effort as the war effort, all the rest will be easy. We are the hope of the world. We must set our own house in order so that our light may shine as a comfort and a beacon to the whole world.

II: 1933

Coming to office on March 4, 1933, the new Secretary of Agriculture made thirty-two scheduled pronouncements and publications between then and New Year's Day, 1934. Besides, there were countless impromptu talks to groups of contending farm leaders, professional agriculturists at odds, pressure-group manipulators, Congressmen, and visiting delegations of farmers, tradesmen and consumers. In all these pronouncements Secretary Wallace candidly displayed an astonishing duality of outlook.

He hated the mess of "overproduction" that it was his responsibility to clean up, momentarily, by measures as unprecedented as a plowdown of ten and one-half million acres, a fourth of that year's crop, of living cotton; and the premature slaughter of six million little pigs. As a plant geneticist, as a man who had bred and reared livestock, as a humanitarian and as a philosopher, Wallace had no stomach for induced scarcity. But: "We must clear the wreckage before we can build," he told his aides. When it was suggested to him that the public might be spared shock and eruption if news and movie photographers were discouraged from taking pictures of the cotton plowup, he expressed the hope that the public would view such pictures in great number and be horrified. "Rub their noses in the facts!" he said.

Many of his 1933 speeches were rapid-fire exercises in trouble shooting. There was trouble in plenty to mend. Agriculture had come to the end of "twelve long years," as he called the period since 1920, in an exceedingly shaky position and low estate. In 1921 certain farm prices had declined to one-fifth of their 1920 level. Between 1930 and 1933 one American farm in every four had been sold for debt or taxes. Between 1929 and 1932 gross farm income, having already suffered a ten-year decline from an inflated peak of seventeen to twelve billion dollars annually, fell to five billion dollars. This was a billion dollars below the prewar figure. Factory wages had made almost exactly the same drop, from twelve billion in 1929 to five billion in 1932. The decline of corporate gross income in the same period was from 161 billion in 1929 to eighty-one billion in 1932; and interest and dividend payments, even in 1932, stood at seven billion dollars, somewhat higher than gross farm income on the one hand or total factory wages on the other.
In the middle country farmers were resisting forced farm sales by a sort of passive resistance which occasionally broke over into local guerrilla warfare. In the Cotton South at scattered places tenants and dayhands were entering stores and taking what they felt they needed, with the storekeepers fearful of protesting.

The incipient New Dealers, having sought and failed to promote emergency farm legislation in the interim lame-duck Congress, called an emergency session of farm leaders to Washington on March 10. With the banks closed, many farm representatives had trouble finding the money to buy a ticket, but their people dug up the currency for them somewhere or other and they came. They came with clashing panaceas, as of old. The old McNary-Haugenites, of whom Wallace had been one, wanted to dump the surpluses abroad. The Farmers’ Union wanted Cost of Production. The Grange still saw some hope in Export Debentures. The Farm Bureau was fronting for the Domestic Allotment Plan and acreage control, but its officials did not really understand the proposal as clearly as did Henry I. Harriman and other business leaders, who sensed in it a means of blocking up the producing value of land foreclosed and held by banks and insurance companies. They saw in it also a precedent which later might remove industrial and commercial combinations beyond the thwart of Sherman anti-trust persecution, through devices such as those embraced under the aegis of the Blue Eagle—N.R.A.

President Roosevelt told his Secretary of Agriculture to lock himself in a room with those farm leaders, if need be, and not let them out until they had come to some agreement about a Farm Act. Toward the middle of the same day, March 10, Wallace made, by radio, the first address of his public career.

THE FARM CRISIS

I have just come from a meeting that began two hours ago in my office and that will continue into the afternoon. The purpose is to reach an immediate agreement on a farm relief program that will affect this year’s crops. The agreement will have to be immediate. We can’t legislate next June for a crop that was planted in April.

There are honest conflicts of opinion. No plan can be perfect. One plan, for example, turns out to be unconstitutional. Another plan has administrative difficulties that defy the wisdom of a Solomon. Another plan may help the wheat people a little more than it helps the cotton people, or vice versa. Our job will be to get a compromise—to combine the most satisfactory features of each into a program.

The problem is clearly revealed. During the few years just preceding 1929, we were selling in foreign markets the product of roughly sixty
million acres of land. The value of these exports this past fiscal year was sixty percent below that of 1929. We must reopen those markets, restore domestic markets, and bring about rising prices generally; or we must provide an orderly retreat for the surplus acreage, or both.

For twelve years American agriculture has suffered, and suffered cruelly. This has been largely because the government could not, or would not, formulate the policies that would enable the United States to act as a nation which is owed money by other nations.

We would not let people who owe us pay their debts in the only way they could—in goods and services. High tariffs prevented that. For a while we loaned our debtors additional funds with which to buy goods from us, but after a few years that method of lifting ourselves by our bootstraps collapsed. We could not sell our surplus farm products to them, partly because they could not sell enough to us, partly because of retaliatory tariffs, and partly because of the drive for economic self-sufficiency among European nations.

Today in this country men are fighting to save their homes. That is not a figure of speech. That is a brutal fact, a bitter commentary on agriculture's twelve years' struggle. What do we propose to do about it? The least we can do is to stay the cruel process of dispossessing farmers from their homes. In adjusting this farm-debt load, creditors also must expect to share in the losses.

It will take time to bring about an effective demand for our surplus products at home and abroad. There is little likelihood of an effective demand abroad for our surplus farm products during the next two years. Negotiating reciprocal tariffs may restore a part of this market, but those negotiations will take time. The European nations, making desperate efforts to act as debtor nations logically must, have increased their tariffs on American farm products and have handled their currency exchanges so as to make almost impossible any large purchases of American farm products. Furthermore, they have increased their wheat and hog production as much as possible.

Meanwhile, we must adjust downward our surplus supplies until domestic and foreign markets can be restored.

The outcome of the farm leaders' huddle was agreement on the need of an omnibus or blunderbuss Farm Act which would authorize the application of all the specially favored cures of agricultural distress, from acreage control to subsidized exports, leaving to the new Secretary of Agriculture enormous discriminatory powers in the choice of means. Charles J. Brand, who had fought with Wallace for the McNary-Haugen bill, but who, like Wallace, was inclined
to feel that export dumping was out of the question now, was charged to draft an Agricultural Adjustment measure, together with Fred Lee, of like antecedents. Into the drafting of the measure there entered also a brilliant and spirited legal wheelhorse of urban antecedents, Jerome Frank. Disagreements within the Department and then in Congress consumed two months while the sun shone, rains fell, and a still ungoverned and expanding acreage of cotton and wheat took root. The carryover of stored wheat was three times normal at the time; the carryover of cotton was also three times normal. Domestic purchasing power was at low ebb; and there was no prospect of an immediate increase in paying foreign custom. Hog prices were down to one third of normal and the foreign market had disappeared.

"A new and untrod path," the President has called this Farm Act in the message submitting it to the Congress. (Purists pointed out that an untrod path was not a path at all.) On May 12, 1933, the Act was passed. The President had planned to make a Fireside Chat to acquaint the country with its scope and intent. But an anticipatory lift of prices, bearing hazard of an undue inflation, made him shift his chat to an anti-inflationary tone, and on May 13 Wallace went on the air instead to announce what he called—

**A DECLARATION OF INTERDEPENDENCE**

The new Farm Act, which the President signed yesterday, initiates a program for a general advance of buying power. It is not an isolated advance in a restricted sector; it is part of a large attack on the whole problem of depression.

Agriculture and tradesmen must make their way together out of a wilderness of economic desolation and waste. This new machinery will not work itself. The farmers and the distributors of foodstuffs must use it, and make it work. The government can help map lines of march, and can see that the interest of no one group is advanced out of line with the interest of all. But government officials cannot and will not go out and work for private businesses. A farm is a private business; so is a farmers' cooperative; and so are all the great links in the food distributing chain. Government men cannot and will not go out and plow down old trails for agriculture, or build for the distributing industries new roads out of the woods. The growers, the processors, the carriers and sellers of food must do that for themselves. Following trade agreements, openly and democratically arrived at, with the consumer represented and protected from gouging, these industries must work out their own salvation! This
emergency Adjustment Act makes it lawful and practical for them to get together and do so. It provides for a control of production to accord with actual need, and for an orderly distribution of essential supplies.

In the end, we envision programs of planned land use; and we must turn our thought to this end immediately; for many thousands of refugees from urban pinch and hunger are turning, with little or no guidance, to the land. A tragic number of city families are reoccupying abandoned farms, farms on which born farmers, skilled, patient, and accustomed to doing with very little, were unable to make a go of it. In consequence of this back-flow there are now thirty-two million people on the farms of the United States, the greatest number ever recorded in our history. Some of those who have returned to farming will find their place there, but most of them, I fear, will not. I look to a day when men and women will be able to do in the country the work that they have been accustomed to doing in the city; a day when we shall have more industrial workers out in the open where there is room to live. I look to a decentralization of industry; but in this respect we shall have to make haste slowly. We do not need any more farmers out in the country now. We do need there more people with some other means of livelihood, buying, close at hand, farm products; enriching and making more various the life of our open-country and village communities.

The Act authorizes the Secretary of Agriculture to apply excise taxes on the processing of these products, and to pay the money thus derived to farmers who agree to enter upon programs of planned production, and who abide by that agreement. These processing taxes will be put on gradually. Few, if any, will be levied before fall; and then we shall make them as light as we can and yet bring about the required reduction in acreage. In no case will taxes be levied on products purchased for the unemployed.

What it amounts to is an advance toward higher prices all along the line. Current proposals for government cooperation with industry are really at one with this Farm Act. Unless we can get re-employment going, lengthen pay rolls, and shorten breadlines, no effort to lift prices can last very long. Our first effort as to agriculture will be to adjust production downward, with safe margins to provide enough food for all. This effort we shall continue until such time as diminishing stocks raise prices to a point where the farmer's buying power will be as high as it was in the pre-war years, 1909 to 1914.

The reason that we chose that period is because the prices farmers got for their crops, in those years, and the prices they paid for manufactured goods and urban services most nearly approached an equitable relationship. There was thus a balance between our major producing groups. At
that time there was not the terrific disparity between rural and urban purchasing power which now exists and which is choking the life out of all forms of American business.

We do not propose to reduce agricultural production schedules to a strictly domestic basis. Our foreign trade has dwindled to a mere trickle; but we still have some foreign customers for cotton, tobacco, and certain foodstuffs; we want to keep that trade and to get more foreign trade, if we can. The immediate job is to organize American agriculture to reduce its output to domestic need plus that amount which we can export at a profit. If the world tide turns and world trade revives, we still can utilize to excellent advantage our crop adjustment and controlled distribution setup. We can find out how much they really want over there, and at what price; and then we can take off the brakes and step on the gas.

The first sharp downward adjustment is necessary because during the past years we have defiantly refused to face an overwhelming reality. In consequence, changed world conditions bear down on us so heavily as to threaten our national life.

Ever since 1929, hundreds of thousands of farm families have had to do without civilized goods and services which in normal times they were glad and eager to buy. Since 1929, millions of farm people have had to patch their garments, store their cars and tractors, deprive their children of educational opportunities, and cease, as farmers, to improve their practices and their property. They have been forced to let their homes and other buildings stand bare and unpainted, eaten by time and the weather. They have been driven toward peasant, or less than peasant, standards; they have been forced to adopt frontier methods of bare sustenance at a time when, in the old surging, unlimited sense of the word, we have no longer a frontier.

When the farmer gets higher prices, he will start spending. He will have to. He needs things. He needs new shoes and clothing for all the family, so that his children can go to school in any weather with dry feet, protected bodies, and a decent American feeling of equality and pride. He needs paint and roofing, fencing, machinery and so on, endlessly.

To reorganize agriculture, co-operatively, democratically, so that the surplus lands on which men and women now are toiling, wasting their time, wearing out their lives to no good end, shall be taken out of production—that is a tremendous task. The adjustment we seek calls first of all for a mental adjustment, a willing reversal, of driving, pioneer opportunism and ungoverned laissez-faire. The ungoverned push of rugged individualism perhaps had an economic justification in the days when we had all the West to surge upon and conquer; but this country has filled up
now, and grown up. There are no more Indians to fight. No more land
worth taking may be had for the grabbing. We must experience a change
of mind and heart.

The frontiers that challenge us now are of the mind and spirit. We
must blaze new trails in scientific accomplishment, in the peaceful arts
and industries. Above all, we must blaze new trails in the direction of a
controlled economy, common sense, and social decency.

There have been delays in the passage of this Act. Meanwhile the plant-
ing season has advanced, and our assigned task of adjusting production
to effective demand has become infinitely more difficult. We cannot pro-
ceed as if this were the middle of winter. Perhaps our wisest course will
be to concentrate on those commodities most in need of adjustment, and
on which the adjustment decided upon, this late in the season, can be
practical and effective.

To help us in these determinations, we shall have here in Washington
within a few days representatives of agriculture and representatives of the
processing and distributing trades. Bearing their recommendations in
mind, we shall decide just what action to take, and when to take it. As
each decision is made we shall get it out directly and publicly to the
farmers affected, and launch organization efforts throughout the Nation.

Unless as we lift farm prices we also unite to control production, this
plan will not work for long. The only way we can effectively control pro-
duction for the long pull is for you farmers to organize, and stick, and do
it yourselves. This Act offers you promise of a balanced abundance, a
shared prosperity, and a richer life. It will work, if you will make it yours,
and make it work. I hope that you will come to see in this Act, as I do
now, a Declaration of Interdependence, a recognition of our essential
unity and of our absolute reliance on one upon another.

Observe from the foregoing that Wallace, recoiling from the brutal need of
reducing agriculture’s physical output in time of dire physical need, already
contemplated using the discretionary powers to be vested in him to adjust the
contemplated A.A.A. to larger and more soundly defensible purposes in the
end. His phrase “sound land use” plainly foretells the soil-conservation prin-
ciples to which A.A.A. administrators were forced to repair (less willingly, on
the whole, than Wallace) after the Supreme Court decision of 1936. His re-
marks on the open country as a doubtful refuge for the indigent and dispos-
sessed foretell, in some measure, the establishment of the Farm Security Ad-
ministration. Particularly, his insistence that Agricultural Adjustment is a
piece of social machinery that may spur as well as retard farm output suggests,
years ahead of the event, the incalculable aid that Triple-A has rendered in
provisioning the present World War.
The following address, delivered in Philadelphia on May 9, three days before the Farm Act became a law, was written a week or so before he prepared his Farm Act broadcast:

A CHALLENGE TO SCIENCE

Whether, in inviting me to address the Franklin Institute, you distinguish between my activities as Secretary of Agriculture and my activities as a scientist, I have no means of knowing; but I hope I have thus far escaped the sort of fame enjoyed by a certain gentleman who is known both as an economist and a journalist, and who is referred to by economists as a highly successful journalist, and by journalists as a highly successful economist. I would not have you carry the parallel too far, however. Some such dual role may be forced upon scientists, before we are out of our present economic disorder.

I doubt if scientists have considered, as much as they should, the impact of the present economic situation upon science. Our present impasse seems to me to shed new light on past contributions of science, and to impose new burdens on the science of the present and the future. Or, to put it another way, our present economic difficulty specifically challenges science to defend itself against alleged excesses of the past, and asks for a pledge to contribute with more certainty to human welfare in the future.

Mind you, I am quite ready to agree that when the income of citizens and of the government is as drastically reduced as it is at present, we have no choice but to reduce all expenditures of government, and scientific work must shoulder its share of the reduction. Conceivably, a searching examination may reveal dead wood here and there; some of our less obviously important scientific activities can be slowed down in deference to the emergency; but that is very different from a heedless elimination of governmental activity because it is scientific, or of scientific activity because it is governmental.

Suppose we consider our agricultural research much as a businessman would. The total value of the corn, wheat, and cotton crops of the United States is normally about four billion dollars. Around these three basic crops the entire agriculture of the United States revolves. If a private corporation had an annual output this valuable, how much would it be spending for scientific research to reduce production costs, discover new uses, and the like? Probably anywhere from forty million to four hundred million dollars.
Does that seem fantastic to you? An officer of the National Research Council, in a letter to Dr. A. F. Woods of our Department of Agriculture last summer, reported the results of a query set to several hundred industrial corporations. In 309 replies representing nineteen classes of industries, it was revealed that most of the corporations spent from one to ten percent of their total sales on scientific research. About one in every six corporations, of those reporting, spent more than five percent of their sales on research, and one in every fourteen spent more than ten percent of their sales. Thus the range—forty million to four hundred million dollars—when computed on the basis of a total output of four billion dollars.

You may ask how government's expenditures for research compare with industry's. The Federal government, for this four-billion-dollar crop of corn, wheat, and cotton, has been in the habit of spending around three million dollars annually for scientific research. That is a very small fraction of one percent. Even on the tragically reduced values of these crops in 1932 Federal expenditures for research amounted to less than two-tenths of one percent. And yet through a relatively small investment, the expenditures for research by the Federal and State governments have undoubtedly made it possible for the farmers of the United States to produce the present volume of corn, wheat, and cotton with a billion hours less man-labor annually. This is a tremendous increase in efficiency.

The attacks upon science stem from many sources. It is necessary for science to defend itself, first, against such attacks, and second, against the consequences of its own successes. What I mean is this: That science has magnificently enabled mankind to conquer its first great problem—that of producing enough to go around; but that science, having created abundance, has now to help men learn to live with abundance. Having conquered seemingly unconquerable physical obstacles, science has now to help mankind conquer social and economic obstacles. Unless mankind can conquer these new obstacles, the former successes of science will seem worse than futile. The future of civilization, as well as of science, is involved.

I do not see how any intelligent person can hear some of the complaints registered against research without desiring to jump at once to the defense. A few business groups, highly articulate, have done a great injustice to the scientific work of the government by inferring that considerable sums of money have been spent to investigate how far a flea could jump, and to look into the love-life of the frog. I am unable to find any account of a government project dealing with the love-life of a frog. It is true that someone wrote into the Department of Agriculture to inquire how far a flea could jump, and that one of our entomologists, after a brief search
through the scientific literature on fleas, was able to make a suitable reply. The publicist who ridiculed the Department for this jumped to a variety of inaccurate conclusions, one of them being that special and expensive research was involved, and another being that fleas, from whatever aspect, are screamingly funny. They seem to be in the same category with spinach.

As many of you know, research on fleas—including a knowledge of how far they can jump—has been fairly important for the human race. For through research it was learned, back in 1906, that the bubonic plague was carried from rats to man by fleas. The knowledge of how far a flea could actually jump was of considerable importance in fighting outbreaks of the plague shortly thereafter.

In any event, I am not disposed to apologize for a certain amount of government money spent in pure research. On the whole, I am inclined to think that more rather than less money should be spent in this way. Let me give an illustration coming out of my own experience. It happens that twenty years ago this summer, I did my first experimenting with the in-breeding of corn and was led to do so by the work in pure science done along this line by Dr. G. H. Shull of the Carnegie Institution, and Dr. E. M. East of the Connecticut experiment station. Dr. Shull especially had no thought whatever of bringing his inbreeding work in corn to a practical conclusion. More than twenty years ago he dropped his corn breeding experiments and turned to the breeding of evening primroses and the weed known as shepherd's-purse. Yet I may say that the purely scientific work started by Dr. G. H. Shull twenty-eight years ago can easily make it possible for us within the next ten years to produce our present supply of corn on eighty million acres instead of 100 million. [This prophecy came true and in coming true released more hours of man labor than were lost in all the strikes. Ed. Note.]

I say this advisedly and with full knowledge, because last year in Iowa more than a thousand farmers grew corn produced by this method which originated in the pure science of Shull and East. As an average of a thousand weighed-up comparisons it was found that the corn produced by crossing inbred strains outyielded the farmers' own corn by ten bushels an acre.

The Federal and State scientists engaged in this particular branch of research know from a practical point of view that their discoveries have just begun. They also know that from the point of view of pure science, there are strange vistas opening up in many directions. The corn geneticists of the United States Department of Agriculture and the State experiment stations have developed several thousand inbred strains of corn which, when properly combined, have in them the ultimate potentiality of
saving the corn farmers of the United States a billion hours of man labor annually. A saving of this magnitude properly distributed through the right kind of economic machinery can be of enormous help to all the people of the United States.

I have no patience with those who claim that the present surplus of farm products means that we should stop our efforts at improved agricultural efficiency. What we need is not less science in farming, but more science in economics. We need economic machinery corresponding in its precision, its power and its delicacy of adjustment to our scientific machinery. Science has no doubt made the surplus possible, but science is not responsible for our failure to distribute the fruits of labor equitably. We must charge that failure squarely to organized society and to government.

Relatively few scientists, I fear, have a well-developed social point of view. It may be that specialization has forced them into the cloister, out of touch with the surge of economic and social problems. It may be that the Darwinian theory of the survival of the fittest has so impressed them that they have permitted it to color their views on economics as well as on biology. For there is a very direct relationship between the survival of the fittest theory and the theory of *laissez-faire* which has so long dominated our economic thinking. Or again it may be that scientists have had to applaud any consequence of profit motive, if they were to pursue their research. Generally removed from any desire for great wealth, scientists may not always have realized the problems daily arising from an inequitable distribution of wealth.

Whatever the basis, I believe the time has come for men of science to consider both the effect of current economic problems on science and the contributions that science may be able to make to the solution of those problems.

Perhaps the star of the social scientist—who seems to specialize, so to speak, in a social point of view—is rising. I have often wondered what the character of modern science would be if the early scientists had been biologists, for instance, like Pasteur, rather than mathematicians and physicists, like Newton and Galileo. At any rate, it is true that the social and biological sciences have lagged far behind the physical sciences.

I want to pay a tribute to those scientists who deal with life. While I have the greatest respect for the physicists, the astronomers and the engineers, I have an even greater respect for the scientists dealing with living organisms. I have the feeling that it is time for the human race to devote its attention more definitely toward the life side rather than the mechanical side of things. As more and more scientists work with the problem of bringing together the superior germ plasm of the different plant and
animal organisms, a social consciousness will be built up which will find an eventual expression in the search for superior human germ plasm. These things, of course, will develop slowly, but to my mind in this direction we shall find some of the most hopeful activities of the human race. We may become eventually disillusioned by our efforts at mechanical progress, but if we look deeply into the life side of things, we will find endless vistas unfolding which, as they express themselves in the social world, are not so likely to be disillusioning as the activities which are built on the inorganic sciences.

I am speaking to you about these things because I want the standard of living, in city and country alike, constantly improved. But we shall never achieve that desideratum unless we learn how to distribute what we have produced as well as we have learned to produce it. Science has done the first job, and done it magnificently; now let it turn to the second and infinitely more difficult one. I feel assured that the challenge appeals to your imagination, and to your craving for social justice, as much as it does to me.

The first year of Agricultural adjustment was a driving catch-as-catch-can affair. As critics of the Act had prophesied, planners who go beyond blueprints and step afield to alter the acreage of any major crop take the bear by the tail and travel fast and far, with the need of making farther-reaching plans as they travel. "One move compels another, as in a game of chess," Rex Tugwell, then Assistant Secretary of Agriculture, said. This aroused derision. It would have sounded homelier, more country-like, if he had said "checkers." What had not been as clearly foreseen in the first dash of collective democratic crop planning was the remarkable behavior of the bear.

Starved and bewildered at the outset, the rampantgously individualistic American farmer, having tasted now the bread and honey of adjustment payments and a mild inflation, with a resulting marked rise in braced prices, sent delegation upon delegation to Washington demanding that the Department of Agriculture have done with mild tail-twitchings and other gentle gestures of guidance and assume absolute control. Cotton spokesmen wanted a compulsory sign-up, so that mavericks could not step from under the price-umbrella and make money by overplanting, to the general ill. A delegation of Five Northwestern Governors came in to demand of Wallace "cost of production" guarantees, backed by absolutely arbitrary mandates from Washington. "Think fast, Captain; think fast!"—the tag-line of the play What Price Glory?—was a common jibe among those in the Secretary's office during the spring and summer of 1933.

M. L. Wilson, chief of the originators of the "voluntary" domestic allotment plan, was running a wheat sign-up which reached more than a million farms and obtained from growers representing seventy-seven percent of the nation's
wheat acreage agreement to reduce their fall sowing fifteen percent. Wilson put all possible emphasis on local committees, local responsibility; and in this Wallace backed him to the limit. They sought also to ingratiate into the beginning drives of agricultural adjustment wider concepts of soil and water conservation, the conveyance of commercially “surplus” products to the relief of the needy, and the rude beginnings of an “ever-normal granary.” Wallace traveled far and made many speeches. Speaking impromptu in Philadelphia before his Franklin Institute address there in May, “If we permit it, nature will take its course,” he said. “A crisis like the present can be worked out ultimately, to be sure, by continued deflation, by continued bankruptcy, by force and competition and misery. That is the way of nature, unmodified and undirected by the intelligence of man. It is a long way, a cruel way and a very costly way.”

At Syracuse, New York, on September 5: “You had a milk war here this summer. I have seen pictures of it. Not far from where I stand milk was spilled on the roads. Heads were broken by guards and troopers wearing gas-masks, armed with clubs and guns, and by strikers with stones in their hands. In the cities, children went hungry. The spectacle did us no credit as a civilized people. I feel that all of us should earnestly examine our own minds and hearts, get at the fundamentals and try to cure the conditions that lead to such bewildered hatred and waste.”

In the month prior he had gone South and had been flown over the Mississippi Delta to observe the extent of the cotton plow-up. Those in his party say that his gaze was mournful and his eyes were moist when the plane brought him back to the ground. Still earlier that year, Helen Hill Miller relates in her recent book, Yours for Tomorrow (Farrar & Rinehart, 1943), “a group of New York intelligentsia, planners, technicians, writers for medical journals, [had] asked Henry Wallace to spend an evening with them. They had a lot of technical questions they wanted to ask him. Finally one of them said, ‘Mr. Wallace, if you had to pick the quality which you thought most important for a man to have in plant-breeding work, what would it be?’ The answer startled them: ‘Sympathy for the plant.’”

Returning from the scene of the plow-up to Washington, Wallace went on the air on the evening of August 21, to report:

**THE COTTON PLOW-UP**

On one of the largest cotton plantations in Mississippi I saw a dramatic instance of America’s present effort to catch its balance in a changed world.

There were two immense fields of cotton with a road between them. On one side of the road men with mules and tractors were turning back
into the earth hundreds of acres of thrifty cotton plants nearly three feet high. On the other side of the road an airplane was whipping back and forth at ninety miles an hour over the same kind of cotton and spreading a poison dust to preserve it from destruction by the boll weevil.

Both of these operations were proceeding side by side on the same farm, and both in our present critical state of economic unbalance were justifiable and necessary. There are those, of course, who would say that with too much cotton the right thing to do would be simply to let the weevil at it and trust to luck. We have been trusting to luck too long. Insects have very small brains. They cannot be counted upon to get us out of troubles of our own making. Clumsily, to be sure, but with a new vigor and an eye to realities, we have started to take hold of this strange situation at both ends in an effort to bring sense and order into our use of land.

Thus far we have been ruled by events quite as much as we have ruled events, but considering the shortness of time and the pressure upon us I think that we have done a fairly good job. What we have done is only the barest beginning of all we shall have to do. The new social and economic machinery that we have set going in this country since March 4 is as crude and as promising as Robert Fulton’s first steamboat.

Our present efforts are only hasty patchwork when compared with the intricate thinking and social planning that will be required. All of us working together will learn how to do these things better as we go along.

Nearly nine-tenths of the nation’s two million cotton farmers agreed to co-operate in the emergency adjustment drive. They are taking ten and a half million acres out of cotton and reducing the national cotton acreage more than one-fourth. Is this a good thing to do? In view of the circumstances, yes. It was too bad to have to turn all that product of wasted effort back into the ground. But it would have been a great deal more destructive and wasteful to have kept on going blindly, driven before the forces of a rampant, competitive individualism to a general smash.

Leaders of the Cotton South assure me that they will soon have a plan ready so that next year they will not plant cotton in the unlimited, planless way they have in the past. Instead of planting around forty million acres of the United States to cotton, it seems likely that we shall put in only about twenty-five million acres next spring.

This month, with the aid of 30,000 field workers, most of them volunteers, we are putting before the 1,200,000 American farm families that grow wheat a proposal to reduce, perhaps as much as one-fifth, their sowings of wheat for the next two years. The exact degree of reduction depends on whether other nations decide to come along with us in this effort to adjust wheat harvests to prevailing demand. They have promised to
let us know by next Thursday. I will make an announcement then. If these other countries will not co-operate the United States will go ahead alone.

We have had more time to plan and organize for a balanced wheat crop than we had in the case of cotton; but the three-year plan we are now putting into operation is an emergency measure only; it will not take care of the long-time situation. Again, like the cotton plan, it is only a start. The cotton plan, the corn and hog plan, the dairy, tobacco, fruit, and wheat programs that we are now launching—all these are experimental first steps in a new direction. Once you take the first step in that direction, you are forced to other steps and a wider outlook.

From that outlook, we begin to see that American progress thus far has been very largely a matter of beginner's luck. What we have called business sagacity in the past often turns out, when candidly examined, to be no more than a bet on the future of a continent which, at the time the bet was made, was incompletely exploited.

"Don't sell America short," was our motto; and for three hundred years or so our pioneers, our businessmen and all of us scrambled without limit to put our stakes on a sure thing. If you couldn't make money farming, you could probably make it speculating in land. If you couldn't make it by building a better mouse trap than your neighbor, you could probably get along by selling gilt-edged shares in Mouse Trap, Preferred. No wonder, as a nation, we came to believe that some sort of economic magic took care of us, and got us out of all the troubles that our greed and thoughtlessness brought down upon our heads from time to time.

We are not at the end of our progress as a civilized people. When we lose faith in gambling and turn toward fundamental values, we shall make this country a better place in which to live. As a start, we have undertaken to put our farmland, the basis of our entire national structure, into better order. In consequence, we are forced to think of what we ought to do with the forty million marginal acres of plowland we are going to take out of cultivation, because the world no longer will pay us for the extra wheat, cotton, and corn we have been growing there. It looks as if we were being forced for the time being toward a self-contained national economy, whether we like it or not. It is certain that we are farming a good deal of land that ought not to be farmed. Much better land, on which a family would have a chance to make a decent living, could be drained, irrigated, rescued from washing away, or otherwise reclaimed. In view of this, President Roosevelt has announced that as fast as good new land is brought into production, a corresponding amount of inferior
land will be taken out. This may mean bringing in one acre and taking out ten. It may mean planned migrations from one region to another.

But we are not going to have a random expansion of farm production, conducted without regard to human values, as we have had in the past. One of the great tragedies that has come out of the haphazard settlement of this country is to be found where families of the best blood and training, folks with a fine point of view and a fundamental philosophy, are slaving their lives away on farms that are not fit to work or live on. We want to fix things so that people are working where their labor will readily do some good, where they will have a real opportunity and the joy of working and creating without being penalized for it. The thing to do now is to farm only land that is worth farming and farm it better than ever. We need clearer thinking and the kind of efficiency that strikes down to fundamentals and builds from there.

When a country fills up and all the land and easy money are taken, the people of that country face problems that they have never met before. In attacking these problems Americans will shift in some measure from their ancient competitive, individualistic standards. Sooner or later, the question, “What is there in it for me?” will have to be translated into, “What is there in it for all of us?” I know how hard it is to change human nature, but human nature does respond to changed conditions; and it becomes plainer all the time that modern capitalistic society faces the choice between a widely, generously shared prosperity or none at all.

The millennium is not yet here, although the makings of it are clearly in our hands.

In November, with demands for compulsory control still running high, Wallace went to the Corn Belt and made three successive talks at Des Moines, Chicago and Muncie, Indiana, on the 11th, 13th and 14th. The five Northwestern Governors, he said at Des Moines, had demanded price-fixing; and he had replied that this would require ironclad production control. The Governors said that they would be willing to stand for that, and proceeded to propose “a system of compulsory marketing control, giving monthly marketing quotas to every farmer in the United States,” together with “a system of licensing every plowed field in the country.”

“One reason I have come out to Iowa at this time,” Wallace proceeded, “is to discover whether or not the farmers of the Corn Belt are ready for the imposition of compulsory control both of production and marketing.” If so, new legislation would have to be drawn: “It would be necessary, apparently, to declare agriculture a public utility, and then to begin the truly staggering task of deciding which farmers should have certificates of public convenience and necessity, of telling American farmers whether or not they would be permitted
to farm at all, what crops they might grow, how much they might plant; and how, when or where they might market them."

At Chicago, before the Land Grant College Association, he made fun, a little, of academic love of precedent: "Some of our forefathers may have kicked about it, but they didn't refuse to make the change from oxsled to buggy-riding, a change involving some new problems, involving wheels and harness and spirited horses. In our generation we have very little hesitation in diving headlong into the immensely complex problems of automechanics and aerodynamics. . . . The solution to our land problems is not to be found 'in the back of the book.' There is no book to go by; we'll have to write our own, chapter by chapter, from the fullness of our experience."

At Muncie he commenced a comparative examination of the "pain of nationalism" and the "pain of internationalism," which led, the year following, to publication by the Foreign Policy Association of the pamphlet, America Must Choose. Many passages from his speeches in 1933 were incorporated into this pamphlet later. These, for instance, from an address before the Civic Forum of the Town Hall Club in New York City on November 24:

"In an age when an advanced technology pours forth goods in a smothering abundance, fear of freezing to death and starving to death should be removed, as a matter of common decency, from the lives of our people as a whole. This is not a cloudy idealism which has no basis in facts. Only those really close to science can know the abundance that could be ours with even-handed justice and a generous distribution among groups. Our grinding efforts to subsist, in the mass, on the farm and in great cities alike, would drop into the far background in the light of the attainments we could command.

"Oh! how we have been under the weight of that need to subsist, to keep body and soul together, in the past few years. We can throw off that miserable burden. We can stand as free men in the sun. But we cannot dream our way into that future. We must be ready to make sacrifices to a known end. As we wrestle with all the infinite complexities which now beset us, the temptation is to give way to false and easy hopes and to easy ways of thinking. We cannot afford to dream again until we have taken hold of things as they are."

The Wallace paper of 1933 which is still most demanded from the document files in the Department of Agriculture is one of his last addresses of the year. He gave it a long title, The Social Advantages and Disadvantages of the Engineering-Scientific Approach to Civilization, and read it at a meeting of the American Association for the Advancement of Science in Boston on December 29. The great brain surgeon, Dr. Harvey Cushing of Boston, who heard this paper, had many copies made of it, and presented them to his students and colleagues as long as he lived.
THE ENGINEERING-SCIENTIFIC APPROACH

I suppose you are all more or less familiar with that concept of the cyclical rhythm of civilization which has been popularized in recent years by Petrie, the egyptologist, and Spengler, the German philosopher. According to this analysis, a civilization takes its origin in a profound, but as yet unexpressed new attitude on the part of a virile, agricultural people toward the universe. This profound, original feeling gives the bias to subsequent events throughout the life of the civilization. First, it manifests itself in great cathedrals and sculpture, next in painting, literature, and music, followed by science, mechanics, and wealth, and finally it manifests itself in dissolution which comes because of a lack of faith in the worthwhileness of the original attitude toward the universe and because of disgust with the material results which have finally been inspired by that attitude. According to this analysis we have now come to the late fall, the eventide of this civilization, and the coming of the engineer is like the coming of Indian summer in late October just before the cold and dreary days of winter.

Philosophical analysis of this sort, even when backed up by archeological research, can of course be merely suggestive. But after our experience with the World War and the depression of the past four years, we are led to question the American credo, based as it has been on faith in Progress Unlimited, derived from endless mechanical invention, improved methods of mass production, and ever-increasing profits. Without accepting either the implicit pessimism of the Spenglerian Twilight philosophy or the Pollyanna optimism of the old-fashioned American go-getter, I would ask you to examine superficially with me the contributions of science and engineering, the dilemma thereby created, and a possible way out.

For a hundred years the productivity of the so-called civilized world has increased at the rate of about three percent annually. Corrected for increase in population, the output per capita has increased at the rate of about one percent annually. In the United States the rate of increase of material wealth has perhaps been a little faster than this. But everywhere there has been apparent a little slowing down during the World War and especially since 1930. And so we have, on the one hand, those people who proclaim that inevitably the pre-depression trend will be resumed, and those who, on the other hand, say that the time of the quantitative ex-
pansion of man's control over nature is now rapidly coming to a close.

Engineering and science, combined with the division of labor, have made it possible for an hour of man-labor on the farm to produce several times as much as it did a hundred years ago. In company with the rest of you I have from time to time marveled over the tremendous contribution of the reaper, the binder, the combine, the truck, the tractor and the gang-plow, but inasmuch as we have now come to days of real soul-searching about all the things which we have hitherto called Progress, I think it is high time for all of us to analyze these various labor-saving devices a little more critically. Do they really save as much as appears on first glance?

True it is that the farmer puts in only a mere fraction of his own labor in producing wheat, as compared with a century ago, but what about the labor of the men who made the combines and the plows and the tractors? What of the labor of the men who transport the wheat the thousand miles to market, of the vast distributing and advertising machinery which seems to be necessary if we are to operate on the broad scale apparently required by the modern adaptations of engineering and scientific discoveries? Personally, I am inclined to think there is a real net gain, but it is a gain of the sort which can easily be lost altogether unless certain social adaptations are very rapidly perfected.

The change from the back-breaking cradle of our forefathers to the modern combine ought to mean a tremendous release of human energy on the farm for something besides growing and harvesting a crop. The days when wheat was broadcast by hand, perhaps from a saddle horse, in retrospect seem quite romantic, but to the farmer who had to spend days at seeding-time where he now spends hours, the romance probably wore pretty thin. The grind of the harvest of years ago, the sweat of men in the field and women in the kitchen, was an honorable thing, and even celebrated in song and story; but it didn't leave much time for living. The engineers and the scientists have given us the instruments and the methods whereby we can escape much of the grind; theoretically, there ought to be far more time for living and far more with which to enjoy life. Yet the reverse seems to be poignantly true.

The men who invented our labor-saving machinery, the scientists who developed improved varieties and cultural methods, would have been bitterly disappointed had they seen how our social order was to make a mockery of their handiwork. I have no doubt they felt they were directing their talents to free mankind from the fear of scarcity, from the grind of monotonous, all-absorbing toil, and from the terrors of economic insecurity. Things have not worked out that way.

I do not mean to imply that there have been no gains. Of course there
have been net gains, even if incommensurate with the hopes and promise of science. Plainly we must hold those gains, and add to them rapidly and extensively; but I think we can do this only if the planning of the engineer and the scientist in their own fields gives rise to comparable planning in our social world.

So far as science and engineering are concerned, I see no reason why the rate of expansion which characterized the "Century of Progress" should not be increased, at least for a time. While there are certain ultimate limitations in our supplies of coal, iron, petroleum, and in soil fertility, it is obvious to most of us who are close to any particular phase of scientific research or technical organization that there are imminent discoveries which, when applied, will increase per capita output enormously. Nearly every technical man knows in his heart that from a purely scientific, engineering point of view the most amazing things could be done within a relatively short period. Of course, in the world of hard fact the full effect of any revolutionary invention is not felt typically for fifteen or twenty years. But I feel safe in saying that our scientists and inventors today have enough new stuff within their grasp or just around the corner so that the world thirty years hence could easily have a total productive power twice that of today.

It is almost equally possible that the total wealth-producing power of the world a generation hence will be less than it is today. The trouble, if it comes, will not be in the inability of scientists and technologists to understand and to exploit nature, but in the ability of man to understand man and to call out the best that is in him. In solving this limitation the scientists and engineers have all too often been a handicap rather than a help. They have turned loose upon the world new productive power without regard to the social implications. One hundred years ago the power looms of England destroyed the cottage weaving industry, and during the early years of that impact misery strode over the countryside of England in proportion as the nouveaux riches gained capital to exploit their gains over the entire world. That kind of thing has been done again and again, and we have called it progress because the power of man over nature was increasing and because in the long run the common man shared in this increase. What happened to the common man in the short run, of course, could be of no concern to a laissez-faire society.

Most of us, whether scientists, businessmen, or laborers, have until recently looked back on the Century of Progress and called it good, but today the afflictions of Job have descended upon us and we must of necessity argue with Bildad, the Shuhite, and set ourselves right with our God
before we go forward into a prosperity twice that which we enjoyed before.

Acting perhaps in the capacity of Bildad, I would like to suggest that the very training which made possible the enormous material expansion of the past century may to some extent have made impossible the building of a just social system for the prompter and more uniform distribution of the wealth produced by the system. Most of the scientists and engineers were trained in laissez-faire, classical economics, and in natural science based on the doctrine of the struggle for existence. They felt that competition was inherent in the very order of things, that "dog eat dog" was almost a divine command.

The power discovered by the scientists and inventors was applied in the United States by a race of men who had developed a concentrated individual willpower and an extraordinary thriftiness as a result of several generations of pioneer agricultural training and Protestant church-going. As a result, human power of high spiritual origin, but debased by the sophistication of the "devil take the hindmost" economics of the colleges, took command of the exploitation of the discoveries made by the scientists and inventors. The scientists and inventors have an intense kind of religion of their own—certain standards to which they like to be true—and as long as they could get enough money to pursue their researches, why should they care how someone else handled the social and economic power derived from these researches? Perhaps that is putting the matter unkindly, but other explanations that might be advanced are not much more flattering. Those who delved too deeply into social and economic problems got into trouble, and so many of the best scientists felt it was not good form to do things which to certain types of mentality seemed impractical and which might endanger science's financial support.

It is my observation that previous to 1933 more than three-fourths of the engineers and scientists believed implicitly in the orthodox economic and social point of view. Even today I suspect that more than half of the engineers and scientists feel that the good old days will soon be back when a respectable engineer or scientist can be an orthodox stand-patter without having the slightest qualm of conscience. It is so nice to feel that there are great supermen from whom, directly and indirectly, you draw your own sustenance, who, sitting Jove-like above us lesser mortals, make possible the free functioning of the law of supply and demand in such a way that their profits enlarge at the same rate that our research expands. Like most of you in this audience, I rather like that kind of world, because I grew up in it; in some ways, I wish we could get back to it. But both my mind and my instinct tell me that it is impossible for any length of time. Of
course if prosperity returns within the next year or two, it is possible for us to think that we are back in that old world again. But unless the people who make profits and direct capital allocation to different productive enterprises have seen a great light, or unless we move forward into certain highly centralized forms of industrial and governmental control, we shall sink back into our former trouble.

There ought to be more than a little hope, it seems to me, in the fact that our engineers have demonstrated so successfully their skill in planning. In many great industries, the engineers have been able to mark out the contours of expansion and development ten to fifteen years ahead. If in the past they seemed to be guided by purely material and mechanical considerations, that has doubtless been because such considerations were necessarily the chief ones so long as we were conquering a continent. Today it is becoming increasingly evident that we must take into account the qualitative as well as the quantitative expansive aspects. This would suggest that in the engineering courses of the future the engineers should be given an opportunity really to enrich their minds with imaginative, non-mathematical studies such as philosophy, literature, metaphysics, drama, and poetry. Of course so long as an engineer is burdened with the necessity of putting in eighteen hours a day mastering calculus, mechanics, and the complex theories of electricity, he simply cannot give any effective attention to the cultural aspects of life. And if by accident an engineer, exposed to studies of this sort, should be enthused by them, he might for the time being become somewhat less effective as an engineer. We are thus exposed to a dilemma, which I would be tempted to solve by saying that probably no great harm would be done if a certain amount of technical efficiency in engineering were traded for a somewhat broader base in general culture.

It is difficult to see how the engineer and the scientist can much longer preserve a complete isolation from the economic and social world about them. A world motivated by economic individualism has repeatedly come to the edge of the abyss, and this last time possibly came within a hair's breadth of plunging over. Yet science, all this time, has been creating another world and another civilization that simply must be motivated by some conscious social purpose, if civilization is to endure. Science and engineering will destroy themselves and the civilization of which they are a part unless there is built up a consciousness which is as real and definite in meeting social problems as the engineer displays when he builds his bridge. The economist and the sociologist have not yet created this definite reality in their approach; can you, trained in engineering and science, help in giving this thought a definite body?
Today when the industrial nations of the world have skimmed most of the cream off the backward nations and the backward classes, and when there are no longer any challenging geographical frontiers to be conquered, it becomes apparent that we must learn to co-operate with each other instead of joining together in the exploitation of someone else. This means building a social machinery as precise and powerful as an automobile engine. How extraordinary is the patient vigor of thought which enables a group of engineers to blueprint and execute a new design! And how sloppy by comparison is our economic blueprinting and execution!

But it must be said in defense of the economists that their problem is infinitely more difficult than that of the engineer. The economic engineer has had no excuse for existence until recently, because no one gave him any orders for blueprints. Even yet the objectives are so loosely defined, the popular will is in such a state of flux, that the designing of the economic engineer is about like that of an automotive engineer who discovers after he has completed his engine that it was to go into a tractor instead of an automobile.

As I have said to many farm audiences, we are children of the transition—we have left Egypt but we have not yet arrived at the Promised Land. We are learning to put off the hard-boiled language of the past, but we have not yet learned to speak the co-operative language of the future. One is as different from the other as a human being is different from an animal. There need be nothing impractical, there need be nothing foolishly idealistic about a Christian, co-operative, democratic State.

We know that there must be a balance between productive power and consumptive power, and that excessive profits used to expand productive power beyond consumptive power are sure to lead to a breakdown. We know that the continued insistence on heavy exports in excess of imports by a creditor nation is bound to lead to disaster. We know today that the great unemployment is in the so-called heavy industries, and that this could be remedied if faith in a profound new excitement swept the country like the railroad-building boom of the early eighties or the automobile boom of the twenties. This boom might take the form of totally new railroad equipment, or the popularization of new and better airplanes, or the making fashionable of winter homes and winter industries for everyone in the South and a duplicate summer set in the North. In any event, whatever is done to stimulate the heavy industries it is to be hoped that the bonds issued to pay for the stimulation will be on a long-term, amortized, low-interest basis.

We know that we must have a monetary system which will bring about a better balance between debtor and creditor and between productive
power and consumptive power. These things can be measured and social machines can be built to deal with them, but before success can be expected, there must run through the rank and file of the people a feeling that amounts to a profound determination to deal with social problems.

There is something about engineering which tends to lay emphasis on logical, cold, hard, lifeless facts. Nearly all engineers have suffered the common punishment resulting from the remorseless discipline of higher mathematics, physics, and mechanics. No man has to work in college as the engineer. As a result, the engineer sometimes imputes a value to precise mathematical reasoning which it does not always have. There is such a thing as life, and the mathematics of life is as far beyond the calculus as the calculus is beyond arithmetic.

We can see in Mendelian genetics a complex algebra which has proved to be of some analytical use in determining the mechanism of heredity. Nevertheless, from the standpoint of producing superior plant and animal organisms, the engineering mathematical approach to life has not yet been especially successful. It seems to me that the emphasis of both engineering and science in the future must be shifted more and more toward the sympathetic understanding of the complexities of life, as contrasted with the simple, mathematical, mechanical understanding of material production.

The quantitative answers produced by the science of the past hundred years are not enough. They merely increase the speed of life without increasing the quality. Would that we had someone with the imagination of Sir Isaac Newton to develop the higher calculus of the engineering of life which is so necessary if our increased productive power is to increase total human happiness!

Haven't you sometimes wondered whether this whole Century of Progress might not be just a superficial and temporary phenomenon after all? The increase of physical output in three generations is so extraordinary that we have tended to think that this is what man is meant for. It seems to me a terribly inadequate yardstick of civilization. A man has food, clothing, and shelter; wherein does he differ from the beasts of the field? Surely these are not the things which distinguish the civilized from the uncivilized. Food and shelter and the other necessaries in any rational order ought to go without saying. They ought to be as automatic and as universal, in this day of technological achievement, as the air we breathe. It is from this point on that life begins.

A characteristic of the engineer is his willingness to face the cold truth about the task to which he addresses himself. Engineers have brought to their jobs a more fully developed intellect than any other class of our citi-
zenry. Sloppy, opportunistic thinking is simply inexcusable in the engineering world. I would be the last to suggest that the engineer abandon the precision of his thinking and his honesty in facing facts. I am merely asking that the same qualities be brought to bear insofar as possible on the more complex situations which have to do with living organisms and our social life.

In brief, then, we wish a wider and better controlled use of engineering and science to the end that man may have a much higher percentage of his energy left over to enjoy the things which are non-material and non-economic, and I would include in this not only music, painting, literature, and sport for sport’s sake, but I would particularly include the idle curiosity of the scientist himself. Even the most enthusiastic engineers and scientists should be heartily desirous of bending their talents to serve these higher human ends. If the social will does not recognize these ends, at this particular stage in history, there is grave danger that Spengler may be proved right after all, and a thousand years hence a new civilization will be budding forth after this one has long laid fallow in a relative Middle Ages.

III: 1934

Prior to his entrance into public service, Wallace was at one with a vigorous pressure group, behind the McNary-Haugen bill. Some of the men who now came to put the heat on him, as Secretary, were his former associates. He had a friendly feeling in general toward the “farm leaders,” but their excesses of zeal disturbed him; and certain of the Washington lobbyists exerted pressure in ways which Wallace soon came to consider no less than attempted “political blackmail.”

Reviewing the first year of Agricultural Adjustment in his book, New Frontiers, “Congressmen, Senators and the people in administrative positions are fully familiar,” Wallace reflected, “with the technique that we may call hot spots, pressure groups and news drives. But ninety-nine percent of the people who depend for their understanding on what they read would be amazed if they could see the method at first hand. The injudicious use of these methods may eventually cause the United States to follow Rome into history.

“Insofar as these methods are used to awaken a sleepy government to its fundamental responsibilities, there can be no sound criticism. Energetic, yet selfish people thinking solely about short-time or regional objectives put on