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ADDRESS OF MR. BENEDICT CROWELL
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"Organization & Functions of The War Ind. Board."

Gentlemen, I feel it is a great privilege to have this opportunity of speaking before you.

I have tried to sketch out the ideas that I want to give you today. I have talked with Secretary Davis and it seemed to me that the best thing I could do was to give you some idea of the difficulties we met during the World War along the lines in which you are all interested, our actual experiences in supplying and equiping the armies of the World War, and the resulting expansion of the War Department for that effort. I am going to be pretty frank about things, otherwise what I say would be of little value. All of our failures, I want to say, can be traced either to lack of preparation or lack of organization. There was no failure during those days that can be traced to any other cause.

I think it is generally known that no effective preparation for war had been made by us, that is, for the industrial effort. This was more or less true in all other countries. The magnitute of the industrial effort had not been anticipated, or, if anticipated, only partially realized.

In our own country, in 1916, the manufacture of

munitions and equipment for our own army was at a low ebb. The arsenals which usually had been kept going in time of peace, were nearly shut down. During the month of November, 1916, I remember that at our arsenals we produced only eleven hundred Springfield rifles and yet Springfield rifles were the one thing necessary immediately if war should come. The arsenals had seldom gotten to such a low ebb before and, I believe, never since. For lack of funds only the key men were kept at work and even in December, 1916, when visiting the arsenals, I discovered that men were being let go, key men - the finest men we had. With affairs in this condition we declared war, April 6th, 1917.

Our supply bureaus were then rapidly expanded and immediately began to contract for the necessary munitions. Quick tables of requirements were furnished, based on a million men perhaps, and as soon as procurement was well started a new table of requirements would be presented, and everyone kept on the jump doubling up orders on our new contracts. That, of course, was a necessity of those times and you know something of the expansion of the bureaus. For example, a department of three men would be expanded to about three hundred men in two or three months. The contracts, as I said before, were placed rapidly and it was necessary that they should be.

The supply bureaus were very ably managed, not only then but all through the war, by energetic officers who knew their business

and were successful - but they were too successful. As you remember, in the latter months of 1917, many of the industrial sections of the country had become congested. Wages were soaring, labor was overcrowding certain towns causing a serious housing shortage, and the power situation was desperate. The confusion seemed to increase every day.

The railroads became almost paralyzed in the fall of 1917. All available sidings were crowded with cars, empty and loaded; storage facilities were hopelessly inadequate and over-taxed everywhere, even open air storage. It seemed at that time as though all production of supplies must cease.

Most of the people have forgotten the hopeless condition of our industry late in 1917. At that time a Senator of the United States, in a dramatic speech, stated that the War Department had practically ceased to function. This caused a great sensation but I assure you that it was practically true. December, 1917, was the drakest month of the entire war for us - that is, to those who knew our real condition. The situation seemed so hopeless and there seemed to be no way out of it. Yet at that very time light was beginning to break. The point I want to impress is that this confusion had been caused by the supply bureaus, and by supply bureaus I mean principally the army supply bureaus. They, of course, had placed their orders where each best could, competing with each other to get

materials and offering high and yet higher prices to get quicker deliveries. In some cases competition was direct, for instance, in buying motor trucks - every bureau wanted them. One bureau would, for instance, bid against other supply bureaus for a plant having a certain capacity for making steel forgings. In this way the situation I have described was brought about. The factories, machine shops, etc., were tied up and prices became ruinously high, or would have been so if they had continued. The trouble was caused by the success of the bureaus, not failure, and through no failure of industry. The trouble was lack of direction or lack of coordination, in the absence of an overhead control.

On January 1, 1918, the Government took over the railroads. A single control of the railroads made possible many things impossible before, and by means of embargoes and other devices tracks were gradually cleared and traffic became normal. About the same time the War Industries Board, the Food Administration, Fuel Administration, War Trade Board, Shipping Board, and others gradually had become strongly organized and were given tremendous powers. They used these powers wisely and confusion was gradually replaced by a huge machine, working smoothly and efficiently.

Please note that most of the corrective measures applied at this period lay entirely beyond the scope and powers of the War Department. The new administrative bodies mentioned above derived

their power direct from the President, who gave his power very freely to men he knew and trusted. These men were all civilians. This vast power will never be given to the War Department and, further, the War Department alone could never have unscrambled this omelette into which industry had been mixed. The credit really does not belong to the War Department for that piece of work which took place between December, 1917 and May 1st, 1918.

In 1918, the supply bureaus continued their excellent work, manned by excellent, high-principled officers. As I have said before, they were energetic men who had merely worked too well and without direction. Each bureau acted as an independent unit without an overhead control, each a world within itself. The trouble was apparent. A re-organization was clearly called for.

That re-organization began in December, 1917. A capable overhead department was needed and at once, a body that had time to do a little thinking. The War Council was the first step in that direction. That body was made up of about ten men; the Secretary of War, the Assistant Secretary of War, the Chief of Staff, and the best officers available were detailed to it, the latter being relieved of all other duties. Meetings were held daily and some of the overhead work was taken care of in this way. The War Council functioned very well during this period but it was not a permanent solution of the problem.

The War Department then consisted of fourteen separate

departments, each reporting direct to the Secretary of War. The General Staff was one of these departments. In the organization chart of that time the Secretary of War was at the head and the fourteen departments were placed on the same level, below. It is clear that an overhead body was needed to intervene between these bureaus and the Secretary of War.

We had to obey the laws of the time. The Overman Act had not been passed. We found that the General Staff had been given sufficient powers but they had never been able to assert themselves. The General Staff had been weaker than the bureaus. We decided to expand the General Staff.

At that time the General Staff consisted of committees studying various military subjects and reaching its decisions by a majority vote. Such an organization was clearly unfitted for administrative work. The new plan was actually worked out in the evenings by two young officers who had no previous knowledge of General Staff work. They got in touch with many men who were qualified to advise them and who told them all they knew.

The result was the organization which continued almost unchanged for some years time. The Chief of Staff was given an executive department and we added thereto five great divisions, the Military Intelligence Division, Division of Operations, War Plans Division, Division of Purchase, and the Division of Storage and Traffic; the two latter being later merged to form the Purchase, Storage and Traffic Division.

The Purchase, Storage and Traffic Division became the overhead department of industry and of the supply bureaus, immediately starting the work of directing and coordinating these bureaus. This organization took hold rapidly, but in the meantime production had to be kept going at full speed. We could not stop while we reorganized. It might be said, that the actual re-organization of the General Staff started in January, 1918, and was completed by May - completed so far as such things are ever completed. During the summer of 1918 the Purchase, Storage and Traffic Division strengthened its own grip on the situation to such an extent that a duplication of work was soon going on and the bureaus were beginning to be hampered by too much overhead, which was a natural reaction. We were planning to give the bureaus more freedom when the Armistice relieved us of further worry in that respect.

The inclusion of the Division of Purchase, Storage, and Traffic in the General Staff was a measure of legal expediency. Its personnel was mostly civilian business men and industrial experts commissioned for the purpose. It had nothing to do with the General Staff proper. It functioned under The Assistant Secretary of War who then became the Director of Munitions.

The great lesson of one war applicable to your particular work is common to all countries - a man may be enlisted and trained in a short time to make a good soldier, but the production of

munitions requires much more time. That point was not realized before the World War. The next lesson is that a proper government organization cannot be worked out during war time except at a tremendous sacrifice of time, money and use of skilled brains which should be doing something else at that time.

A proper organization for our next war, if we ever have one (and we must assume that we are going to have one), should be worked out and set up now, a skeleton kept in being and operation in peace time even if the method of administration is not so direct or quite so good and necessitates some sacrifice in efficiency during peace time. The only excuse for the War Department's being in existence is preparation for war. The war organization of the War Department should, I think, be charted pretty plainly because we are here now and gone tomorrow, and by the time war comes again none of us may be alive. Responsiblities of each officer should be clearly defined on this war time chart and if war comes the Secretary of War can then merely fill these vacancies with the proper men.

In this connection I cannot help but remember a point that was brought out by President Roosevelt in one of his books in which he was describing some of the conditions which existed in Washington during the Spanish American War. He called on the chief of a supply bureau and found him very much disturbed. The chief remarked "Here I have been working for years and have just got my

bureau running smoothly, and now this war comes along and spoils everything". We must not again get into this condition.

Assume that you do have a good organization chart and the personnel skeletonized. If war comes the Secretary of War has merely to get out this chart and make his appointments. All he has to do is to see that no square pegs are put in round holes.

Assume that the War Department, as was the case in 1917, is not ready for a war; then the Secretary of War must spend many weary days and nights in planning a proper organization, working out the duties and responsibilities of each position and balancing these duties properly. The personality of each appointee must be known and allowed for. Responsiblities must be balanced by powers, without overlap or conflict. We were badly overworked during the World War on account of having to do these things which could and should have been planned before.

In concluding I want to emphasize some points - to me they are very important. I want to say that the War Department can never do the work of the war bodies and boards which were brought into being in 1917 and functioned from then on through the war. In another war, these or similar boards will be needed again. The vast power wielded by the War Industries Board through its chairman, for instance, will never be handed over to the War Department. If they were, a military dictatorship would be the result and you know that

the American people will never tolerate such a thing.

I think that it should never be forgotten that the work which this College is teaching is army work only in time of peace. As I see it, in time of peace army officers must transact the business of the War Department and business training is, therefore, necessary. Plans for industrial mobilization, under the National Defense Act of 1920, must also be made by the War Department in time of peace.

A proper war organization must always be kept in mind. Army officers are valuable to the country on account of their knowledge of and experience in military matters and when war comes, (and I remember in the last war this was true) all officers are needed for military duty, and all officers want military duty. Early in the next war officers doing non-military duty will be relieved and assigned military work, their position being taken over by civilians, whether commissioned or not. I think all officers should welcome this plan because there is little glory and much grief in performing this duty in time of war. The greatest war efficiency is bound to result when military matters are handled by officers who understand them, and when the purely business matters of the war are handed over to business men.

This is as far as I have outlined my talk, and my rather sketchy notes certainly do not do the subject justice, but if there is anything I have omitted that you would like to ask about, I would be glad to answer any questions.

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Question. What is the relation the Finance Department bears to the Assistant Secretary of War by the Act of 1920?

Answer. As I recall it, the original intention was to place the Finance Department under the Assistant Secretary of War on the theory that Finance was largely a business matter. However, there were others who were testifying before the Military Affairs Committees of the House and Senate at that time who were very much against any such plan being put into effect and they out-talked those of us who wanted it put under the Assistant Secretary. I think it was taken out and placed elsewhere.

Question. What is your conception of the relation of the Assistant Secretary's office to the construction program of the army?

Answer. The construction program, so far as it relates to work outside of the theatre of war, should be wholly under the Assistant Secretary of War and therefore the Construction Division should be under the Assistant Secretary. Naturally, construction work in the theatre of war should be under the Corps of Engineers.

Question. The Act of 1920 turns over to the Assistant Secretary of War the "procurement of all military supplies and other business of the War Department". What is meant by the term "other business", in your opinion?

Answer. The term "other business" is comprehensive, and can be made to cover all matters that are not strictly military matters. I think the Congress so intended.

Question. In the question of storage of munitions, did you intend to have that come under the Assistant Secretary or the General Staff?

Answer. It was our intention to have the storage of muntions until they reached the theatre of war under the Assistant Secretary. Storage is wholly a business question, certainly not military. It is a vast business and a very technical one. During the World War all the storage in this country was under the Assistant Secretary of War; the shores of France were the dividing line and we were responsible until the munitions were received in France. If in another war, for example, the theatre of war is the Mexican Border, then some dividing line would be drawn by which the theatre of war would be defined and delivery would be made by the Assistant Secretary to this border line and there his responsibility would cease.

Question. What were the functions of the Second and Third Assistant Secretaries, now abolished by the Act of 1920?

Answer. The Assistant Secretary of War did a little of everything;

the Second Assistant Secretary was the head of aviation, bringing all aircraft activities together. The Third Assistant Secretary handled welfare work.

Question. About war reserves to be held in time of peace - does the establishment of that come under the Assistant Secretary or the Chief of Staff?

Answer. I think that there are now certain military supplies in each corps area under the control of the corps area commander. They should be under military control because they may be needed very suddenly to meet an emergency. There are also other supplies that have been issued to the troops. They also should be left under military control. But the actual storage of the munitions, because that is what the problem becomes, aside from the exceptions mentioned should be under the Assistant Secretary. I consider it wholly a non-military function. The fixing of requirements is wholly a General Staff function. The theory of the original plan was that matters such as this would be discussed at a meeting of the War Council which consists of the Secretary of War, the Assistant Secretary of War and the Chief of Staff. The Chief of Staff brings in his table of requirements and the Assistant Secretary of War points out whatever of these requirements can or cannot be met. The Army Program can be worked out in this way.

Question. Do you make any exception for requirements in war reserves of strategic raw materials in war? For instance, would you consider carrying a reserve of manganese in time of peace?

Answer. I do not favor an attempt to carry a reserve of any raw material. We need not consider maintaining reserves of anything where there is a reasonable expectation of getting it in time of war. In war we could produce a lower grade of manganese from our own ores and get along very nicely without foreign ores. In that case I do not think we are justified in carrying reserves. The only reserve of raw material we have ever carried is nitrate of soda and since the World War we have lessened the amount of that to one hundred thousand tons, and I think, can soon afford to do without any reserve at all.

Question. Do you think, Mr. Crowell, that a war reserve of any material should be extensive?

Answer. I do not think you will ever get money enough to have large reserves. At present we have certain reserves and they will last for some time. I doubt if you will ever get money with which to replace them in more modern equipment and supplies. It would be nice if you could.

Question. You have seen from these various points the fact that there is some question as to the meaning and interpretation of your

National Defense Act. Your one small paragraph causes a lot of trouble. Won't you sum up, in a general way, your conception of that paragraph of the National Defense Act to give us an idea of your fundamental conception of the duties of the Assistant Secretary of War?

Answer. My part in drawing up the National Defense Act was very small. We tried to look at matters in a broad way and the point we tried to always keep in mind is that the Secretary of War is usually selected for political reasons and is a man who of necessity knows nothing of his job when he first comes in. He must be advised, and he cannot take all this advice from the Chief of Staff. It is not humanly possible that the Chief of Staff can understand all the business matters of this country. If he is a good Chief of Staff, he has been selected on account of his military knowledge and training. The Secretary of War, therefore, must have somebody to advise him on business matters of the War Department, and by business matters we mean all matters that are not military. The Assistant Secretary of War is logically the business advisor of the Secretary of War. He is also the business administrator of the War Department. His office force should always be large enough to enable him to direct and coordinate the business activities of the War Department.

There are in every bureau matters which are both military and business and we visualized the Secretary of War sitting with a

military advisor on one side and a non-military advisor on the other, the bureaus all being grouped under them. The matters having to do with military affairs came up through the proper channel, through the Chief of Staff, and the matters having to do with business, the non-military affairs, came up through the organization which the Assistant Secretary of War set up. Matters both military and non-military were handled in the War Council, final power being vested in the Secretary of War, if his two advisors did not agree.