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THE PRINCIPAL FEATURES OF WORLD WAR INDUSTRIAL MOBILIZATION
AND THEIR POSSIBLE APPLICATION IN FUTURE EMERGENCIES

by

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I am going to try a new stunt - I am going to try to speak extemporaneously. I ought to know the subject, but whether or not I can present it here I do not know; however, I am going to try.

Industrial mobilization means the arrangement of a country so the fighting men can get what they want in men and materials, when and where they want them. Modern war is fought not only on the land, on the sea, and in the air; that is, on the war front, but on the home front behind the line; and also on the third front, the neutral front. By the "neutral" front I mean those great countries or areas which lay outside of the fighting forces. I shall deal with each one of these in turn.

While the fighting forces should receive each according to the quickest winning of the war, and that of course there cannot be any question about, this should at the same time be done so as to keep as far as possible the home front. That is why you read a good deal about the so-called ceiling on prices - home front control. Those of you who are familiar with my recommendations, which I think have been adopted by the Army and Navy, know that I have suggested that we put a ceiling over prices as of a day previous to the declaration of war, when there is some peace-time relationship between prices, some ebb and flow of the law of supply and demand. The idea of putting a ceiling over prices is not so much to take care of the Army and Navy, because they always have the power of commandeering, but for the purpose of keeping the home front satisfied - that vast number of civilians: men, women, and children, who have to stay at home; to protect that large number of men and women who have to work in the factories from being exploited, or being either willingly or unwillingly profiteered upon by the manufacturers and producers of goods. Of course some are not old enough or able to work in the factories. If we did not place a ceiling over prices no one with fixed wages or salaries or income could possibly live. Also, you hear stories of profiteering, of exploitation, which dissatisfies not alone the people at home but permeates into the trenches of the front line. If you remember, Ludendorf said that his home front

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crumbled long before his war front did. That was due to the neglect of the civilian population.

I know that I am neither an orator nor a good speaker and I know that I bite my ideas and my sentences off, so at the end of my address I hope that in any phase of this thing which is not clear to you, or that I have not made clear to you, you will have no diffidence or bashfulness about asking questions to clarify the subject in your own mind. Maybe you might clarify my mind a little.

What I have in mind in order to keep intact this home front, which is so important, is so far as we can to have the status quo remain in the various relationships between segments of our society. As you know, when we put a ceiling over prices there will be immediately established a price-fixing committee which will raise or lower, according to the necessities of the occasion, prices of anything or any segment of production. This arrangement will prevent profiteering.

There may occur to you various objections to this plan or some impossibility in carrying it out, in which case I want you to ask me questions. I remember in an address before the War College some man said: "But, Mr. Baruch, how can you tell what these prices are? For instance, if I order a suit from a tailor, how does anybody know what the price of that suit was on such and such a day?" I said: "You know and the tailor knows." That is true of all prices as of any date that you might set, isn't it? - you would know and the fellow from whom you ordered the things would know. In this day when we have war and rumors of war there would not be anything difficult about setting a ceiling over prices as of this date, thirty days ago, or whatever it may be. What everybody has in mind who criticizes that, is the condition of affairs that existed when we entered the World War, when the whole structure had been shattered by the tremendous demands of the Allied forces who competed one with another. And then on top of it came our own demands and we had to handle it in a different way. We said: "No higher prices," and we started to push them down. However, you see how simple it would be to put a ceiling over prices. I want you to keep clearly in your mind that that is the most important thing in keeping the home front, which is just as important as the battle front.

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Putting a ceiling over prices will absolutely prevent what we call "run away markets" and that dread disease which attacks in war and threatens us in peace - "inflation." I believe no system of taxation alone will do that. Those of you who are aware of my recommendation know that I have suggested two things: put a ceiling over prices, have a price-fixing committee to readjust such things as are necessary; and put into action a tax program which will skim off all that you can up to the point where you will not prevent the Army and the Navy getting what they want when they want it. I had quite a discussion with some people who had an idea that they could carry into effect something like "production for use." I think that is a very fine and noble idea but when you are faced with a ruthless enemy you haven't got time to change any philosophic idea of the foundations of our society which has been geared on profit. In war time we think people will practically throw profit aside but we have to let them have something because people have to live. To keep the home front where it ought to be, however, we have got to see that that is the very lowest amount which will keep the machine going. The great machine always is the fellow in the front line. The home front is important but if you do not keep the goods moving into the Army it cannot fight.

I was glad to see the other day a statement by General Craig, your distinguished Chief of Staff, in which there was a discussion of the various divisions of the fighting forces: in the air and on the land. He said what I think is the true thing: that it is the soldier with the cold steel in his hand that is the dominating influence in war. We have got to let him have everything, but I want to do it without despoiling the people at home unnecessarily. I would take the last drop of water and the last bit of bread from the home forces in order that the fighting forces shall have it but I want to prevent the taking away of things from the home people that the Army is not ready to use.

In the beginning of the last war we heard much about the various schools of thought regarding prices. There was one school of thought that said: "Let them go as high as they want and we will take it off through the excess profits tax; we will let the law of supply and demand work." The trouble with that is that the prices will go so high you could not see them. Even if a manufacturer got 10% or 15% net to himself - that is, if the excess profits tax

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were 85% or 90% - he would still make too much if prices were not held down, if you let them go with the law of supply and demand; and the poor, unfortunate worker for wages, whether it be the toiler with his hands or the white collar brigade, would not be able to buy a sandwich once a day. Incidentally, the law of supply and demand demands time in which to work, and, as you gentlemen know, you haven't got time in war to wait until a fellow brings in the stuff; you have to have the stuff right away, to throw it at the enemy. I know the law of supply and demand will work but we ought to help it work by preventing the breaking into what I call "uneconomic areas" and unnecessarily destroying peoples. What is needed is time for it to work. If any one would like me to dilate upon that subject later I will, but I want to continue with my address so as to cover the whole subject.

There is a very great difference in the prices and profits in peace and in war. In war you have the urge of sacrifice. Everybody wants to get his place in the line; they want to be in the push-over no matter what it may be, and people do not think about profits as much as they do in time of peace. Of course there are always some people who do, but a large majority of people drop that subject. Human nature being what it is, however, you have got to pay them something. I am willing to pay them something but that something has to be just enough to have the machine function and no more. I repeat again that the point of function must be to see that the fighting forces get what they want. The American people will never forgive us if we lose a war. They will criticize a lot and holler a lot but they will say "Atta boy"! when it is all over if we win the war.

I have spoken of what I call the direct front, the war front. I did not go into that because you know what it is. I also talked of what I call the home front - the taking care of the civilian population; seeing that they get whatever is left; educating them to ask only for what they need and not for what they want. I wish we could do that in peace time but we cannot. You and I are not going to enter into any discussion now of the philosophy of present Governmental activities because we have plenty to do in discussing and thinking about the carrying out of activities in war.

There is still another front which I would like to allude to because we have never said much about it in our discussions. Just before I come to that, however, I want to say that of course I have not gone into the details of mobilization. You know what mobilization means - getting everything for the fighting forces when they want them. That means somebody is going to furnish the money. The money is going to be furnished; the various products are going to be allocated, the system of priority is going to be working for that purpose; the railroads and the shipping, etc., are going to be operating so the Army may have what it wants. My theory of the Army is that it should know what it wants - do the best it can because what it wants is frequently not known until it meets the offensive, the other side. They should state the men; they should state the materials and kinds; they should sign the contracts; they should inspect; and they should use the things they want and be free in that field. However, I do not want them to get over into the field of industrial activity any more than I want the civilians to tell General Pershing, who is in command of the field forces, how he should run that show.

I am now going to get to what I call the neutral front. We all know that there are a great many things which are not produced in this country. We are all pleased to note that nitrate is now out of that classification. In the production of artificial nitrates we are able to get all we want for any explosive and propellent program. There is a large field, and I think one of the most fruitful sources for your study, in the things that we do not produce in this country that are going to be extremely difficult for us to get: nickel, rubber, the hardening metals. By "hardening" metals I mean tungsten, molybdenite, monazite, and even such things as mica. I do not know whether that is necessary now or not but one of the things that I was faced with when I first came down here was that we had to have a certain kind of mica for sights of big guns which we could get only out of India. I do not know whether my memory is correct, or whether that still is so. At any rate, we needed innumerable things we did not produce in this country. One other was platinum, used in the making of explosives. Tin and manganese were others. My mind is not functioning on those things just now, but you know that there is a field that is yet vacant in this country. That is the neutral front. We have to go out and get those things

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from neutral countries. We cannot get them from the enemies so we have to get them from the neutrals; therefore, there has to be organized as a part of this industrial mobilization what we had during the war, called a War Trade Board. The purpose of that was to exclude from the enemy the things that were leaving our country and going to neutral ports and to also exclude things from moving from the neutrals directly to the enemy. Then above all, to get the things from the neutral countries that we needed for our own activities. The way I propose to do that has been suggested from my own activity. I do not know whether you are familiar with it but it will just take a minute or two to repeat it. It is to have as a part of the general scheme someone who will take over the exports of all things from America. The things from America will be in demand from the rest of the world always; they will probably be in very large demand at very high prices because everybody will be afraid they will not be able to get anything and therefore the prices will rise after the first break. At least that has always been the history of war: to take those things and through this agency to sell them at the highest price; paying our own people whatever the fixed price is here, and with the excess profit from that to buy and trade with other countries for the things that they need in order that we might get the manganese from Russia or the tin or rubber from the Straits Settlements, etc. It is an extremely important phase. I know the Army made recommendations to the Government to buy a supply of tin and manganese and various other things but the recommendation was never acted upon. Therefore, we have got to do the best we can in the circumstances and that is to form an organization that will be able to take what we have here which we do not need, and trade it for the things we need and do not have. That is what I call fighting on the neutral front. That is an important thing for us.

Another very important thing, which was the most exciting thing in the whole war, was our trade with Chile for nitrates. Without the Chile nitrates we were up Salt River for good and all because there was not any possibility of any production, no matter what source, for our propellant or explosive program except the fields in Chile. That was a question of trade - giving the Chileans what they needed for what we had to have. As a matter of fact, they could have made us pay any price because that would have been the price of victory - without nitrate, as I said, we were gone.

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Another thing was this: Sweden sold a great deal of iron ore to Germany. We had to figure some way of not letting the Germans have it. You can never tell what last little thing is going to break the backbone of the operation while the Army is fighting, and we were trying to give our Army everything it wanted. You fellows have got to do that. You have got to do everything in the world to drop a bomb on the fellow at home. One of the things we did was to go out and buy the Swedish ores. The Germans the last year or so could not get Swedish ore because we were willing to pay more. That is what I am trying to illustrate as briefly as I can - the battling on what I call the neutral front.

In reference to that, we are facing a very serious problem in what we call our Neutrality Act. Of course it is not a neutrality act at all. It was originally started by those people who desired (and I can understand it - I do not criticize it but I do not agree with them; I heartily disagree with them) peace at any price. Peace at any price would result in our being exactly like poor, miserable China today - four hundred million people against sixty-six millions - and if over the years we become soft as the Chinese did we are going to get into trouble too. The Neutrality Act, in my opinion, was passed because the American people had made up their minds they were not going to go to war no matter what happened, except in an invasion, and there have been placed in that Neutrality Act, which I have dubbed publicly a "scuttle and run policy", very dangerous things that you have got to think about. Let us look at the present Sino-Japanese War. I believe that is what the intellectuals call the conflict. We have a new way of having wars now. Nobody declares war but they just kill each other off. In Spain there is such a war. This has been done frequently in Spain before. I think the Carlist Rebellion went on for years. It is true also of the Latin-American countries. The Japs improved upon it. They have not made any declaration of war. They have taken a large part of China; they have blown up our ships, but that is not war. If we say: "This is state of war," the President has no discretion about it; he must immediately put into effect certain embargoes. Those embargoes are on what we call lethal instruments, although a better name would be death-dealing instruments. You gentlemen know it is important to have bombs and lethal instrumentalities; it is also very important for the Army and civilian

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population to have life sustaining instrumentalities, wheat and various kinds of food. In state of war the President can declare that nothing can leave the American shores in American vessels to go to belligerents - it must change ownership at the seaport. Of course that leaves Japan where she can get anything she wants and the poor Chinks cannot get anything because they do not have any ships to protect them after they once get on the high sea. Suppose we go further and say we are not going to ship anything to anybody. We can do that under the Act. That is all very well when we are not at war. However, suppose some day we get into a war with Japan or some other country and the other countries adopt the same policy with us and say: "This is a great, noble, and fervid religious idea, this idea of neutrality. We are not going to ship to anybody at war any of the things they use, even to the civilian population. You cannot have any tungsten; you cannot have any rubber; and you cannot have any of the things that you need." It is a double-edged sword. It is all right when we are not engaged in war but it is a very important thing for us to consider that that neutrality may go into effect some day against us. I do not suppose I will be here; perhaps some of you gentlemen will. We may be faced with the fact that if we do not have certain things here we are going to have a very difficult time. The basis of every idea I have ever had in industrial mobilization has been an M-Day upon which the whole world will be against America. It seems to me that is what we ought to consider - then we will be safe.

I might touch briefly upon what I think the military ought to have. I think they ought to have such things on the land, in the air, and on the sea as will be able to hold any enemy off in any circumstance. Also, we ought to have within the country such things as are necessary, and to prepare those things and give them to the men that have to do the fighting on the land, on the sea, and in the air. There are many things which we do not own in the proper amounts in this country. Of course we can go a long distance on what there is here by reclaiming. In this respect, if you will permit me, I will make a suggestion. I do not know whether you have it or not. You should have it - I would if I had anything to do with it. You should have a committee making a study and keeping abreast of what the Germans call ersatz - substitutes. I saw the other day at the General Electric laboratory some very wonderful things. Dr. Coolidge over there could

tell you more about these things than I could. He has been brought up in that atmosphere. A substitute for rubber for some purposes, curiously, had been discovered at the same time by the Edison people and the Goodrich people. Neither one nor the other were studying about it but they both found it. It will not do for rubber tires, but if we have any rubber through reclaims we can make some kind of a showing. Also, do not forget that with twelve billions of gold we can get a lot of fellows on the outside to do a lot of things. That is a question of wisdom in handling the trades, etc. I would not let the Army come into that because you gentlemen are trained to fight and not to trade, although I have found among the Army fellows that are a good deal smarter traders than fellows outside of it. That is a very important subject and I know that you have given some thought to it. You have the Bureau (I do not know whether you call it Mining or what) presided over by a tip top man, Finch, in the Interior Department. You may be organized and in touch with him. You have some wonderful men in the Department of Agriculture. We ought to have a nucleus of these substitutes for what I call the neutral front activities. That is what I mean by a neutral front. We have got to fight on that line. We have also got to keep things away from the other fellow, the enemy, so he cannot get them; give every chance in the world to the ones who have to bear the brunt of the fighting. That brings up the subject that I have seen the Army fight for. I was trying to do a little fighting myself, a little trading in getting manganese, tin, rubber, and some of these other things. Sometimes it is very interesting to see what these manufacturers put over when they try to get us to make that fight for them. I do not think much of this embargo on scrap tin and scrap iron. I can get more tin in a couple of shiploads of tin than they will ever get out of scrap tin, and we will have it right here. If they embargo scrap iron they have got to embargo all forms of iron and steel. They use iron; they of course have to have it; but they also want to have it cheap. I have an idea the boys are trying to put that over, put down the price of scrap iron; get it cheaper and make a little more money.

I have already alluded to the study of substitutes. It is really wonderful what those Germans have done.

This may be of value, too, and therefore I allude to it. Everybody does not agree with me so of course I

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think I am right. The Germans have made all of these things, and they are wonderful people. You can never beat them. They are tough fellows and they can suffer. They just pull in their belts. It is marvelous what they have done in the way of taking the stuff they had to sell and trading it off for the things they have needed. However, I can hear the belt squeaking now. They have pulled it in pretty tight. At any rate, it is something that shows you what really can be done even in peace time, with no effort on the part of the people to exclude Germany except on moral issues, and people do not like them. I do not like them because they do not like me. That is the only reason. I have the greatest respect in the world for them as fighting people, people who know how to suffer. There is an evidence of just what happens in war, only it takes a longer time in peace time. A nation can go on and on and on and give up and give up. It is marvelous what a human can stand. I sometimes read history and learn of the great devastations of nature. Some people call them visitations of providence. Sometimes I read of great devastations of hordes of people such as the Huns, coming I believe almost as far as the gates of Paris. When you read of how they murdered and burned everybody and destroyed everything you would think the human race could not persist any more, but here we are. It is marvelous how we can go back to the primeval man when we are forced to do so; how much we can give up and how simply we can live. That is one of the things you have got to keep in mind. The man who runs this industrial show has got to keep in mind that people can give up a lot of things but the thing to do is not to have them give them up until they have to. Do not let anybody make any money out of the giving of it up and they will stand anything. It is marvelous what they will stand.

The weakest point we have is that we haven't got these other things. If today the President were to call me in with the Chief of Staff of the Army and the Navy and say: "We are liable to get into such and such trouble, how about it, boys?" I would say: "The first thing we will have to know is what we have; what we do not have that we ought to have, and how can we get it quick." Of course you cannot wait. Many times the Army may have to move and a strategic movement might be worth more than a loss in other things. You have to move pretty fast on that front too. You see, that is what the industrial man has to do. He has to say to the military man: "What do you want?". "I want so and so." "I can or cannot give it to you yet." I think

that is what is keeping the Germans from moving. I think what has really kept the English from moving is the fact that the fleet was not ready, and so anybody can cuff them in the ear. The Germans cannot get what they want. You gentlemen probably know more about it than I do, but the German Chief of Staff has told them: "You can not beat them yet." They are not ready for it. They told Hitler that about moving into the Rhine but he moved in anyway because he was smarter than they were. He knew the politics of the situation: that the French were not ready and would not fight and neither would the English fight. Of course Cordell Hull can say what he wants to say and no matter how shocked he is, Japan says: "I am very sorry, I won't do it again," and zingo! another one. We know perfectly well what Japan is going to do - walk in and take China while other civilization is busy; go just as far as she can. I do not know how we can stop those Japs myself, especially after that great religious revival we had here called "The Washington Disarmament Conference." We would have to do what Japan is doing. I know they are talking about having a revival of a board, with Army and Navy and other people on it, to study these problems, with some younger men to take the places of the doddering old fellows like myself who really perhaps could not go through with it. In connection with that you have got to have the thing that we had - this studying of ersatz. There were some wonderful things discovered in the war. We have research men that equal any anywhere in the world, but because we are rich and soft we say "We can buy rubber cheaper than we can make it." As a matter of fact, we can produce rubber in the Imperial Valley and are producing it. When I say rubber I mean rubber; I do not mean something that merely smells bad when it burns but something that has resilience. We can produce it in quantities; it can be produced in from three to five years.

When I use the word "Army" of course I mean the Army and Navy, I mean the fighting forces. I am glad to see that the Army and Navy are getting together because I used to have to referee a lot of fights. I thought sometimes we would have a repetition of the Battle of the Marne but after they saw what the problem was they got along very well. I think these colleges, the Industrial College and the War College, and the studies you are making are showing the necessity for mutual concern of the problems one for the other. Probably in any air

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attacks the Navy and the Air force will be first in the line of defense. After that, of course it is the boy with the cold steel that does the trick.

I am sometimes amused to hear discussions about these great armies of the world, particularly about the one in Russia. They can take an airplane and drop five thousand men behind the lines! They do not realize how dizzy the fellows will be when they hit the ground. A couple of Irish cops could fix the whole bunch of them. It is all very well to talk about dropping men behind the line but, as you know, formation, organization, food, clothing, and ammunition are necessary. We all know that when we have an air force and the boys go up and get at each other, zingo! something happens and somebody has to be there who knows how to repair that airplane or it is out of order. Our boys know how to do that; the Russians cannot do it. I think one thing that has been demonstrated is the fact that Russia is a great spineless monster, unable to do anything except emit large noises. They might have done something to help along poor, suffering France and England in the great problems that have come before them, but they just have not been able to function. I do not know what would happen if anybody went into Russia. It would seem to me a good deal like punching a pillow. The reason they cannot function is that they do not have the organization, and the reason countries like little England with forty odd millions of people can function is that they have an organization behind them. They can get the stuff and put it in the hands of the fighting men. I have always visualized that when I have thought of the industrial mobilization of this country.

I have not been going into detail about these things because I presume you are more or less familiar with them. I see one or two gentlemen here who probably study this thing more than I do and doubtless know as much as I do.

The greatest force on the industrial side of it is what we term the priority. We use the priority to time everything together, to synchronize the whole move. There is no good in getting anything ready for the Army unless the Army has everything ready to move. In the movement a fellow pulls out his watch, the whistle blows, and he starts to move. Everything has to be there. What has to be done back of the line is to get that stuff into those hands; they have got to have the goods: the trucks, the

airplanes, the tanks, and all the other things. They have all got to be there, because when the General wants to do this or that those fellows have got to have that stuff. We have got to have that synchronizing. The power to commandeer was the greatest thing we had in the war, but the thing did not work until the President said: "Nobody can commandeer except with the approval of the Chairman of the War Industries Board." He wanted to go further and say: "The Chairman of the War Industries Board will commandeer", but I did not think it was wise to take away from the department something they might never give back to it. You cannot commandeer without this synchronizing machinery, without getting the whole thing working together. When you order something you have got to get all the innumerable little parts together that make the whole. Like an automobile coming off the line, everything has got to work because when you move you have got to have everything. The organization ought to be one that will be flexible because when you start to move it might be with your present demands as it was with the things that were used in the beginning of the war: shells, bullets, shrapnel - all of a sudden everybody wanted lead and antimony. We had a terrible time getting the latter from China; had an awful time trading to get lead and antimony; all of a sudden zingo! and no more. Then we had to go to high explosives. That is the kind of an organization you have got to have.

There is one thing I want to draw your attention to that I hope you have remedied. I know you have remedied most of it. If I seem critical or super critical, please put it to my excessive zeal to see the Army and Navy, of which I like to feel that I was and am a part, function when the time comes. On every side I see evidences that most of the things have been removed. I am going to read a little piece. It is now half past eleven. When do you want me to stop?

Colonel Jordan: You go ahead, sir.

I want to give these fellows a chance to ask me some questions. I see some of them writing them down already. What I want to talk about is our desire for perfection. We all know that none of us is perfect and yet we always want the other fellow to be perfect. When I say our desire for perfection, I mean our desire to get something better than we have. Really when you are fighting a war

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you have got to use what you have in hand in great quantity, and try to get an improvement in the other. I am going to refer to some of the things that we had in the Army. Doubtless it is not necessary and you may say: "That old fellow does not know what he is talking about because we have done away with that", but human nature being what it is I am going to refer to it again because I think it is very important. I want to talk about the industrial-Army jam. The Army was the chief offender because you had your various competing bureaus. However, I am quite certain, knowing what we were doing toward the end of the war, that you have perfected to the extent that you are not going to have any bureaus competing one against the other. But it will all be centralized in one place. If it is not so, you all ought to be shot at dawn. I am quite sure, however, that I do not have to speak of that again. Here is something that is so human I am going to speak of it: "One of the great difficulties proceeding from the filing of an order under a contract with the principal producer was the astonishing proclivity of the American mind for trying to improve existing types. At the very outset of the war, the most effective machine gun on either side of the Allied front was the so-called Lewis gun -- the invention of an American -- rights to which were available to our Government. A Board was convened to consider the substitution for the American forces of a very much improved machine gun called the Browning. This gun had never been made except in preliminary models. Facilities were in actual operation for the supply of a vast quantity of Lewis guns for the Allies! Without going into too much detail, the decision to substitute for the Lewis gun, which could have been turned out in enormous quantities, the improved Browning, stopped machine gun production for our forces while jigs, fixtures, and toolings were being provided for the Browning gun, with the result that the supply of the new gun in quantities necessary for the tactical needs of the Army never did occur.

"Exactly similar circumstances surrounded the supply of practically every important piece of gunnery and small arms for the American Army. For the Springfield rifle, which was perhaps the best rifle available in any army, was substituted a combination of Springfield and modified Lee-Enfield, a British type of rifle.

"Considerable controversy arose at the very beginning over the type of artillery to be used by our Army. It

was well recognized that our field guns were of a type distinctly inferior both to the British fifteen pounder and the French 75 mm. The latter gun was the most effective gun on the western front insofar as rapidity and intensity of fire were concerned. It was slightly outranged by the German guns but its remarkable speed and accuracy counterbalanced that advantage. The 75 mm. gun, however, was of a secret design that had thus far been revealed to the manufacturers of no other country. The French generously offered us that secret and cooperated with us in our attempt to get in the production for the supply of our own forces, meanwhile leaving us to rely on French manufacture for the artillery of the first thirty divisions to arrive in France. Our experts, upon receiving the plans and after placing orders both for the guns and the ammunition therefor, immediately proceeded to attempt to redesign -- during production -- this acme of perfection of the ordnance art. As a result, not one single 75 mm. gun was delivered intact from these shores to the battlefields of France. Also, as a result of our attempt to redesign the shell, not only for additional streamlining but also for the thickness of wall and quality of material, no American-manufactured shell and only about ten thousand rounds of American manufactured shrapnel were fired on the western front.

"A very similar circumstance attended our attempt to supply aircraft to our own armies. With our vast experience in automobile manufacture and notwithstanding the fact that the airplane was first invented and to a large degree perfected in this country, our facilities were not great and although we were offered all the aircraft designs of the Allies, which were in successful operation, our aircraft division immediately began to design absolutely new planes; and notwithstanding the most extravagant promise of darkening the skies of the western front with America-made planes our deliveries were inconsequential.

"One of the first steps taken by the War Department was to discard all approved Allied types of motors and with a great deal of publicity a new motor called the Liberty was put on the drawing board. While this motor proved the most effective produced in any country, this changing of motor design resulted in retardation not only of aircraft production and delivery but of the ambitious tank program and in a most astonishing proposal

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in connection with truck production. The British and French armies in very large part had moved on the wheels of standard type of American commercial trucks, and the whole motor industry was geared to the production of these trucks. As a matter of practice it took at that time a full year for design to be approved, tooling set up, and manufacture of even a slightly different type of truck than that in production.

"In the summer of 1918 an Army Truck Committee returned from France. It was shortly called to my attention by General Johnson that a new motor division had been set up in the War Department and that on every automobile factory was to be imposed a complete and radical change of design, to a so-called Standard B military truck. Only a most vigorous interposition of the War Industries Board prevented this change, which would have absolutely paralyzed truck production in the United States for a period of several months, according to the advice given by Mr. Charles D. Nash."

I read that not in criticism but to show you the problem with which we came in conflict. I am quite sure you must have learned that we have got to use what we can get now; we have got to get quantity production. Of course you can keep trying to improve, make suggestions to the manufacturer. The manufacturer is trying to get a truck or an engine or something that will move. I know that the Army in its operations has experienced that, as perhaps no other people have, in the use of airplanes and in carrying enormously heavy loads through all kinds of terrain. We want the best, but I am sure you must have learned that we must use what we can get in quantities. Those who know this may be laughing a little bit at me, but even at that expense I made up my mind to draw that to your attention.

I have no more to say to you except that I am going to close with a story. I do not know all about these subjects. I do not know whether I have learned much; I think I have. I really think I have, between you and me, learned something about this subject. You know the difference between a man who learns from experience and one who does not is that the one who does not is a fool and the one who does sometimes is a wise man. I think I have been wised up just a little, and I am trying to pass on to you what I have learned for such use as you see fit to make of it and for such criticism as you may think is beneficial.

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While talking about this thing I was reminded of a chapter that I wrote on the subject of speculation in a book which bears, as Al Smith says, "a court of appeals" (ten dollar word) title - an autobiography of myself. I am reminded of a remark on the subject of speculation, and I wish that I had thought of it but it was made by Sir Ernest Castle. Perhaps some of you do not know of that very man of insignificant German birth who went to England and made a vast fortune; became the Confidant of the great Prince of Wales of our grandma's youthful days, and whose descendants of today married even into the Royal Family. They asked Sir Ernest Castle, who still spoke with a German accent, about speculation: "Sir Ernest, tell us about speculation."

He said: "Well, I will tell you. When I commenced in a small way and began to make a little money people referred to me as a gambler; then when my operation enlarged a little and I made more money and became more successful they referred to me as a speculator; when the scope of my activities widened in every direction and I made a great deal of money they called me a banker; and, do you know, all the time I was doing exactly the same thing!"

In all of the fields that we enter if we use our minds and try to draw upon our experience we will all be doing just the same thing all the time.

Now, gentlemen, you shoot.

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Colonel Jordan: Gentlemen, are there any questions?

Q. Mr. Baruch, the statement has been made by a gentleman whose accomplishments and writings are studied with much interest in this school that there are three powers necessary to organize a war-time national economy, the power to commandeer, the power to control priorities, and the power to fix prices. Now here is my question: would it not be possible so to exercise the power of controlling priorities as to obviate any necessity of commandeering?

A. Well, you have got to have one. If you don't have the power to commandeer your priority isn't worth anything. I would like to have all three of them. I think we could

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get along with what we have now if we had to. I mean that if the show started tomorrow I think that we could move in with the knowledge that you gentlemen have gained of how to handle the thing and the experience we have had, but I would like to have all three of the things you referred to. I would like to have the ceiling on the prices, the power to commandeer, and a special priority law.

Q. Mr. Baruch, The Army Industrial College will have a problem this year concerning the licensing of industry or the control of strategic and critical material in time of war. The question will arise as to the desirable extent of any licensing system which may be instituted. It is my opinion that if a licensing system of distribution is used no other licensing activity will be necessary. Will you give the College the benefit of your views on that matter?

A. I agree with you. If you have the power to license the distribution you can't do anything with the balance of his product. Another thing, I don't believe in taking over another man's activity. We have enough to do to fight the war and we want to have every fellow in line doing his job. I don't think it is a good thing. I don't agree with these fellows who had in the bill -- I believe it is still there -- about taking over the factories and putting the men in charge under the military. Is that under the bill, Colonel?

A. It is in the bill but it is permissive. The war and Navy Departments don't believe in it.

Mr. Baruch: With a commandeering order you still have that power to take over and do what you want. I want to tell you - this is where I pin a couple of medals on my own chest. Just forget me and think about all those thousands of wonderful men we had, civilians and from the Army and Navy and Marine Corps, who served with us. God seemed to have given them an extraordinary wisdom of how to handle these problems. A wise administrator is better than a good law. I would rather have a wise administrator with a bad law than a fool administrator with a perfect law. You have got to think about that. It is a question of the wisdom with which you handle these problems. That is one of the good things about this contact that you men are now having with industry. You are learning what their problems are and they are learning about your problems. But remember the human approach. That, I think, is one of the difficulties that we are having in this country today, the human approach to these things. I

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don't know whether most of you are married or not, but I can't make my wife or my children do anything; but I can sometimes persuade them. Well, I see you all agree with me.

Q. Mr. Baruch, in your opinion would the authoritative control exercised after the spring of 1918 have been practicable or advisable before the winter of 1917? In other words, is it practicable or advisable at the beginning of a war, due to the peculiar nature of our political institutions?

A. Well, that question is subject to two answers. At that time we didn't know and the people didn't understand. I think the thing grew almost as fast as it should have grown. But today we know and we want to hop right in. The country knows that we know what it is about. Don't think you have to improvise any more. We know just what we can do. Don't try to improve too much on what we learned in the war. Let's start where we ended. There has been a lot of talk. My friend over there, the Colonel, knows about how they are endeavoring to change almost the basis of society in case of another war. I want the Army to keep fighting along with me. Never mind whether they call you Dillingers or not. One distinguished senator referred to the Army as Dillingers. I was glad because I knew that then the public was on our side because the public believed in the Army. No matter what people say, the American people believe in its fighting forces. They believe in the people who are the guardians of peace, whether it be your soldiers or the ordinary policemen. They do have the very highest respect for the guardians of that peace, and when that distinguished senator referred to the Army as Dillingers I chuckled to myself because that will be all right.

Q. Mr. Baruch, do you advocate the extension of your ceiling over prices to labor prices?

A. Yes, sir. All prices, goods, services, everything.

Q. Before the War Policies Commission recently in Congress you made the statement, I think, that the Army and Navy should attempt to keep in touch with industry. Now you know that we have reserve officers and what is being done now. You spoke specifically of the new leaders of industry when the older ones pass out of the picture. Have you any suggestions as to any other things that the Army and Navy should do than they are now doing? How do you find these new leaders, and how do you spot them? Is there any way of getting in contact with them or any method?

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A. There is a way of getting in contact, but you put me on a tough spot when you ask me how to spot them. Now let us say, for instance, that today, if I were so honored as to be chairman, I would go out and find some fellow to take my place. We have got to do it exactly the way we selected in the war. We have got to throw politics out of the window. This is no place any more than in the Army for a fellow to be put in command because he is a good fellow. He has got to be a man that can deliver the goods. That is what we want. Whom I would take I don't know. The chairman ought to have three assistants and those three assistants I would call flying executives. The chairman says, "Bill, take that problem and bring it back to me solved." I call them flying executives. You have to always have three fellows as assistants to the chairman who can handle any problem that comes up that he can't give all his time to. I would want to get a man who would be sure to get what we wanted but I would want him to avoid the exploitation of the public. I would take these various men and train them. You Army men do the same thing. You are constantly renewing from younger men as the others grow up. The Army ought to have men on these commodity committees so the Army and Navy can see what is going on and see that they are getting a fair deal. In connection with the ceiling put on prices, I want to admit here of one very great mistake that I made because I am not what Al Smith calls a "languager." I used the term "freeze" prices. That got me into a lot of trouble. When you froze prices a lot of people thought that you couldn't change them, you see. What I meant was I wanted to have something that couldn't go above, so I shifted to "ceiling over" prices. You have got to have a price-fixing committee to adjust inequalities. The Army may come and say, "We can't get all the stuff and how about it." On the price fixing committee you ought to take in the various government departments which will know about prices. There is the Chairman of the Federal Trade Commission because they are jealous of whether you are breaking the Sherman Anti-Trust Law; the Chairman of the Tariff Commission; and some of these new administrators will be interested in those things. You ought to enlarge beyond what I did in the war. If you notice in the price adjustment committee we took in a lot of men from departments who knew about prices and who were dealing with prices, and who were dealing with the production and distribution of goods to the public. I think one of the things that made old "iron pants" get into trouble -- I mean General Johnson, I beg his pardon --

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and by the way, I think he is a great guy and you fellows ought to be proud of him, was that he didn't have a strong enough committee functioning to look after the public interests and the whole recovery was not synchronized. The home front is what I am talking about. You see, the prices had been boosted up to meet the increase in cost and there wasn't a strong enough committee functioning to look after the consumers, the home people. Of course he was so busy, brickbats and dead cats being thrown in every direction, and doing a remarkable job without any time. He was not able to pick out just whom he wanted. Incidentally, I think he is a great fellow and he did a good job. Are there any other questions?

Q. In order to properly prepare for war do you think that we should set up in peace time an organization similar to your War Industries Board in order that the members of such an agency could actually undertake training and be prepared on M-Day to immediately get into operation?

A. Yes, sir. And I think that one of the reasons that perhaps it is not done now is that I am afraid there might be misunderstanding and people would think that we are going to war now, right away. It might frighten the people, but I think it ought to be done. It should have been done long ago. I know that your present Assistant Secretary of War seems to have gotten this subject on his finger tips in a very short while. It is one of the things that has been brought to his attention and that he is now thinking about. I don't know whether I am talking out of turn or not.

Q. Do you think Congress would stand for the setting up of such administration, sir?

A. They don't have anything to do with it. The Assistant Secretary of War has certain power and under that he can say, "Now I am going to have these fellows set up a skeleton organization for the purpose of having the Army and Navy discuss these problems with them." Put it that way. It would be a question of intelligence, the wisdom with which you do it. You don't have to get any act from Congress.

Q. What about money?

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A. Well, old fellows like me would be so delighted to serve that it wouldn't cost you anything. I am serious about that.

Colonel Jordan: We have here this morning our real boss, The Assistant Secretary of War. Mr. Johnson, won't you please say something, sir?

Mr. Baruch: I didn't know he was here. All right, you heard the truth.

Mr. Johnson: I think it is only fair to say on the subject of which you have last inquired of our distinguished guest that he and I have had much correspondence and considerable discussion. We do not find ourselves far apart. I think it is only fair to add that except for a probable misunderstanding on the part of the country the board which he has referred to would some sixty days ago have been created. I have enjoyed listening to the "grand old man of industrial mobilization." We thank you for all you have done in the past and what you are doing now, and you know we want you with us many years.

Colonel Jordan: Mr. Baruch, I want to express the appreciation of The Army Industrial College for your coming here. It is a compliment indeed and we have learned a great, great many things today, sir. Thank you very much.

Mr. Baruch: If you only knew what a great pleasure it gives me--you wouldn't be able to keep me away.