

fessor Dewey, "how many eggs are laid in Alaska, we measure the glass surface of florists' establishments, we have laid bare the balance sheets of the counting room; in our census we distinguish between one-and two-seated sleighs; we can tell the proportion of checks to other monetary media; we know how much gold is consumed in dentistry." The labors of the statistician will endure forever, since of the making of statistics there is no end.

Yet even while we assess at a high value the services of the new economist, there are drawbacks which may not be left out of account. The specialized economist, the capable, alert man whom we see at this convention, has not perhaps the firm grip of the early economists, and he is prone to brush aside theoretical discussions with perhaps too intolerant an indifference. His very qualities carry defects. He may know everything about social insurance, and not as much as he should about general theory, or economic history, or agricultural economics, or mining, or forestry. The detailed knowledge of his particular subject which enables him to teach it in class-room and text-book, and renders him eligible for membership upon state commissions and invaluable in the drafting of laws, is paid for necessarily by a relative ignorance of many important subjects.

Moreover, something still more valuable is endangered by too narrow a specialization. The man who spends his life in studying the financial history of Georgia in the eighteenth century is likely to lose a real sense of large contemporary problems. A professor of economics may become director of the census or sit upon an industrial commission or revise the tax laws of a great commonwealth, but the lasting influence of such a man is less than that of one who gives to the world a new interpretation of our complex economic life. More than ever before, such interpretations are necessary now. A hundred years ago the economists became the intellectual leaders of the manufacturers then rising to power. To-day a similar industrial transition is occurring, and a new class, not yet fully conscious of its power or rights, not yet clear even as to the extent and nature of its constituency, is groping after some philosophy to explain it to other classes and to itself. Where in our American universities or in the American Economic Association is the scholar who will endow this class with a philosophy and an understanding?

Perhaps to-day, when the task is more difficult, the qualifications of the economists are less adequate. There is still a tendency towards too narrow a conception of the economic motives of classes and individuals, towards too mechanical and rigid

semi-egoistic. Nor does the economist himself escape from illusions and predilections born of his individual experience. His right to perform great public services is often bought by unperceived sacrifices of scientific convictions. In the universities themselves there are entangling prejudices and a certain convention of academic decorum which are more repressive than any specific prohibitions. Do we find in our American universities to-day that complete intellectual tolerance and freedom, that *Lehrfreiheit* and *Lernfreiheit* for which the Economic Association so definitely stands? Do our professors pin their theses on the university doors, and defend them against all without and within?

This is the paramount problem which faces the economists to-day. They are doing excellent work in university and in public life, in the teaching of boys and in the conduct of affairs. But their greater task remains unfulfilled.

Puzzle-Education

HOW righteously indignant did our teachers use to be if we ever precociously objected to learning our mathematics and grammar in school on the ground that if we were going to be doctors or policemen we should never have any use when we grew up for that kind of knowledge. Were we not entirely too young to know at all what kind of knowledge we should need when we did grow up? Did not our teachers impress upon us that in some mysterious way all was grist that came to our intellectual mill? Did we wish to know merely what we could use in the daily grubbing of bread and butter? Was not the fine flower of education knowledge learned for its own sake? We could thus be assured, as we cubed our roots or diagrammed our sentences, that all this work was "training the mind," so that we could almost feel our mental muscles growing in strength and elasticity. We were too young to see it then, but some day we should be heartily grateful to our painstaking teachers. Some day, when we were successful men, we should come to appreciate the superior wisdom of this educational system against which our rational little wills so smoulderingly rebelled.

In those days, would we not have given our young chances of promotion to see ranged up before the teacher a group of great grown men, the successful ones of the earth, to be put through the paces at which we kicked? Would it not have tickled us to see a class consisting of a state senator, a former lieutenant-governor, a manufacturer, a city official, a banker, a physician, a merchant, a lawyer, an

erysipelas, guessing at the distance in degrees from Portugal to the Ural Mountains, locating the desert of Atacama and the Pamir Plateau, expressing 150° Cent. in terms of Fahrenheit, and finding the area of the base of a cylindrical 1 gal. can 10 ins. high? If it was true that we should all find this knowledge useful some day, then it would be preeminently these men who were finding it useful now.

Let the news go forth to all the children of the land who are questioning the why and wherefore of what they are learning, that this thing has actually been done. The eleven men have been assembled in Springfield, Ill. and have had put to them these questions and others, all taken from the prescribed work of the local public schools. The class constituted one of those inquiries conducted with the deadly accuracy of a laboratory experiment by the Russell Sage Foundation. The results, it need hardly be said, were a complete demonstration of the intuition of our childish precocity. Not one of these eleven successful and intelligent gentlemen made so much as a passing mark in any subject. In the spelling-match the best record was six words out of ten, while one man, probably the editor, failed in every word. Only one of the pupils knew the capital of Montenegro, while neither he nor any of the others had the faintest reaction to Atacama or the Pamir Plateau, much less to the length of South America or the distance in degrees from Portugal to the Ural Mountains. Only one of the eleven could do the thermometer problem—he must have been in Paris once in January—and not one knew the specific gravity of alcohol when 2 liters weigh 1.58 kgms. As for the ten historical dates selected from ninety-one, the only date that as many as ten men knew was the attack on Sumter. Only one identified the date of the Mexican War, only one the surrender of Cornwallis.

It must have seemed very curious to the eleven to be presented with these questions, and then have the answers labelled "knowledge." How many of them drew the conclusion that our public schools were little more in the higher reaches than a glorified puzzle-party, where recitation is often more like a guessing of riddles, or trying to discover the answer from the teacher's tone, or the putting together of a puzzle-picture? Look at the average school text-book, with its neat and logical divisions, and see if you can't hear the dry crackle of the author's wit as he has worked out his ingenious riddles, pieced his cunning examples together, hunted the dictionary for words to spell, dissected his history, carved up a continent. The intellect feeds on syllogisms. Syllogisms are so much easier than appreciations. And really it is far easier to reason than to interpret. In the first you have merely to follow

Yet this whirling around of the mental engine with the belting off is represented to us as a process of "training the mind." You might as well say that an athlete could best train his legs by standing on his head and waving them.

It is this scheme of puzzle-education which this Springfield inquiry—a characteristic flash, we take it, of American genius—has so tellingly shown up. And this riddle-curriculum tends to get worse instead of better as the science of text-book-making waxes and the machinery of scientific pedagogy accumulates. The avowed aim of teachers and training-colleges in recent years has been to discover pedagogical methods that would do the work regardless of the personality of the teacher. The riotous absurdities of this scheme are being revealed by such inquiries as these in Springfield. They suggest that the policy of having our next generation's mental attitudes, stock of information, personal qualities, and moral biases cultivated by unimaginative teachers whose intellectual capacity has been just sufficient to acquire a few routine methods of "conducting" a class and keeping order in a group of restless children, may have become antiquated. Our genuine education—that is, a familiarity with the world we live in—must wait until we get out of school. That may partly explain why most children are so anxious to leave.

Some people might find in this inquiry not so much an evidence of the inefficiency of our public schools as of how little intellectual baggage one needs to become successful and eminent in these United States. But this is in reality only to make a heavier indictment. It is still primarily the schools that have failed to make the intellectual baggage important to the minds of their pupils, that have left uncultivated their tastes and horizons. It is for this reason that our American intellectual background is relatively thin.

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EDITORS

HERBERT CROLY WALTER LIPPMANN
PHILIP LITTELL FRANCIS HACKETT
WALTER E. WEYL CHARLOTTE RUDYARD

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1914—The End of an Era?

IN its immediate effects upon the lives and fortunes of millions of men and women, the great war is unmistakably the largest human fact since the French Revolution. Since that tremendous deluge overflowed the frontiers of the Old Monarchy and began its resistless march from Paris to Moscow, from the Straits of Dover to the Syrian Coast, there has been no single disturbance of the whole system of nations and continents comparable with that which is now going on before our eyes.

Yet in the face of this almost limitless destruction there is patent on many sides a disposition to regard it as an accident, a piece of collective insanity on the part of races and nations certain to be followed presently by a sad return to sanity. Those who were but a few months ago assuring us that there never could be another general war are most vociferously informing the same audience that this will be the last. In the same sense there is the general tendency to assert that when it has come to an end we shall be as we were before, that after a temporary if terrible interruption nations and continents will return to the same tasks, the same ideas, the same ideals which they followed up to the fatal first of August, 1914.

Going back to the French Revolution, is it not quite as clear from any reading of contemporary comment that a similar expectation prevailed everywhere save in Paris when the Allies at last undertook the little "police expedition" into France which was to bring the French people to their senses, restore a Bourbon to the throne, an aristocracy to control? Was it not quite as inevitable in the minds of those who directed the first invasion of France, which terminated at Valmy, that in a brief time the world was to be exactly as it had been before 1789, as it is now to many minds, that the treaty of peace which closes the present chapter will send the world back to the precise point from which it started on this temporary explosion of madness?

Accepting this as possible, is it inevitable? Is it not a possibility that what is taking place marks quite as complete a bankruptcy of ideas, systems, society, as did the French Revolution? For Carlyle, in many ways the most satisfactory interpreter of the French Revolution, it was above all else a conflagration, a burning up of shams, of inveracities, a forest fire sweeping through woods long dead and become tinder, a total dissolution of a world which had become unreal, inveracious, devitalized.

As a final evidence of the stability of the order existing before the war, we have been accustomed to point to at least four bulwarks, each a product of contemporary genius, each a prop and promise of the perpetuation of what was frankly conceded to be the best and the wisest social order ever devised by the mind of man. These four forces may be described as science, sentiment, high finance and socialism.

As to science, it will be remembered that twenty years ago M. Bloch quite convinced a willing world that war had become impossible because modern weapons had made the cost of battle beyond the resource of men or nations to pay. In that time the world eagerly read carefully prepared tables which showed that, given the power of modern artillery and rifle, battles would now be more terrible than any known to history. From this fact it was reasoned that men would not fight, nations would not dare to send their citizens to battle. Yet after twenty years it was fully demonstrated in the Balkan War that all the terrible destructiveness of modern weapons did not prevent men from fighting, and from fighting hand to hand. It was the bayonet and not the artillery which decided Monastir and Kirk Killisse. The Bulgarian "Na noge" was still the watchword of battle, and the knife terrible in European warfare as in African. To-day each report of battle brings the details of bayonet charges comparable with those that made Gettysburg famous and Waterloo immortal.

Thus science, which in twenty years has added much to the terrors foreseen by M. Bloch, has given us the 42-centimetre gun and the French "75," has in no degree weakened the spirit of man. As the Greeks, the Romans, the fighting races of all past time fought, so the great nations of twentieth century Europe are fighting. Science has made war more terrible, more costly, but it has not made war impossible, filled man with controlling terror. Thus it has failed.

Is it less plain that sentiment, the sentiment that was behind The Hague Conferences, the international arrangements, the endless "scrap of paper" and agreements, the indefinable thing we call humanitarian spirit, has failed quite as completely? It did not avail to prevent the invasion of Belgium, the laying in waste of East Prussia. Has there been any time since the Thirty Years' War when the map of Europe could show so many regions devastated, so many millions homeless, destitute? Has