I do not want to seem smug amidst such immunities as we English-speaking people still enjoy, nevertheless I must confess I think it possible to overrate the intensity and staying power of this present nationalist phase. I think that the present vehemence of nationalism in the world may be due not to the strength of these tyrannies but to their weakness. This change of scale, this increment of power that has come into human affairs, has strained every boundary, every institution and every tradition in the world. It is an age of confusion, an age of gangster opportunity. After the gangters the Vigilantes. Both the dying old and the vamped-up new are on the defensive. They build up their barriers and increase their repression because they feel the broad flood of change towards a vastly greater new order is rising. Every old government, every hasty new government that has leapt into power, is made crazy by the threat of a wider and greater order, and its struggle to survive becomes desperate. It tries still to carry on- to deny that it is an experiment-even if it survives crippled and monstrous. The dogmatic Russian Revolution has not held power for a score of years and yet it, too, is now as much on the defensive as any other upstart dictatorship. A lot of what looks to us now like triumphant reaction may in the end prove to be no more than doomed,

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dwarfed and decaying dogmas and traditions at bay. None of the utterances of these militant figures that most threaten the peace of the world today have the serene assurance of men conscious that they are creating something that marches with the ruling forces of life. For the most part they are shouts—screams—of defiance. They scold and rant and threaten. That is the rebel note and not the note of mastery.

We hear very much about the suppression of thought in the world. Is there really-even at the present time—in spite of all this current violence, any real diminution of creative thought in the world -as compared with 1800 or 1850-or 1900, or 1914 or 1924? You have to remember that the suppression of free discussion in such countries as Germany, Italy and Russia does not mean an end to original thought in these countries. Thought, like gunpowder, may be all the more effective for being confined. I know that beneath the surface Germany is thinking intensely, and Russia is thinking more clearly if less discursively than ever before. Maybe we overestimate the value of that idle and safe. slack, go-as-you-please discussion that we Englishspeaking folk enjoy under our democratic regime. The concentration camps of today may prove after all to be the austere training grounds of a new freedom.

Let us glance for a moment at the chief forces that are driving against all that would keep the world in its ancient tradition of small national governments, warring and planning perpetually against each other, of a perpetual struggle not only of nations but individuals for a mere cramped possessiveness.

Consider now the drives towards release, abundance, one World Pax, one world control of violence, that are going on today. They seem to me very much like those forces that drove the United States to the Pacific coast and prevented the break-up of the Union. No doubt, many a heart failed in the covered waggons as they toiled westward, face to face with the red Indian and every sort of lawless violence. Yet the drive persisted and prevailed. The Vigilantes prepared the way for the reign of law. The railway, the telegraph and so on followed the covered waggon and knitted this new-scale community of America together. In the middle nineteenth century all Europe thought that the United States must break up into a lawless confusion. The railway, the printing press, saved that. The greater unity conquered because of its immense appeal to common sense in the face of the new conditions. And because it was able to appeal to common sense through these media. The United States could spread gigantically

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and keep a common mind. And today I believe in many ways, in a variety of fashions and using many weapons and devices, the Vigilantes of World Peace, under the stimulus of still wider necessities, are finding themselves and each other and getting together to ride.

That is to say their minds are getting together. One great line of development must be towards a Common Control of the Air. The great spans of the Atlantic and Pacific may prevent this from beginning as a world-wide Air Control, but that, I think, is just a passing phase of the problem. I submit to you that a state of affairs in which vast populations are under an ever-increasing threat of aerial bombardment with explosives, incendiary bombs and poison gas at barely an hour's notice, is intolerable to human reason. Maybe there will be terrible wars first. Quite possibly not. It may after all prove unnecessary to have very many great cities destroyed and very many millions of people burnt, suffocated, blown limb from limb, before men see what stares them in the face and accept the obvious. Men are, after all, partly reasonable creatures, they have at least spasmodic moral impulses. There is already in action a movement for World Air Control. But you can't have a thing like that by itself. Who or what will control the air?

This is a political question. None of us quite know the answer, but the answer has to be found, and hundreds of thousands of the best brains on earth are busy at the riddle of that adjustment. We can rule out any of the pat, ready-made answers of yesterday, League of Nations or what not. None the less that implacable necessity for World Air Control insists upon something, something with at least the authority of a World Federal Government in these matters, and that trails with it, you will find, a revelation of other vast collateral necessities. I cannot now develop these at any great length. But in the end I believe we are led to the conviction that the elemental forces of human progress, the stars in their courses, are fighting to evoke at least this much world community as involves a control of communications throughout the whole world, a common federal protection of everyone in the world from private, sectarian or national violence, a common federal protection of the natural resources of the planet from national, class or individual appropriation, and a world system of money and credit. The obstinacy of man is great, but the forces that grip him are greater and in the end, after I know not what wars, struggles and afflictions, this is the road along which he will go. He has to see it first-and then he will do it. I am sure of the ultimate necessity

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of this federal world state-and at the backs of your minds at least, I believe most of you are too-as I am sure that, whatever clouds may obscure it, the sun will rise tomorrow.

And now having recapitulated and brought together this general conception of human progress towards unity which is forming in most of our minds, as an answer to the ever more insistent World Problem, I propose to devote the rest of my time with you to the discussion of one particular aspect of this march towards a world community, the necessity it brings with it, for a correlated educational expansion. This has not so far been given anything like the attention it may demand in the near future. We have been gradually brought to the pitch of imagining and framing our preliminary ideas of a federal world control of such things as communications, health, money, economic adjustments, and the suppression of crime. In all these material things we have begun to foresee the possibility of a worldwide network being woven between all men about the earth. So much of the World Peace has been brought into the range of-what shall I call it?-the general imagination. But I do not think we have yet given sufficient attention to the prior necessity, of linking together its mental organizations into a much closer accord than obtains at the present time. All

these ideas of unifying mankind's affairs depend ultimately for their realization on mankind having a unified mind for the job. The want of such effective mental unification is the key to most of our present frustrations. While men's minds are still confused, their social and political relations will remain in confusion, however great the forces that are grinding them against each other and however tragic and monstrous the consequences.

Now I know of no general history of human education and discussion in existence. We have nowadays -in what is called the New History-books which trace for us in rough outline the growth in size and complexity of organized human communities. But so far no one has attempted to trace the stages through which **teaching** has developed, how schools began, how discussions grew, how knowledge was acquired and spread, how the human intelligence kept pace with its broadening responsibilities. We know that in the small tribal community and even in the city states of, for example, Greece, there was hardly any need for reading or writing. The youngsters were instructed and initiated by their elders. They could walk all over the small territory of their community and see and hear, how it was fed, guarded, governed. The bright young men gathered for oral instruction in the Porch or the Academy.

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With the growth of communities into states and kingdoms we know that the medicine man was replaced by an organized priesthood, we know that scribes appeared, written records. There must have been schools for the priests and scribes, but we know very little about it. We know something of the effect of the early writings, the Bible particularly, in consolidating and preserving the Jewish tradition giving it such a start off that for a long time it dominated the subsequent development of the Gentile world, and we know that the survival and spread of Christianity is largely-due to its resort to written records to supplement that oral teaching of disciples with which it began. But the growing thirst for medical, theological and general knowledge that appeared in the Middle Ages and which led to those remarkable gatherings of hungry minds, the Universities, has still to be explained and described. That appearance and that swarming of scholars would make an extraordinary story. After the lecture room, the book; after that the newspaper, universal education, the cinema, the radio. No one has yet appeared to make an orderly story of the developments of information and instruction that have occurred in the past hundred years. Age by age the world's Knowledge Apparatus has grown up. Unpremeditated. Without a plan. But enlarging the possible areas of political co-operation at every stage in its growth.

It is a very interesting thing indeed to ask myself certain questions. **How** did I come to know what I know about the world and myself? What ought I to know? What would I like to know that I don't know? If I want to know about this or that, where can I get the clearest, best and latest information? And where did these other people about me get their ideas about things? Which are sometimes so different from mine. Why do we differ so widely? Surely about a great number of things upon which we differ there is in existence exact knowledge? So that we ought not to differ in these things. This is true not merely about small matters in dispute but about vitally important things concerning our business, our money, our political outlook, our health, the general conduct of our lives. We are guessing when we might know. The facts are there, but we don't know them completely. We are inadequately informed. We blunder about in our ignorance and this great ruthless world in which we live, beats upon us and punishes our ignorance like a sin. Not only in our mass-ruled democracies but in the countries where dogmas and dictators rule, tremendous decisions are constantly being made affecting human happiness, root and branch, in complete disregard of realities that are known.

You see we are beginning to realize not only that **foo1**

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the formal political structures of the world and many of the methods of our economic life are out of date and out of scale, but also another thing that hampers us hopelessly in every endeavour we make to adjust life to its new conditions-our World Knowledge Apparatus is not up to our necessities. We are neither collecting, arranging nor digesting what knowledge we have at all adequately, and our schools, our instruments of distribution are old-fashioned and ineffective.

We are not being told enough, we are not being told properly, and that is one main reason why we are all at sixes and sevens in our collective life.

The other day my university, the University of London, celebrated its centenary. For some minor reason I was asked to assist at these celebrations. And to do so I had to assume some very remarkable garments—most remarkable if you consider that London University was founded in the year 1836 when gentlemen wore tight trousers with straps, elegantly waisted coats and bell-shaped top hats. Did I dress up like that? No. I found myself retreating from the age of the aeroplane to the age of the horse and mule outfit of the Canterbury Pilgrims. I found myself wearing a hood and gown and carrying a beret rather like those worn by prosperous citizens of the days of Edward IV, when the Uni-

versity of London was as little anticipated as the continent of America. My modern head peeped out at the top of this get-up and my modern trousers at the bottom. Properly I ought to have been wearing a square beard or have been clean-shaven, but I was forgiven that much. And from all parts of the world representatives of innumerable universities had come with beautifully illuminated addresses to congratulate our Chancellor and ourselves on our hundred years of sham mediaevalism. They came from the ends of the earth, they came up the aisle in an endless process ; one ancient name followed another, now it was Tokio, now Athens, now Upsala, now Cape Town, now the Sorbonne, now Glasgow, now Johns Hopkins, on they came and on and bowed and handed their addresses and passed aside. It was a marvellous, a dazzling array of beautifully coloured robes. It was also a marvellous collection of men and women. I watched the grave and dignified faces of some of the finest minds in the world. Together they presented, they embodied or they were there to represent, the whole body of human knowledge. There it was in effect parading before me. And nine out of ten of them were dressed up in some colourful imitation of a costume worn centuries before their foundations came into existence. It was picturesque, it was imposing-but it was just a little odd of them.

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My thoughts drifted away to certain political gatherings I had seen and heard; faces of an altogether inferior type, leather-lunged adventures bawling and gesticulating, raucous little men screaming plausible nonsense to ignorant crowds, supporters herded like sheep and saluting like trained monkeys, and the incongruity of the contrast came to meyou know how things come to you suddenly at times -so that I almost laughed aloud. Because, when it comes to the direction of human affairs, all these universities, all these nice refined people in their lovely gowns, all this visible body of human knowledge and wisdom, has far less influence upon the conduct of human affairs, than, let us say, an intractable newspaper proprietor, an unscrupulous group of financiers or the leader of a recalcitrant minority.

Some weeks previously I had taken part in a little private conference of scientific men in London. They were very distinguished men indeed, and they were distressed beyond measure at the way in which one scientific invention after another was turned to the injury of human life. What was to be done? What could be done? Our discussion was inconclusive, but it had quickened my sense of the reality of the situation. I put these three separate impressions together before you: First, these anxious scientific specialists, then the unchallenged power and mischief of these

bawling war-making politicians and their crowds at the present time, and finally, capping the whole, these hundreds of all-too-decorated learned gentlemen, fine and delicate, bowing, presenting addresses (for the most part in Latin) and conferring further gowns and diplomas on one another. This last lot, I said, this third lot is after all-in spite of its elegant weakness, the organized brain of mankind so far as there is an organized brain of mankind-and it is not doing its proper work. Why? Why are our universities floating above the general disorder of mankind like a beautiful sunset over a battlefield? Is it not high time that something was done about it?

Certain ideas had been stirring in my mind for some time already, but this scene of archaic ceremony just lit up the situation for me. I realized that these mediaeval robes were in the highest degree symp tomatic. They clothed an organization essentially mediaeval, inadequate and out of date. We are living in 1937 and our universities, I suggest, are not half-way out of the fifteenth century. We have made hardly any changes in our conception of university organization, education, graduation, for a century—for several centuries. The three or four years' course of lectures, the bachelor who knows some, the master who knows most, the doctor who knows all, are ideas that have come down unimpaired from the

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Middle Ages. Nowadays no one should end his learning while he lives and these university degrees are preposterous. It is true that we have multiplied universities greatly in the past hundred years, but we seem to have multiplied them altogether too much upon the old pattern. A new batttleship, a new aeroplane, a new radio receiver is always an improvement upon its predecessor. But a new university is just another imitation of all the old universities that have ever been. Educationally we are still for all practical purposes in the coach and horse and galley stage. The new university is just one more mental gilt-coach in which minds take a short ride and get out again. We have done nothing to co-ordinate the work of our universities in the world-or at least we have done very little. What are called the learned societies with correspondents all over the world have been the chief addition to the human knowledge organization since the Renaissance and most of these societies took their shape and scale in the eighteenth and nineteenth centuries. All the new means of communicating ideas and demonstrating realities that modern invention has given us, have been seized upon by other hands and used for other purposes; these universities which should guide the thought of the world, making no protest. The showmen got the cinema and the governments or the adventurers got