritless, morning mood; they came slanting down like a sword swung by a lazy man, and not so rapidly but that he was able to slip away from under them and get between them and Berlin. They began challenging him in German with a megaphone when they were still perhaps a mile away. The words came to him, rolled up into a mere blob of hoarse sound. Then, gathering alarm from his grim silence, they gave chase and swept down, a hundred yards above him perhaps, and a couple of hundred behind. They were beginning to understand what he was. He ceased to watch them and concentrated himself on the city ahead, and for a time the two aeroplanes raced....

A bullet came tearing through the air by him, as though some one was tearing paper. A second followed. Something tapped the machine.

It was time to act. The broad avenues, the park, the palaces below rushed widening out nearer and nearer to them. 'Ready!' said the steersman.

The gaunt face hardened to grimness, and with both hands the bomb-thrower lifted the big atomic bomb from the box and steadied it against the side. It was a black sphere two feet in diameter. Between its handles was a little celluloid stud, and to this he bent his head until his lips touched it. Then he had to bite in order to let the air in upon the inducive. Sure of its accessibility, he craned his neck over the side of the aeroplane and judged his pace and distance. Then very quickly he bent forward, bit the stud, and hoisted the bomb over the side.

'Round,' he whispered inaudibly.

The bomb flashed blinding scarlet in mid-air, and fell, a descending column of blaze eddying spirally in the midst of a whirlwind. Both the aeroplanes were tossed like shuttlecocks, hurled high and sideways and the steersman, with gleaming eyes and set teeth, fought in great banking curves for a balance. The gaunt man clung tight with hand and knees; his nostrils dilated, his teeth biting his lips. He was firmly strapped....

When he could look down again it was like looking down upon the crater of a small volcano. In the open garden before the Imperial castle a

shuddering star of evil splendour spurted and poured up smoke and flame towards them like an accusation. They were too high to distinguish people clearly, or mark the bomb's effect upon the building until suddenly the facade tottered and crumbled before the flare as sugar dissolves in water. The man stared for a moment, showed all his long teeth, and then staggered into the cramped standing position his straps permitted, hoisted out and bit another bomb, and sent it down after its fellow.

The explosion came this time more directly underneath the aeroplane and shot it upward edgeways. The bomb box tipped to the point of disgorgement, and the bomb-thrower was pitched forward upon the third bomb with his face close to its celluloid stud. He clutched its handles, and with a sudden gust of determination that the thing should not escape him, bit its stud. Before he could hurl it over, the monoplane was slipping sideways. Everything was falling sideways. Instinctively he gave himself up to gripping, his body holding the bomb in its place.

Then that bomb had exploded also, and steersman, thrower, and aeroplane were just flying rags and splinters of metal and drops of moisture in the air, and a third column of fire rushed eddying down upon the doomed buildings below....

Section 4

Never before in the history of warfare had there been a continuing

explosive; indeed, up to the middle of the twentieth century the only explosives known were combustibles whose explosiveness was due entirely to their instantaneousness; and these atomic bombs which science burst upon the world that night were strange even to the men who used them. Those used by the Allies were lumps of pure Carolinum, painted on the outside with unoxidised cydonator inducive enclosed hermetically in a case of membranium. A little celluloid stud between the handles by which the bomb was lifted was arranged so as to be easily torn off and admit air to the inducive, which at once became active and set up radio-activity in the outer layer of the Carolinum sphere. This liberated fresh inducive, and so in a few minutes the whole bomb was a blazing continual explosion. The Central European bombs were the same, except that they were larger and had a more complicated arrangement for animating the inducive.

Always before in the development of warfare the shells and rockets fired had been but momentarily explosive, they had gone off in an instant once for all, and if there was nothing living or valuable within reach of the concussion and the flying fragments then they were spent and over. But Carolinum, which belonged to the beta group of Hyslop's so-called 'suspended degenerator' elements, once its degenerative process had been induced, continued a furious radiation of energy and nothing could arrest it. Of all Hyslop's artificial elements, Carolinum was the most heavily stored with energy and the most dangerous to make and handle. To this day it remains the most potent degenerator known. What the earlier twentieth-century chemists called its half period was seventeen days;

that is to say, it poured out half of the huge store of energy in its great molecules in the space of seventeen days, the next seventeen days' emission was a half of that first period's outpouring, and so on. As with all radio-active substances this Carolinum, though every seventeen days its power is halved, though constantly it diminishes towards the imperceptible, is never entirely exhausted, and to this day the battle-fields and bomb fields of that frantic time in human history are sprinkled with radiant matter, and so centres of inconvenient rays.

What happened when the celluloid stud was opened was that the inducive oxidised and became active. Then the surface of the Carolinum began to degenerate. This degeneration passed only slowly into the substance of the bomb. A moment or so after its explosion began it was still mainly an inert sphere exploding superficially, a big, inanimate nucleus wrapped in flame and thunder. Those that were thrown from aeroplanes fell in this state, they reached the ground still mainly solid, and, melting soil and rock in their progress, bored into the earth. There, as more and more of the Carolinum became active, the bomb spread itself out into a monstrous cavern of fiery energy at the base of what became very speedily a miniature active volcano. The Carolinum, unable to disperse, freely drove into and mixed up with a boiling confusion of molten soil and superheated steam, and so remained spinning furiously and maintaining an eruption that lasted for years or months or weeks according to the size of the bomb employed and the chances of its dispersal. Once launched, the bomb was absolutely unapproachable and uncontrollable until its forces were nearly exhausted, and from the

crater that burst open above it, puffs of heavy incandescent vapour and fragments of viciously punitive rock and mud, saturated with Carolinum, and each a centre of scorching and blistering energy, were flung high and far.

Such was the crowning triumph of military science, the ultimate explosive that was to give the 'decisive touch' to war....

Section 5

A recent historical writer has described the world of that time as one that 'believed in established words and was invincibly blind to the obvious in things.' Certainly it seems now that nothing could have been more obvious to the people of the earlier twentieth century than the rapidity with which war was becoming impossible. And as certainly they did not see it. They did not see it until the atomic bombs burst in their fumbling hands. Yet the broad facts must have glared upon any intelligent mind. All through the nineteenth and twentieth centuries the amount of energy that men were able to command was continually increasing. Applied to warfare that meant that the power to inflict a blow, the power to destroy, was continually increasing. There was no increase whatever in the ability to escape. Every sort of passive defence, armour, fortifications, and so forth, was being outmastered by this tremendous increase on the destructive side. Destruction was becoming so facile that any little body of malcontents could use it; it was revolutionising the problems of police and internal rule. Before

the last war began it was a matter of common knowledge that a man could carry about in a handbag an amount of latent energy sufficient to wreck half a city. These facts were before the minds of everybody; the children in the streets knew them. And yet the world still, as the Americans used to phrase it, 'fooled around' with the paraphernalia and pretensions of war.

It is only by realising this profound, this fantastic divorce between the scientific and intellectual movement on the one hand, and the world of the lawyer-politician on the other, that the men of a later time can hope to understand this preposterous state of affairs. Social organisation was still in the barbaric stage. There were already great numbers of actively intelligent men and much private and commercial civilisation, but the community, as a whole, was aimless, untrained and unorganised to the pitch of imbecility. Collective civilisation, the 'Modern State,' was still in the womb of the future....

Section 6

But let us return to Frederick Barnet's Wander Jahre and its account of the experiences of a common man during the war time. While these terrific disclosures of scientific possibility were happening in Paris and Berlin, Barnet and his company were industriously entrenching themselves in Belgian Luxembourg.

He tells of the mobilisation and of his summer day's journey through the

north of France and the Ardennes in a few vivid phrases. The country was browned by a warm summer, the trees a little touched with autumnal colour, and the wheat already golden. When they stopped for an hour at Hirson, men and women with tricolour badges upon the platform distributed cakes and glasses of beer to the thirsty soldiers, and there was much cheerfulness. 'Such good, cool beer it was,' he wrote. 'I had had nothing to eat nor drink since Epsom.'

A number of monoplanes, 'like giant swallows,' he notes, were scouting in the pink evening sky.

Barnet's battalion was sent through the Sedan country to a place called Virton, and thence to a point in the woods on the line to Jemelle. Here they detrained, bivouacked uneasily by the railway--trains and stores were passing along it all night--and next morning he: marched eastward through a cold, overcast dawn, and a morning, first cloudy and then blazing, over a large spacious country-side interspersed by forest towards Arlon.

There the infantry were set to work upon a line of masked entrenchments and hidden rifle pits between St Hubert and Virton that were designed to check and delay any advance from the east upon the fortified line of the Meuse. They had their orders, and for two days they worked without either a sight of the enemy or any suspicion of the disaster that had abruptly decapitated the armies of Europe, and turned the west of Paris and the centre of Berlin into blazing miniatures of the destruction of

Pompeii.

And the news, when it did come, came attenuated. 'We heard there had been mischief with aeroplanes and bombs in Paris,' Barnet relates; 'but it didn't seem to follow that "They" weren't still somewhere elaborating their plans and issuing orders. When the enemy began to emerge from the woods in front of us, we cheered and blazed away, and didn't trouble much more about anything but the battle in hand. If now and then one cocked up an eye into the sky to see what was happening there, the rip of a bullet soon brought one down to the horizontal again....

That battle went on for three days all over a great stretch of country between Louvain on the north and Longwy to the south. It was essentially a rifle and infantry struggle. The aeroplanes do not seem to have taken any decisive share in the actual fighting for some days, though no doubt they effected the strategy from the first by preventing surprise movements. They were aeroplanes with atomic engines, but they were not provided with atomic bombs, which were manifestly unsuitable for field use, nor indeed had they any very effective kind of bomb. And though they manoeuvred against each other, and there was rifle shooting at them and between them, there was little actual aerial fighting. Either the airmen were indisposed to fight or the commanders on both sides preferred to reserve these machines for scouting....

After a day or so of digging and scheming, Barnet found himself in the forefront of a battle. He had made his section of rifle pits chiefly

along a line of deep dry ditch that gave a means of inter-communication, he had had the earth scattered over the adjacent field, and he had masked his preparations with tussocks of corn and poppy. The hostile advance came blindly and unsuspiciously across the fields below and would have been very cruelly handled indeed, if some one away to the right had not opened fire too soon.

'It was a queer thrill when these fellows came into sight,' he confesses; 'and not a bit like manoeuvres. They halted for a time on the edge of the wood and then came forward in an open line. They kept walking nearer to us and not looking at us, but away to the right of us. Even when they began to be hit, and their officers' whistles woke them up, they didn't seem to see us. One or two halted to fire, and then they all went back towards the wood again. They went slowly at first, looking round at us, then the shelter of the wood seemed to draw them, and they trotted. I fired rather mechanically and missed, then I fired again, and then I became earnest to hit something, made sure of my sighting, and aimed very carefully at a blue back that was dodging about in the corn. At first I couldn't satisfy myself and didn't shoot, his movements were so spasmodic and uncertain; then I think he came to a ditch or some such obstacle and halted for a moment. "GOT you," I whispered, and pulled the trigger.

'I had the strangest sensations about that man. In the first instance, when I felt that I had hit him I was irradiated with joy and pride....

'I sent him spinning. He jumped and threw up his arms....

'Then I saw the corn tops waving and had glimpses of him flapping about. Suddenly I felt sick. I hadn't killed him....

'In some way he was disabled and smashed up and yet able to struggle about. I began to think....

'For nearly two hours that Prussian was agonising in the corn. Either he was calling out or some one was shouting to him....

'Then he jumped up--he seemed to try to get up upon his feet with one last effort; and then he fell like a sack and lay quite still and never moved again.

'He had been unendurable, and I believe some one had shot him dead. I had been wanting to do so for some time....'

The enemy began sniping the rifle pits from shelters they made for themselves in the woods below. A man was hit in the pit next to Barnet, and began cursing and crying out in a violent rage. Barnet crawled along the ditch to him and found him in great pain, covered with blood, frantic with indignation, and with the half of his right hand smashed to a pulp. 'Look at this,' he kept repeating, hugging it and then extending it. 'Damned foolery! Damned foolery! My right hand, sir! My right hand!'

For some time Barnet could do nothing with him. The man was consumed by his tortured realisation of the evil silliness of war, the realisation which had come upon him in a flash with the bullet that had destroyed his skill and use as an artificer for ever. He was looking at the vestiges with a horror that made him impenetrable to any other idea. At last the poor wretch let Barnet tie up his bleeding stump and help him along the ditch that conducted him deviously out of range....

When Barnet returned his men were already calling out for water, and all day long the line of pits suffered greatly from thirst. For food they had chocolate and bread.

'At first,' he says, 'I was extraordinarily excited by my baptism of fire. Then as the heat of the day came on I experienced an enormous tedium and discomfort. The flies became extremely troublesome, and my little grave of a rifle pit was invaded by ants. I could not get up or move about, for some one in the trees had got a mark on me. I kept thinking of the dead Prussian down among the corn, and of the bitter outcries of my own man. Damned foolery! It WAS damned foolery. But who was to blame? How had we got to this? . . .

'Early in the afternoon an aeroplane tried to dislodge us with dynamite bombs, but she was hit by bullets once or twice, and suddenly dived down over beyond the trees.

'"From Holland to the Alps this day," I thought, "there must be

crouching and lying between half and a million of men, trying to inflict irreparable damage upon one another. The thing is idiotic to the pitch of impossibility. It is a dream. Presently I shall wake up." . . .

'Then the phrase changed itself in my mind. "Presently mankind will wake up."

'I lay speculating just how many thousands of men there were among these hundreds of thousands, whose spirits were in rebellion against all these ancient traditions of flag and empire. Weren't we, perhaps, already in the throes of the last crisis, in that darkest moment of a nightmare's horror before the sleeper will endure no more of it--and wakes?

'I don't know how my speculations ended. I think they were not so much ended as distracted by the distant thudding of the guns that were opening fire at long range upon Namur.'

Section 7

But as yet Barnet had seen no more than the mildest beginnings of modern warfare. So far he had taken part only in a little shooting. The bayonet attack by which the advanced line was broken was made at a place called Croix Rouge, more than twenty miles away, and that night under cover of the darkness the rifle pits were abandoned and he got his company away without further loss.

His regiment fell back unpressed behind the fortified lines between Namur and Sedan, entrained at a station called Mettet, and was sent northward by Antwerp and Rotterdam to Haarlem. Hence they marched into North Holland. It was only after the march into Holland that he began to realise the monstrous and catastrophic nature of the struggle in which he was playing his undistinguished part.

He describes very pleasantly the journey through the hills and open land of Brabant, the repeated crossing of arms of the Rhine, and the change from the undulating scenery of Belgium to the flat, rich meadows, the sunlit dyke roads, and the countless windmills of the Dutch levels.
In those days there was unbroken land from Alkmaar and Leiden to the Dollart. Three great provinces, South Holland, North Holland, and Zuiderzeeland, reclaimed at various times between the early tenth century and 1945 and all many feet below the level of the waves outside the dykes, spread out their lush polders to the northern sun and sustained a dense industrious population. An intricate web of laws and custom and tradition ensured a perpetual vigilance and a perpetual defence against the beleaguering sea. For more than two hundred and fifty miles from Walcheren to Friesland stretched a line of embankments and pumping stations that was the admiration of the world.

If some curious god had chosen to watch the course of events in those northern provinces while that flanking march of the British was in progress, he would have found a convenient and appropriate seat for his observation upon one of the great cumulus clouds that were drifting

slowly across the blue sky during all these eventful days before the great catastrophe. For that was the quality of the weather, hot and clear, with something of a breeze, and underfoot dry and a little inclined to be dusty. This watching god would have looked down upon broad stretches of sunlit green, sunlit save for the creeping patches of shadow cast by the clouds, upon sky-reflecting meres, fringed and divided up by masses of willow and large areas of silvery weeds, upon white roads lying bare to the sun and upon a tracery of blue canals. The pastures were alive with cattle, the roads had a busy traffic, of beasts and bicycles and gaily coloured peasants' automobiles, the hues of the innumerable motor barges in the canal vied with the eventfulness of the roadways; and everywhere in solitary steadings, amidst ricks and barns, in groups by the wayside, in straggling villages, each with its fine old church, or in compact towns laced with canals and abounding in bridges and clipped trees, were human habitations.

The people of this country-side were not belligerents. The interests and sympathies alike of Holland had been so divided that to the end she remained undecided and passive in the struggle of the world powers. And everywhere along the roads taken by the marching armies clustered groups and crowds of impartially observant spectators, women and children in peculiar white caps and old-fashioned sabots, and elderly, clean-shaven men quietly thoughtful over their long pipes. They had no fear of their invaders; the days when 'soldiering' meant bands of licentious looters had long since passed away....

That watcher among the clouds would have seen a great distribution of khaki-uniformed men and khaki-painted material over the whole of the sunken area of Holland. He would have marked the long trains, packed with men or piled with great guns and war material, creeping slowly, alert for train-wreckers, along the north-going lines; he would have seen the Scheldt and Rhine choked with shipping, and pouring out still more men and still more material; he would have noticed halts and provisionings and detrainments, and the long, bustling caterpillars of cavalry and infantry, the maggot-like wagons, the huge beetles of great guns, crawling under the poplars along the dykes and roads northward, along ways lined by the neutral, unmolested, ambiguously observant Dutch. All the barges and shipping upon the canals had been requisitioned for transport. In that clear, bright, warm weather, it would all have looked from above like some extravagant festival of animated toys.

As the sun sank westward the spectacle must have become a little indistinct because of a golden haze; everything must have become warmer and more glowing, and because of the lengthening of the shadows more manifestly in relief. The shadows of the tall churches grew longer and longer, until they touched the horizon and mingled in the universal shadow; and then, slow, and soft, and wrapping the world in fold after fold of deepening blue, came the night--the night at first obscurely simple, and then with faint points here and there, and then jewelled in darkling splendour with a hundred thousand lights. Out of that mingling of darkness and ambiguous glares the noise of an unceasing activity

would have arisen, the louder and plainer now because there was no longer any distraction of sight.

It may be that watcher drifting in the pellucid gulf beneath the stars watched all through the night; it may be that he dozed. But if he gave way to so natural a proclivity, assuredly on the fourth night of the great flank march he was aroused, for that was the night of the battle in the air that decided the fate of Holland. The aeroplanes were fighting at last, and suddenly about him, above and below, with cries and uproar rushing out of the four quarters of heaven, striking, plunging, oversetting, soaring to the zenith and dropping to the ground, they came to assail or defend the myriads below.

Secretly the Central European power had gathered his flying machines together, and now he threw them as a giant might fling a handful of ten thousand knives over the low country. And amidst that swarming flight were five that drove headlong for the sea walls of Holland, carrying atomic bombs. From north and west and south, the allied aeroplanes rose in response and swept down upon this sudden attack. So it was that war in the air began. Men rode upon the whirlwind that night and slew and fell like archangels. The sky rained heroes upon the astonished earth. Surely the last fights of mankind were the best. What was the heavy pounding of your Homeric swordsmen, what was the creaking charge of chariots, beside this swift rush, this crash, this giddy triumph, this headlong swoop to death?

And then athwart this whirling rush of aerial duels that swooped and locked and dropped in the void between the lamp-lights and the stars, came a great wind and a crash louder than thunder, and first one and then a score of lengthening fiery serpents plunged hungrily down upon the Dutchmen's dykes and struck between land and sea and flared up again in enormous columns of glare and crimsoned smoke and steam.

And out of the darkness leapt the little land, with its spires and trees, aghast with terror, still and distinct, and the sea, tumbled with anger, red-foaming like a sea of blood....

Over the populous country below went a strange multitudinous crying and a flurry of alarm bells... .

The surviving aeroplanes turned about and fled out of the sky, like things that suddenly know themselves to be wicked....

Through a dozen thunderously flaming gaps that no water might quench, the waves came roaring in upon the land....

Section 8

'We had cursed our luck,' says Barnet, 'that we could not get to our quarters at Alkmaar that night. There, we were told, were provisions, tobacco, and everything for which we craved. But the main canal from Zaandam and Amsterdam was hopelessly jammed with craft, and we were glad

of a chance opening that enabled us to get out of the main column and lie up in a kind of little harbour very much neglected and weedgrown before a deserted house. We broke into this and found some herrings in a barrel, a heap of cheeses, and stone bottles of gin in the cellar; and with this I cheered my starving men. We made fires and toasted the cheese and grilled our herrings. None of us had slept for nearly forty hours, and I determined to stay in this refuge until dawn and then if the traffic was still choked leave the barge and march the rest of the way into Alkmaar.

'This place we had got into was perhaps a hundred yards from the canal and underneath a little brick bridge we could see the flotilla still, and hear the voices of the soldiers. Presently five or six other barges came through and lay up in the meer near by us, and with two of these, full of men of the Antrim regiment, I shared my find of provisions. In return we got tobacco. A large expanse of water spread to the westward of us and beyond were a cluster of roofs and one or two church towers. The barge was rather cramped for so many men, and I let several squads, thirty or forty perhaps altogether, bivouac on the bank. I did not let them go into the house on account of the furniture, and I left a note of indebtedness for the food we had taken. We were particularly glad of our tobacco and fires, because of the numerous mosquitoes that rose about us.

'The gate of the house from which we had provisioned ourselves was adorned with the legend, Vreugde bij Vrede, "Joy with Peace," and it

bore every mark of the busy retirement of a comfort-loving proprietor. I went along his garden, which was gay and delightful with big bushes of rose and sweet brier, to a quaint little summer-house, and there I sat and watched the men in groups cooking and squatting along the bank. The sun was setting in a nearly cloudless sky.

'For the last two weeks I had been a wholly occupied man, intent only upon obeying the orders that came down to me. All through this time I had been working to the very limit of my mental and physical faculties, and my only moments of rest had been devoted to snatches of sleep. Now came this rare, unexpected interlude, and I could look detachedly upon what I was doing and feel something of its infinite wonderfulness. I was irradiated with affection for the men of my company and with admiration at their cheerful acquiescence in the subordination and needs of our positions. I watched their proceedings and heard their pleasant voices. How willing those men were! How ready to accept leadership and forget themselves in collective ends! I thought how manfully they had gone through all the strains and toil of the last two weeks, how they had toughened and shaken down to comradeship together, and how much sweetness there is after all in our foolish human blood. For they were just one casual sample of the species--their patience and readiness lay, as the energy of the atom had lain, still waiting to be properly utilised. Again it came to me with overpowering force that the supreme need of our race is leading, that the supreme task is to discover leading, to forget oneself in realising the collective purpose of the race. Once more I saw life plain....'

Very characteristic is that of the 'rather too corpulent' young officer, who was afterwards to set it all down in the Wander Jahre. Very characteristic, too, it is of the change in men's hearts that was even then preparing a new phase of human history.

He goes on to write of the escape from individuality in science and service, and of his discovery of this 'salvation.' All that was then, no doubt, very moving and original; now it seems only the most obvious commonplace of human life.

The glow of the sunset faded, the twilight deepened into night. The fires burnt the brighter, and some Irishmen away across the meer started singing. But Barnet's men were too weary for that sort of thing, and soon the bank and the barge were heaped with sleeping forms.

'I alone seemed unable to sleep. I suppose I was over-weary, and after a little feverish slumber by the tiller of the barge I sat up, awake and uneasy....

'That night Holland seemed all sky. There was just a little black lower rim to things, a steeple, perhaps, or a line of poplars, and then the great hemisphere swept over us. As at first the sky was empty. Yet my uneasiness referred itself in some vague way to the sky.

'And now I was melancholy. I found something strangely sorrowful and

submissive in the sleepers all about me, those men who had marched so far, who had left all the established texture of their lives behind them to come upon this mad campaign, this campaign that signified nothing and consumed everything, this mere fever of fighting. I saw how little and feeble is the life of man, a thing of chances, preposterously unable to find the will to realise even the most timid of its dreams. And I wondered if always it would be so, if man was a doomed animal who would never to the last days of his time take hold of fate and change it to his will. Always, it may be, he will remain kindly but jealous, desirous but discursive, able and unwisely impulsive, until Saturn who begot him shall devour him in his turn....

'I was roused from these thoughts by the sudden realisation of the presence of a squadron of aeroplanes far away to the north-east and very high. They looked like little black dashes against the midnight blue. I remember that I looked up at them at first rather idly--as one might notice a flight of birds. Then I perceived that they were only the extreme wing of a great fleet that was advancing in a long line very swiftly from the direction of the frontier and my attention tightened.

'Directly I saw that fleet I was astonished not to have seen it before.

'I stood up softly, undesirous of disturbing my companions, but with my heart beating now rather more rapidly with surprise and excitement. I strained my ears for any sound of guns along our front. Almost instinctively I turned about for protection to the south and west, and

peered; and then I saw coming as fast and much nearer to me, as if they had sprung out of the darkness, three banks of aeroplanes; a group of squadrons very high, a main body at a height perhaps of one or two thousand feet, and a doubtful number flying low and very indistinct. The middle ones were so thick they kept putting out groups of stars. And I realised that after all there was to be fighting in the air.

'There was something extraordinarily strange in this swift, noiseless convergence of nearly invisible combatants above the sleeping hosts. Every one about me was still unconscious; there was no sign as yet of any agitation among the shipping on the main canal, whose whole course, dotted with unsuspicious lights and fringed with fires, must have been clearly perceptible from above. Then a long way off towards Alkmaar I heard bugles, and after that shots, and then a wild clamour of bells. I determined to let my men sleep on for as long as they could....

'The battle was joined with the swiftness of dreaming. I do not think it can have been five minutes from the moment when I first became aware of the Central European air fleet to the contact of the two forces. I saw it quite plainly in silhouette against the luminous blue of the northern sky. The allied aeroplanes--they were mostly French--came pouring down like a fierce shower upon the middle of the Central European fleet. They looked exactly like a coarser sort of rain. There was a crackling sound--the first sound I heard--it reminded one of the Aurora Borealis, and I supposed it was an interchange of rifle shots. There were flashes like summer lightning; and then all the sky became a whirling confusion

of battle that was still largely noiseless. Some of the Central European aeroplanes were certainly charged and overset; others seemed to collapse and fall and then flare out with so bright a light that it took the edge off one's vision and made the rest of the battle disappear as though it had been snatched back out of sight.

'And then, while I still peered and tried to shade these flames from my eyes with my hand, and while the men about me were beginning to stir, the atomic bombs were thrown at the dykes. They made a mighty thunder in the air, and fell like Lucifer in the picture, leaving a flaring trail in the sky. The night, which had been pellucid and detailed and eventful, seemed to vanish, to be replaced abruptly by a black background to these tremendous pillars of fire....

'Hard upon the sound of them came a roaring wind, and the sky was filled with flickering lightnings and rushing clouds....

'There was something discontinuous in this impact. At one moment I was a lonely watcher in a sleeping world; the next saw every one about me afoot, the whole world awake and amazed....

'And then the wind had struck me a buffet, taken my helmet and swept aside the summerhouse of Vreugde bij Vrede, as a scythe sweeps away grass. I saw the bombs fall, and then watched a great crimson flare leap responsive to each impact, and mountainous masses of red-lit steam and flying fragments clamber up towards the zenith. Against the glare I saw

the country-side for miles standing black and clear, churches, trees, chimneys. And suddenly I understood. The Central Europeans had burst the dykes. Those flares meant the bursting of the dykes, and in a little while the sea-water would be upon us....'

He goes on to tell with a certain prolixity of the steps he took--and all things considered they were very intelligent steps--to meet this amazing crisis. He got his men aboard and hailed the adjacent barges; he got the man who acted as barge engineer at his post and the engines working, he cast loose from his moorings. Then he bethought himself of food, and contrived to land five men, get in a few dozen cheeses, and ship his men again before the inundation reached them.

He is reasonably proud of this piece of coolness. His idea was to take the wave head-on and with his engines full speed ahead. And all the while he was thanking heaven he was not in the jam of traffic in the main canal. He rather, I think, overestimated the probable rush of waters; he dreaded being swept away, he explains, and smashed against houses and trees.

He does not give any estimate of the time it took between the bursting of the dykes and the arrival of the waters, but it was probably an interval of about twenty minutes or half an hour. He was working now in darkness--save for the light of his lantern--and in a great wind. He hung out head and stern lights....

Whirling torrents of steam were pouring up from the advancing waters, which had rushed, it must be remembered, through nearly incandescent gaps in the sea defences, and this vast uprush of vapour soon veiled the flaring centres of explosion altogether.

'The waters came at last, an advancing cascade. It was like a broad roller sweeping across the country. They came with a deep, roaring sound. I had expected a Niagara, but the total fall of the front could not have been much more than twelve feet. Our barge hesitated for a moment, took a dose over her bows, and then lifted. I signalled for full speed ahead and brought her head upstream, and held on like grim death to keep her there.

'There was a wind about as strong as the flood, and I found we were pounding against every conceivable buoyant object that had been between us and the sea. The only light in the world now came from our lamps, the steam became impenetrable at a score of yards from the boat, and the roar of the wind and water cut us off from all remoter sounds. The black, shining waters swirled by, coming into the light of our lamps out of an ebony blackness and vanishing again into impenetrable black.
And on the waters came shapes, came things that flashed upon us for a moment, now a half-submerged boat, now a cow, now a huge fragment of a house's timberings, now a muddle of packing-cases and scaffolding.
The things clapped into sight like something shown by the opening of a shutter, and then bumped shatteringly against us or rushed by us. Once I saw very clearly a man's white face....

'All the while a group of labouring, half-submerged trees remained ahead of us, drawing very slowly nearer. I steered a course to avoid them. They seemed to gesticulate a frantic despair against the black steam clouds behind. Once a great branch detached itself and tore shuddering by me. We did, on the whole, make headway. The last I saw of Vreugde bij Vrede before the night swallowed it, was almost dead astern of us....'

Section 9

Morning found Barnet still afloat. The bows of his barge had been badly strained, and his men were pumping or baling in relays. He had got about a dozen half-drowned people aboard whose boat had capsized near him, and he had three other boats in tow. He was afloat, and somewhere between Amsterdam and Alkmaar, but he could not tell where. It was a day that was still half night. Gray waters stretched in every direction under a dark gray sky, and out of the waves rose the upper parts of houses, in many cases ruined, the tops of trees, windmills, in fact the upper third of all the familiar Dutch scenery; and on it there drifted a dimly seen flotilla of barges, small boats, many overturned, furniture, rafts, timbering, and miscellaneous objects.

The drowned were under water that morning. Only here and there did a dead cow or a stiff figure still clinging stoutly to a box or chair or such-like buoy hint at the hidden massacre. It was not till the Thursday that the dead came to the surface in any quantity. The view was bounded

on every side by a gray mist that closed overhead in a gray canopy. The air cleared in the afternoon, and then, far away to the west under great banks of steam and dust, the flaming red eruption of the atomic bombs came visible across the waste of water.

They showed flat and sullen through the mist, like London sunsets. 'They sat upon the sea,' says Barnet, 'like frayed-out waterlilies of flame.'

Barnet seems to have spent the morning in rescue work along the track of the canal, in helping people who were adrift, in picking up derelict boats, and in taking people out of imperilled houses. He found other military barges similarly employed, and it was only as the day wore on and the immediate appeals for aid were satisfied that he thought of food and drink for his men, and what course he had better pursue. They had a little cheese, but no water. 'Orders,' that mysterious direction, had at last altogether disappeared. He perceived he had now to act upon his own responsibility.

'One's sense was of a destruction so far-reaching and of a world so altered that it seemed foolish to go in any direction and expect to find things as they had been before the war began. I sat on the quarter-deck with Mylius my engineer and Kemp and two others of the non-commissioned officers, and we consulted upon our line of action. We were foodless and aimless. We agreed that our fighting value was extremely small, and that our first duty was to get ourselves in touch with food and instructions again. Whatever plan of campaign had directed our movements was

manifestly smashed to bits. Mylius was of opinion that we could take a line westward and get back to England across the North Sea. He calculated that with such a motor barge as ours it would be possible to reach the Yorkshire coast within four-and-twenty hours. But this idea I overruled because of the shortness of our provisions, and more particularly because of our urgent need of water.

'Every boat we drew near now hailed us for water, and their demands did much to exasperate our thirst. I decided that if we went away to the south we should reach hilly country, or at least country that was not submerged, and then we should be able to land, find some stream, drink, and get supplies and news. Many of the barges adrift in the haze about us were filled with British soldiers and had floated up from the Nord See Canal, but none of them were any better informed than ourselves of the course of events. "Orders" had, in fact, vanished out of the sky.

'"Orders" made a temporary reappearance late that evening in the form of a megaphone hail from a British torpedo boat, announcing a truce, and giving the welcome information that food and water were being hurried down the Rhine and were to be found on the barge flotilla lying over the old Rhine above Leiden.' . . .

We will not follow Barnet, however, in the description of his strange overland voyage among trees and houses and churches by Zaandam and between Haarlem and Amsterdam, to Leiden. It was a voyage in a red-lit mist, in a world of steamy silhouette, full of strange voices and

perplexity, and with every other sensation dominated by a feverish thirst. 'We sat,' he says, 'in a little huddled group, saying very little, and the men forward were mere knots of silent endurance. Our only continuing sound was the persistent mewing of a cat one of the men had rescued from a floating hayrick near Zaandam. We kept a southward course by a watch-chain compass Mylius had produced....

'I do not think any of us felt we belonged to a defeated army, nor had we any strong sense of the war as the dominating fact about us. Our mental setting had far more of the effect of a huge natural catastrophe. The atomic bombs had dwarfed the international issues to complete insignificance. When our minds wandered from the preoccupations of our immediate needs, we speculated upon the possibility of stopping the use of these frightful explosives before the world was utterly destroyed. For to us it seemed quite plain that these bombs and the still greater power of destruction of which they were the precursors might quite easily shatter every relationship and institution of mankind.

'"What will they be doing," asked Mylius, "what will they be doing? It's plain we've got to put an end to war. It's plain things have to be run some way. THIS--all this--is impossible."

'I made no immediate answer. Something--I cannot think what--had brought back to me the figure of that man I had seen wounded on the very first day of actual fighting. I saw again his angry, tearful eyes, and that poor, dripping, bloody mess that had been a skilful human hand five

minutes before, thrust out in indignant protest. "Damned foolery," he had stormed and sobbed, "damned foolery. My right hand, sir! My RIGHT hand. . . ."

'My faith had for a time gone altogether out of me. "I think we are too--too silly," I said to Mylius, "ever to stop war. If we'd had the sense to do it, we should have done it before this. I think this----" I pointed to the gaunt black outline of a smashed windmill that stuck up, ridiculous and ugly, above the blood-lit waters--"this is the end."'

Section 10

But now our history must part company with Frederick Barnet and his barge-load of hungry and starving men.

For a time in western Europe at least it was indeed as if civilisation had come to a final collapse. These crowning buds upon the tradition that Napoleon planted and Bismarck watered, opened and flared 'like waterlilies of flame' over nations destroyed, over churches smashed or submerged, towns ruined, fields lost to mankind for ever, and a million weltering bodies. Was this lesson enough for mankind, or would the flames of war still burn amidst the ruins?

Neither Barnet nor his companions, it is clear, had any assurance in their answers to that question. Already once in the history of mankind, in America, before its discovery by the whites, an organised

civilisation had given way to a mere cult of warfare, specialised and cruel, and it seemed for a time to many a thoughtful man as if the whole world was but to repeat on a larger scale this ascendancy of the warrior, this triumph of the destructive instincts of the race.

The subsequent chapters of Barnet's narrative do but supply body to this tragic possibility. He gives a series of vignettes of civilisation, shattered, it seemed, almost irreparably. He found the Belgian hills swarming with refugees and desolated by cholera; the vestiges of the contending armies keeping order under a truce, without actual battles, but with the cautious hostility of habit, and a great absence of plan everywhere.

Overhead aeroplanes went on mysterious errands, and there were rumours of cannibalism and hysterical fanaticisms in the valleys of the Semoy and the forest region of the eastern Ardennes. There was the report of an attack upon Russia by the Chinese and Japanese, and of some huge revolutionary outbreak in America. The weather was stormier than men had ever known it in those regions, with much thunder and lightning and wild cloud-bursts of rain....