TO THE SENATE:

I return herewith, without my approval, Senate 2600, a bill "To expedite the prosecution of the war by making provision for an increased supply of rubber manufactured from alcohol produced from agricultural or forest products."

This bill would create a new independent agency to be known as the Rubber Supply Agency to be headed by a Director of Rubber Supplies. The new agency is directed to "make available at the earliest possible time an adequate supply of rubber which, when added to the rubber being supplied by other agencies, will be sufficient to meet the military and civilian needs of the United States." To perform this duty, the agency is empowered to acquire the necessary plants, equipment, machinery, materials and supplies for the making of synthetic rubber. In order to acquire such plants and machinery, the Director is given power to obtain any necessary materials and is accorded priority over all other private plants engaged in making implements of war.

In other words, by legislative fiat, the manufacture of synthetic rubber is ordered in quantities large enough to satisfy any civilian needs; and absolute priority is given to obtain scarce materials for this purpose, in preference to any other military needs as scheduled by the War Production Board, or called for by the armed forces.

The approval of this bill would, in my opinion, block the progress of the war production program, and therefore the war itself.
The Congress of the United States has heretofore definitely laid down the policy, approved by the President, that in order to carry on a unified, integrated and efficient program of war production, it is necessary to centralize the power to determine the priorities of materials not only between military and civilian needs, but also among competing military needs. This power to fix priorities for the use of scarce materials has been vested by the Congress in the President of the United States, and has been delegated to the War Production Board. Experience in other wars, as well as in the present conflict, has proven beyond doubt that concentration of power with respect to the use of critical materials is essential to efficiency and production. In fact, without such concentration, there can result only conflict and delay.

On the War Production Board there are represented all of the government agencies concerned with the supply and use of materials for civilian needs in the United States and for the military needs of ourselves and our allies in this war. To this board, therefore, can be presented all of the many conflicting military and civilian demands for materials of which there is not enough to go around.

One of the responsibilities and functions of the Chairman of the War Production Board is to determine, in the light of the many demands and inadequate supplies, which must be filled first—considering, as we must, that the sole objective is victory in this war. Obviously, it is only after the reasonable military requirements have been met, that the civilian needs can even be considered.

This bill would immediately break up that logical coordination of centralised control, and would set up a new agency with power and duty to manufacture alcohols, rubber, and to override all the priorities established by the War Production Board for materials necessary to manufacture all the hundreds of products essential in war. It
goes much further than that. It provides that even civilian needs of rubber— for pleasure driving, joy-riding— must be given consideration, for the bill sets forth the duty of the new agency to furnish rubber in quantities sufficient "to meet the military and civilian needs of the United States" irrespective of the relationship of such civilian needs to winning the war.

The War Production Board has adopted a program for making synthetic rubber, and is now operating under it. In doing so, it has endeavored to operate on the basis of estimated military needs for rubber and those civilian needs which are essential. By the phrase "essential needs" are meant those needs of civilians who require rubber in work directly related to the war effort — for example, driving to war production plants in automobiles where other transportation is not readily available. It includes also certain rubber, new plants must be constructed or old plants converted. In formulating its program, therefore, the War Production Board has, of course, taken into consideration the amount of critical materials which can be diverted from other vital needs of the war program to build the plants to produce synthetic rubber. In its program, the Board has allocated a certain amount of rubber to be produced from agricultural products, and a certain amount to be made from petroleum.

Both types of plants — those using farm products and those using petroleum — are now being constructed, and others are planned to be constructed month by month, at the greatest possible speed.

Every one of these plants and all the machinery to be installed in them will require large quantities of certain materials
of which there is great scarcity and which are sorely needed for
other war purposes. They will require steel plate, other steel,
copper, bronze and brass. Remember that every time steel plate is
used for a synthetic rubber plant, just so much is being taken away
from ships, tanks, high octane gasoline plants and munitions plants.
These rubber plants will also require compressors which are so badly
needed to manufacture ammonia and other components of explosives;
and equipment. Every pound of copper taken for rubber plants and
their equipment will mean fewer shells and less ammunition for our
fighting forces.

In spite of the shortage of materials, however, we know
that plants must be built to manufacture synthetic rubber, because
rubber is necessary for our fighting machine, and for our production
machine as well. I am just as determined as anyone to get that
rubber - and to get it as quickly as we can. But it is necessary
the need for factories to care for civilian luxuries against
to watch the needs of our fighting and production forces. The rubber
needs for the munitions required to build the
rubber plants. While the rubber shortage is extremely serious, it
is only one of the products which we need to win the war.

Therefore, to take the determination of this question away
from a board which is equipped by personnel, and by experience, and
by an overall knowledge of all our military and civilian needs, and
to place it in an agency which is concerned with the manufacture of
only one commodity, rubber, is in itself a disruption of a unified
and expeditious production program. To go further, and to say that
these materials can be taken away from ships and guns and ammunition
and put to work producing rubber so that some people might use it for
these rum automobiles for their idle-hour pleasure, is to
fly in the face of the
realities of the present grave military situation which threatens all the world and civilization itself.

The distribution of scarce materials for various needs, both for the erection of plants and production of war materials, is one which can be handled only by one who has been empowered to control the entire situation. It would be dangerously mishandled if it were divided between new transferred to rival and overlapping agencies — independent of each other — competing for our limited supplies.

Apart from that, it is unquestionably a gross distortion of our war production policy and a repudiation of our all-out effort to win the war, to say that any critical material can be taken away from military purposes and devoted to non-essential civilian demand. I am sure that not one loyal American would wish to take an ounce of critical war materials of any kind in order to insure the use of his own automobile for anything but essential war needs.

There is one other commodity — of supreme importance — which is involved in this question of synthetic rubber. That is food.

The proposed bill not only provides for a complete supply of rubber, but it also directs that the director of the new agency shall have the duty to “make available at the earliest possible time an adequate supply of alcohol produced from agricultural products to meet any military or civilian need of alcohol in the United States.” In addition to the further consumption of critical materials for the construction of any new alcohol plants which the new agency may de-
termine to be necessary, this provision may require the consumption of hundreds of millions of bushels of grain. Even the process of making synthetic rubber under the present program will require almost one hundred million bushels of grain.

It is true that we have great grain reserves at present; but we must bear in mind that there is a steadily increasing demand for grain for the making of food for the army and navy and air force - not only of the United States but of all the United Nations. In the event of a serious drought next year - which is always a possibility - our reserves of grain may not be sufficient to cover the requirements both for food and for unlimited alcohol and rubber. Therefore, the need of grain for food instead of rubber or alcohol is something which must also be taken into consideration by those charged with the overall responsibility of the entire war production effort.

The processes for making synthetic rubber are now in a state of flux. Some of them are in the purely experimental stage, others have been demonstrated to have varying degrees of efficiency. It is obviously impossible to determine in advance just which process will eventually prove to be the most desirable, taking into consideration the elements of speed, efficiency of production, and consumption of critical materials. Even the processes for making synthetic rubber out of grain are several in number, and new ones are being presented from time to time. The whole question of which process to use is tied up with the question of the most strategic use of the materials which are at hand or which can be obtained. Determination in this more or less uncharted area should have the advantages of the flexibility of administrative action rather than be frozen by legislative mandate.

It may well be that serious mistakes have been made in the past, based either on misinformation, misconception, or even partiality to one process or another. It may be that the present program of the
War Production Board not the best solution. If so, the facts should be ascertained and made public. This is particularly so, if it be true as charged by some sources in the Congress and outside the Congress, that the manufacture of synthetic rubber from grain has been hamstrung by selfish business interests.

The question of rubber for automobiles is an unusually important one because it so intimately affects the daily lives and habits of so many American citizens. The very passage of the present ill-advised bill is an indication of the overwhelming interest which the American people have in this problem. If I am sure, however, that once they are given the full facts as to the supply of rubber and the military and essential civilian needs for rubber, and the amount of materials required for the production of an adequate supply of synthetic rubber, they will be wholly willing to forego any consideration of their own convenience or pleasure.

In this war, as in all the wars that we have fought since 1776, the American people have not been reluctant to make every sacrifice that is necessary for the defense and perpetuation of our sacred freedom. Americans gladly give up their comforts, their time, their money - everything that seems necessary to the successful prosecution of the war effort. They proudly and freely make the greatest sacrifice of all - their own sons and brothers. To say that Americans must be pampered in this one important respect is to insult the patriotism and the determination of our people.

In recent months there have been so many conflicting statements of fact concerning all the elements of the rubber situation - statements from responsible government agencies as well as from private sources - that I have set up a committee of three men with authority to investigate the whole situation - to get the facts - and to report to me as quickly as possible the facts as well as their recommendations.
This committee will immediately proceed to study the present supply and the estimated military and essential civilian needs. They will also determine the various processes now being urged for producing the requirements of the War Production Board. They will recommend the various processes to be used, not only in the light of the need for rubber, but also in the light of the critical materials required by these processes.

In a sense this will require a review of the program now being followed by the War Production Board. It will form a basis for future action not only with respect to synthetic rubber, but also such matters as nation-wide gas rationing and motor transportation.

The responsibility for the distribution of critical materials will remain with the War Production Board; but in addition, as well as the American people, will have a complete statement before them of the facts found by the committee. Based on these facts, their program must be changed. If the facts justify their program, we shall all be satisfied that every precaution shall have been taken.

This unusual method of investigation is being adopted because of the interest of the American people in the subject, because of the great impact of the lack of rubber upon the lives of American citizens, and because of the present confusion of thought and factual statement.

In the meantime, of course, the manufacture of synthetic rubber will continue without interruption.

The functions of this committee require not only experience in business and production and the relations of government thereto, but also trained, scientific minds. Therefore, I am appointing as members of this committee, Honorable Bernard M. Baruch, Chairman; Dr. James B. Conant, President of Harvard University; and Dr. Karl T. Compton, President of Massachusetts Institute of Technology. They will be equipped with adequate staff and will, I know, submit their report at the
earliest possible moment. I am asking them to investigate the whole situation, and to recommend such action as will produce the rubber necessary for our total war effort, including essential civilian use, with a minimum interference with the production of other weapons of war.
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In other words, by legislative fiat, the manufacture of synthetic rubber is ordered in quantities large enough to satisfy any and all civilian needs; and absolute priority is given to obtain scarce materials for this purpose, in preference to any other military needs as scheduled by the War Production Board, or called for by the armed forces.

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On the War Production Board there are now represented all of the government agencies concerned with the supply and use of materials for civilian needs in the United States and for the military needs of ourselves and our allies in this war. To this board, therefore, can be presented all of the many conflicting military and civilian demands for materials of which there is not enough to go around. One of the responsibilities and functions of the Chairman of the War Production Board is to determine, in the light of the many demands and inadequate supplies, which requirements must be filled first—considering, as we must, that the sole objective is victory in this war.

Obviously, it is only after all of the reasonable military requirements have been met, that the civilian needs can even be considered.
from rubber, plants must be cut and other crops must be harvested so that rubber can be produced as quickly as possible. This rubber will then be converted into synthetic rubber products.

In order to produce any substantial amounts of synthetic rubber, it is necessary to install new plants and to allocate a certain amount of material and man hours to be used for the production of synthetic rubber. These plants are not yet ready for operation, but when they are, they will produce synthetic rubber in quantities sufficient to meet the needs of the services of the United States. The War Production Board has accepted a program for the manufacture of synthetic rubber and the War Labor Board is working to ensure that the necessary labor and facilities are available. The War Department is taking steps to ensure that the War Production Board can carry out its program and to ensure that the synthetic rubber produced will meet the needs of the armed forces.
It is a gross distortion of our war production policy and a repudiation of our all-out effort to win the war, to say that any critical material can be taken away from military purposes and devoted to non-essential civilian demand. I am sure that not one loyal American would wish to take an ounce of critical war materials of any kind in order to insure the use of his own automobile for anything but essential war needs.

There is one other commodity - of supreme importance - which is involved in this question of synthetic rubber. That is food.

The proposed bill not only provides for a complete supply of rubber for any and all purposes, but it also directs that the new agency shall have the duty to "make available at the earliest possible time an adequate supply of alcohol produced from agricultural products to meet any military or civilian need of alcohol in the United States." In addition to the further consumption of critical materials for the construction of any new alcohol plants which the new agency may determine to be necessary, this provision may require the consumption of many millions of bushels of grain. Even the process of making synthetic rubber under the present program, now actually under way, will require almost one hundred million bushels of grain.

It is true that we have great grain reserves at present; but we must bear in mind that there is a steadily increasing demand for grain for the making of food for the army and navy and air force - not only of the United States, but of all the United Nations. In the event of a serious drought next year like those of 1931 and 1936 - which is always a possibility - our reserves of grain may not be sufficient to cover the requirements both for food and for unlimited alcohol and rubber. Therefore, the need of grain for food instead of unlimited rubber or alcohol is something which must also be taken into consideration by those charged with the over-all responsibility of the entire war production effort.

The processes for making synthetic rubber are now in a state of flux. Some of them are in the purely experimental stage, others have been demonstrated to have varying degrees of efficiency.

It is obviously impossible to determine in advance just which process will eventually prove to be the most desirable, taking into consideration the elements of speed, efficiency of production, and consumption of critical materials. Even the processes for making synthetic rubber out of grain are several in number, and new ones are being presented from time to time. The whole question of which process to use is tied up with the question of the most strategic use of the materials which are at hand or which can be obtained. Determination in this more or less uncharted area should have the advantages of the flexibility of administrative action rather than be frozen by legislative mandate.

It may well be that serious mistakes have been made in the past, based either on misinformation, misconception, or even partiality to one process or another. It may be that the present program of the War Production Board is not the best solution. If so, the facts should be ascertained and made public. This is particularly so, if it be true, as charged by some persons in the Congress and outside the Congress, that the manufacture of synthetic rubber from grain has been hamstrung by selfish business interests.

The question of rubber for automobiles is an unusually important one because it so intimately affects the daily lives and habits of so many American citizens. The very passage of the present ill-advised bill is an indication of the overwhelming interest which the American people have in this problem.
I am sure, however, that once they are given the full facts as to the supply of rubber and the military and essential civilian needs for rubber, and the amount of materials required for the production of an adequate supply of synthetic rubber, they will be wholly willing to forego their own convenience or pleasure. Americans gladly give up their comforts, their time, their money — everything that seems necessary to the successful prosecution of the war effort. They freely and proudly make the greatest sacrifice of all — their own sons and brothers.

In recent months there have been so many conflicting statements of fact concerning all the elements of the rubber situation — statements from responsible government agencies as well as from private sources — that I have set up a committee of three men to investigate the whole situation — to get the facts — and to report them to me as quickly as possible with their recommendations.

This committee will immediately proceed to study the present supply, the estimated military and essential civilian needs, and the various processes now being urged; and they will recommend processes to be used, not only in the light of need for rubber, but also in the light of critical materials required by these processes. In a sense this will require a review of the program now being followed by the War Production Board. It will form a basis for future action not only with respect to synthetic rubber, but also such matters as nation-wide gas rationing and motor transportation. The responsibility for the distribution of critical materials will continue to remain with the War Production Board; but the board, as well as the American people, will have a complete statement before them of the facts found by the committee.

This unusual investigation is being directed because of the interest of the American people in the subject, because of the great impact of the lack of rubber upon the lives of American citizens, and because of the present confusion of thought and factual statement.

In the meantime, of course, the manufacture of synthetic rubber from oil and grain will continue without interruption.

The functions of this committee require not only experience in business and production and the relations of government thereto, but also trained, scientific minds. Therefore, I am appointing as members of this committee, Honorable Bernard H. Baruch, Chairman; Dr. James B. Conant, President of Harvard University; and Dr. Karl T. Compton, President of Massachusetts Institute of Technology. They will be equipped with adequate staff and will, I know, submit their report at the earliest possible moment. I am asking them to investigate the whole situation, and to recommend such action as will produce the rubber necessary for our total war effort, including essential civilian use, with a minimum interference with the production of other weapons of war.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE

August 6, 1942
Rubber Veto - Draft - Aug. 1942 - No corrections
August 9, 1942

Dear Mr. ———

I have just vetoed the bill passed by the Congress setting up a new agency for the purpose of producing a supply of rubber and alcohol for military and civilian needs for the United States. For your information, I am enclosing a copy of my veto message.

I believe it to be highly important, however, that a small committee of distinguished and disinterested citizens be appointed for the purpose of making a quick but adequate survey of the entire rubber question. This would include not only facts with respect to existing supplies and estimates as to future needs but also the question of the best method to be followed for obtaining an adequate supply of rubber for our military and essential civilian requirements. This, of course, involves a consideration of how large a quantity of critical materials needed for other war purposes can and should be used for the construction of plants for the manufacture of synthetic rubber.

I am asking to serve on this committee Mr. ———, as Chairman, Mr. ——— and yourself. You will, of course, be equipped with the necessary technical staff, and I hope that your report will be made as quickly as possible. In the meantime, of course, the War Production Board will proceed with the manufacture of synthetic rubber.

In short, the purpose of your survey and investigation is to recom-
such action as will best produce the synthetic rubber necessary for
our total war effort, including essential civilian use, with a minimum
interference with the production of arms and ammunition of all kinds. I
trust I may have an acceptance of this most important public trust, although
I am aware of the other demands being made upon your time and energy.

With kindest personal regards,

Yours very truly,
TO THE SENATE:

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This bill would create a new independent agency to be known as the Rubber Supply Agency to be headed by a Director of Rubber Supplies. The new agency is directed to "make available at the earliest possible time an adequate supply of rubber which, when added to the rubber being supplied by other agencies, will be sufficient to meet the military and civilian needs of the United States." To perform this duty, the agency is empowered to construct or acquire the necessary plants, equipment, machinery, materials and supplies for the making of synthetic rubber. In order to construct any such plants and machinery, the Director is given power to obtain any necessary materials and is accorded priority therefor over all other private plants engaged in making implements of war.

In other words, by legislative fiat, the manufacture of synthetic rubber is ordered in quantities large enough to satisfy any civilian needs; and absolute priority is given to obtain scarce materials for this purpose, in preference to any other military needs as scheduled by the War Production Board.

The approval of this bill would, in my opinion, block the progress of the war production program.
The Congress of the United States has heretofore definitely laid down the policy, approved by the President, that in order to carry on a unified, integrated and efficient program of war production, it is necessary to centralize the power to determine the priorities of materials not only between military and civilian needs, but also among competing military needs. This power to fix priorities for the use of scarce materials has been vested by the Congress in the President of the United States, and has been delegated to the War Production Board. Experience in other wars, as well as in the present conflict, has proven beyond doubt that centralization of power with respect to the use of critical materials is essential to efficiency and expedition. In fact, without such centralization, there can result only conflict and chaos.

On the War Production Board there are represented all of the government agencies concerned with the supply and use of materials for civilian needs in the United States and for the military needs of ourselves and our allies in this war. To this board, therefore, can be presented all of the many conflicting military and civilian demands for materials of which there is not enough to go around.

The responsibility and function of the Chairman of the War Production Board are to determine, in the light of the many demands and inadequate supplies, which needs must be filled first—considering, as we must, that the sole objective is victory in this war. Obviously, it is only after the reasonable military requirements have been met, that the civilian needs can even be considered.

This bill would immediately break up that logical coordination by centralised control, and would set up a new agency with power and duty to manufacture one product—rubber—and to override all the priorities established by the War Production Board for materials necessary to manufacture all the hundreds of products essential in war. It
goes much further than that. It provides that even civilian needs of rubber— for pleasure driving, joy-riding—must be given first consideration, for the bill sets forth the duty of the new agency to furnish rubber in quantities sufficient "to meet the military and civilian needs of the United States" irrespective of the relationship of such civilian needs to winning the war.

The War Production Board has adopted a program for making synthetic rubber, and is now operating under it. In doing so, it has endeavored to operate on the basis of estimated military needs for rubber and those civilian needs which are essential. By the phrase "essential needs" are meant those needs of civilians who require rubber in work directly related to the war effort— for example, driving to war production plants in automobiles where other transportation is not readily available.

In order to produce any substantial amount of synthetic rubber, new plants must be constructed or old plants converted. In formulating its program, therefore, the War Production Board has, of course, taken into consideration the amount of critical materials which can be diverted from other vital needs of the war program to build the plants to produce synthetic rubber. In its program, the Board has allocated a certain amount of rubber to be produced from agricultural products, and a certain amount to be made from petroleum.

Both types of plants—those using farm products and those using petroleum—are now being constructed, and others are planned to be constructed month by month, at the greatest possible speed.

Every one of these plants and all the machinery to be installed in them will require large quantities of certain materials
of which there is great scarcity and which are sorely needed for other war purposes. They will require steel plate, other steel, copper, bronze and brass. Remember that every time steel plate is used for a synthetic rubber plant, just so much is being taken away from ships, tanks, high octane gasoline plants and munitions plants. These rubber plants will also require compressors which are so badly needed to manufacture ammonia and other components of explosives and aviation gas. Every pound of copper taken for rubber plants and their equipment will mean fewer shells and less ammunition for our fighting forces.

In spite of the shortage of materials, however, we know that plants must be built to manufacture synthetic rubber, because rubber is necessary for our fighting machine, and for our production machine as well. I am just as determined as anyone to get that rubber—and to get it as quickly as we can. But it is necessary to weigh the needs of our fighting and production forces for rubber against their needs for the very materials required to build the rubber plants. While the rubber shortage is extremely serious, it is only one of the products which we need to win the war.

Therefore, to take the determination of this question away from a board which is equipped by personnel, and by experience, and by an overall knowledge of all our military and civilian needs, and to place it in an agency which is concerned with the manufacture of only one commodity, rubber, is in itself a disruption of a unified and expeditious production program. To go further, and to say that these materials can be taken away from ships and guns and ammunition and put to work producing rubber so that some people might use it for their own automobiles for their own idle-hour pleasure, is to fly in the face of the
realities of the present grave military situation which threatens all the world and civilization itself.

The distribution of scarce materials for various needs, both for the erection of plants and production of war materials, is one which can be handled only by one who has been empowered to control the entire situation. It would be dangerously mishandled if now transferred to rival and overlapping agencies - independent of each other - competing for our limited supplies.

Apart from this, it is unquestionably a gross distortion of our war production policy and a repudiation of our all-out effort to win the war, to say that any critical material can be taken away from military purposes and devoted to non-essential civilian demand. I am sure that not one loyal American would wish to take an ounce of critical war materials of any kind in order to insure the use of his own automobile for anything but essential war needs.

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termine to be necessary, this provision may require the consumption
of hundreds of millions of bushels of grain. Even the process
of making synthetic rubber under the present program will require
approximately one hundred million bushels of grain.

It is true that we have great grain reserves at present,
but we must bear in mind that there is a steadily increasing demand
for grain for the making of food for the army and navy and air force
not only of the United States but of all the United Nations. In the
event of a serious drought next year - which is always a possibility -
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ministrative action rather than be frozen by legislative mandates.

It may well be that serious mistakes have been made in the
past, based either on misinformation, misconception, or even partiality
to one process or another. It may be that the present program of the
War Production Board not the best solution. If so, the facts should be ascertained and made public. This is particularly so, if it be true as charged by some sources in the Congress and outside the Congress – that the manufacture of synthetic rubber from grain has been hamstrung by selfish business interests.

The question of rubber for automobiles is an unusually important one because it so intimately affects the daily lives and habits of so many American citizens. The very passage of the present ill-advised bill is an indication of the overwhelming interest which the American people have in this problem. I am sure, however, that once they are given the full facts as to the supply of rubber and the military and essential civilian needs for rubber, and the amount of materials which are required for the production of an adequate supply of synthetic rubber, they will be wholly willing to forgo any considerations of their own convenience or pleasure.

In this war, as in all the wars that we have fought since 1776, the American people have not been reluctant to make every sacrifice that is necessary for the defense and perpetuation of our sacred freedom. Americans have gladly given up their comforts, their time, their money – everything that seemed necessary to the successful prosecution of the war effort. They have freely and proudly made the greatest sacrifice of all – their own sons and brothers. To say that Americans must be pampered in this one important respect is to insult the patriotism and the determination of our people.

In recent months there have been so many conflicting statements of fact concerning all the elements of the rubber situation – statements from responsible government agencies as well as from private sources – that I have determined to set up a committee of three men without further delay to investigate the whole situation and to report to me as quickly as possible the facts as well as their recommendations.
This committee will immediately proceed to study the present supply and the estimated military and essential civilian needs. They will also at the same time study the various processes now being urged for producing the required amount of rubber. They will recommend the various processes to be used, not only in the light of the great need for rubber, but also in the light of the quantities of critical materials required by these processes.

In a sense this will require a review of the program now being followed by the War Production Board. It will form a basis for any future action not only with respect to synthetic rubber but also such matters as nation-wide gas rationing, and motor transportation.

The responsibility for the distribution of critical materials will remain with the War Production Board; but they, as well as the American people, will have a complete statement before them of the facts found by the committee. Based on such facts their program may have to be changed. If the facts justify their program, we shall all be satisfied that every precaution shall have been taken.

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In the meantime, of course, the manufacture of synthetic rubber will continue without interruption.

The functions of this committee require not only experience in business and production and the relations of government thereto, but also trained, scientific minds. Therefore, I am appointing as members of this committee, Honorable Bernard N. Baruch, Chairman; Dr. James B. Conant, President of Harvard University; and Dr. Karl T. Compton, President of Massachusetts Institute of Technology. They will be equipped with adequate staff and will, I know, submit their report at the
earliest possible moment. I am asking them to investigate the whole situation and to recommend such action as will produce the rubber necessary for our total war effort, including essential civilian use, with a minimum interference with the production of other weapons of war.
TO THE SENATE:

I return herewith, without my approval, Senate 2600, a bill "To expedite the prosecution of the war by making provision for an increased supply of rubber manufactured from alcohol produced from agricultural or forest products."

This bill would create a new independent agency to be known as the Rubber Supply Agency to be headed by a Director of Rubber Supplies. The new agency is directed to "make available at the earliest possible time an adequate supply of rubber which, when added to the rubber being supplied by other agencies, will be sufficient to meet the military and civilian needs of the United States." To perform this duty, the agency is empowered to construct or acquire the necessary plants, equipment, machinery, materials and supplies for the making of synthetic rubber. In order to construct any such plants and machinery, the Director is given power to obtain any necessary materials and is accorded priority thereafter over all other private plants engaged in making implements of war.

In other words, by legislative fiat, the manufacture of synthetic rubber is ordered in quantities large enough to satisfy any civilian needs; and absolute priority is given to obtain scarce materials for this purpose, in preference to any other military needs as scheduled by the War Production Board.

The approval of this bill would, in my opinion, completely break up the progress of the war production program. Furthermore, it would not facilitate the production of synthetic rubber but would delay it.
The Congress of the United States has definitely laid down the policy, approved by the President, that in order to carry on a unified, integrated and efficient program of war production, it is necessary completely to centralize the power to determine the priorities of materials not only as between military and civilian needs, but also as to competing military needs. This power to fix priorities for the use of scarce materials has been vested by the Congress in the President of the United States, and has been delegated to the War Production Board. Experience in other wars, as well as experience in the present conflict, has proven beyond doubt that centralization of power with respect to the use of critical materials is essential to efficiency and expedition. In fact, without such centralization, there can result only confusion, conflict and chaos.

On the War Production Board there are represented all of the government agencies concerned with the supply and use of materials to fulfill the military and civilian needs in the United States and the military needs of our allies in this war. To this board, therefore, can be presented all of the many conflicting military and civilian demands for materials of which there is not enough to go around. The responsibility and function of the Chairman of the War Production Board are to determine in the light of the many demands and inadequate supplies, which needs must be filled first—considering the sole objective to be that of winning the war. Obviously, it is only after the reasonable military requirements have been met that the civilian needs can even be considered.

This bill would immediately break up that logical coordination by centralized control and would set up a new agency with power and duty to manufacture one product—rubber—and to override all the priorities established by the War Production Board for materials necessary to manufacture all the hundreds of products used in war. It
goes much further than that. It provides that even civilian needs of rubber— for pleasure driving, for automobile vacations, for automobile touring and joy-riding—must be given first consideration, for the bill sets forth the duty of the new agency to furnish rubber in quantities sufficient "to meet the military and civilian needs of the United States" irrespective of the relationship of such civilian needs to winning the war.

The War Production Board has adopted a program for making synthetic rubber, and is now operating under it. In doing so, it has endeavored to operate on the basis of estimated military needs for rubber and those civilian needs which are essential. By the phrase "essential needs" are meant those needs of civilians who require rubber in work directly related to the war effort— for example, going to war production plants in automobiles where other transportation is not readily available.

In order to produce any substantial amount of synthetic rubber, new plants must be constructed or old plants converted. In formulating its program, therefore, the War Production Board has, of course, taken into consideration the amount of critical materials which can be diverted from other vital needs of the war program to build the plants to produce synthetic rubber. In its program, the Board has allocated a certain amount of rubber to be produced from agricultural products, and a certain amount to be made from petroleum.

I am informed that both types of plants—those using farm products and those using petroleum—are being actually constructed, and others are planned to be constructed month by month.

Every one of these plants and all the machinery to be installed in them will require large quantities of certain materials
of which there is great scarcity and which are sorely needed for other war purposes. They will require steel plate, other steel, copper, bronze and brass. Remember that every time steel plate is used for a synthetic rubber plant, just so much is being taken away from ships, tanks, high octane gasoline plants and munitions plants. These rubber plants will require compressors which are so badly needed to manufacture ammonia, toluene and other components of explosives and aviation gas. Every pound of copper taken for rubber plants and their equipment will mean fewer shells and less ammunition for our fighting forces.

In spite of the shortage of materials, however, we know that plants must be built to manufacture synthetic rubber, because rubber is necessary for our fighting machine and for our production machine as well. I am just as determined as anyone to get that rubber — and to get it as quickly as we can. But it is necessary to weigh the needs of our fighting and production forces for rubber against their needs for the very materials required to build the rubber plants. While the rubber shortage is extremely serious, it is only one of the products which we need to win the war.

Therefore, to take the determination of this question away from a Board which is equipped by personnel, and by experience, and by an overall knowledge of all our military and civilian needs, and to place it in a Board which is primarily concerned with the manufacture of one commodity, rubber, is in itself a disruption of a unified and expeditious production program. To go further, and to say that these materials can be taken away from ships and guns and ammunition and put to work producing rubber so that some people might use it for driving for pleasure is to fly in the face of the
realities of the present grave military situation which threatens all the world and civilization itself.

The distribution of scarce materials for various needs, both for the erection of plants and production of war materials, is one which can be handled only by one who has been empowered to control the entire situation. It would only be mishandled if now transferred to rival and overlapping agencies - independent of each other - competing for our limited supplies.

Apart from this, it is unquestionably a gross distortion of our war production policy and a repudiation of our all-out effort to win the war to say that any critical material can be taken away from military purposes and devoted to non-essential civilian demands. To give a moment's attention to the desire of a citizen to use his automobile for pleasure when our fighting forces require the rubber themselves and the materials required to make rubber, is an affront to the patriotism of every American citizen. I am sure that not one loyal American would wish to take an ounce of critical war materials of any kind in order to insure the use of his own automobile for anything but essential war needs.

There is one other commodity - of supreme importance - which is involved in this question of synthetic rubber. That is food.

The proposed bill not only provides for a complete supply of rubber, but it also directs that the director of the new agency shall have the duty to "make available at the earliest possible time an adequate supply of alcohol produced from agricultural products to meet any military or civilian need of alcohol in the United States." In addition to the further consumption of critical materials for the construction of any new alcohol plants which the new agency may de-
termine to be necessary, this provision may require the consumption of many hundreds of millions of bushels of grain. Even the process of making synthetic rubber under the present program will require approximately one hundred million bushels of grain.

It is true that we have great grain reserves at present, but we must bear in mind that there is a steadily increasing demand for grain for theaking of food for the army and navy and air force – not only of the United States but of all the United Nations. In the event of a serious drought next year – which is always a possibility – our reserves of grain may not be sufficient to cover the requirements both for food and for unlimited alcohol and rubber. Therefore, the need of grain for food instead of rubber or alcohol is something which must also be taken into consideration by those charged with the overall responsibility of the entire war production effort.

The processes for making synthetic rubber are now in a state of flux. Some of them are in the purely experimental stage, others have been demonstrated to have varying degrees of efficiency. It is obviously impossible to determine in advance just which process will eventually prove to be the most desirable, taking into consideration the elements of speed, efficiency of production, and consumption of critical materials. Even the processes for making synthetic rubber out of grain are several in number and new ones are being urged from time to time. The whole question of which process to use is tied up with the question of the best strategic use of the materials which are at hand or which can be obtained. Determination in this more or less unchartered area should have the advantages of the flexibility of administrative action rather than be frozen by legislative mandate.

It may well be that serious mistakes have been made in the past, based either on misinformation, misconception, or even partiality to one process or another. It may be that the present program of the
War Production Board is also a mistake. If so, the facts should be ascertained and made public. This is particularly so, if it be true as charged by some sources in the Congress and outside the Congress— that the manufacture of synthetic rubber from grain has been hamstrung by selfish business interests.

The question of rubber for automobiles is an unusually important one because it so intimately affects the daily lives and habits of so many American citizens. The very passage of the present ill-advised bill is an indication of the overwhelming interest which the American people have in this problem. I am sure, however, that once they are given the full facts as to the supply of rubber and the military and essential civilian needs for rubber, and the amount of materials which are required for the production of an adequate supply of synthetic rubber, they will be wholly willing to forego any considerations of their own convenience or pleasure.

In recent months there have been so many conflicting statements of fact concerning all the elements of the rubber situation—statements from responsible government agencies as well as from private sources—that I have determined to set up a committee of three men to investigate the whole situation and to report to me as quickly as possible the facts as well as their recommendations.

This committee will immediately proceed to study the present supply and the estimated military and essential civilian needs. They will also at the same time study the various processes now being urged for producing the required amount of rubber. They will recommend the various processes to be used not only in the light of the great need for rubber, but also in the light of the quantities of critical materials required by these processes.

In a sense this will require a review of the program now being followed by the War Production Board. It will form a basis...
for any future action not only with respect to synthetic rubber but also such matters as nation-wide gas rationing, and motor transportation.

The responsibility for the distribution of critical materials will remain with the War Production Board; but they, as well as the American people, will have a complete statement before them of the facts found by the committee. Based on such facts their program may have to be changed. If the facts justify their program, we shall all be satisfied that every precaution shall have been taken.

This unusual method of investigation and survey is being adopted because of the interest of the American people in the subject, because of the great impact of the lack of rubber upon the lives of American citizens, and because of the present confusion of thought and factual statement. In the meantime, of course, the manufacture of synthetic rubber will continue without interruption.

The functions of this committee require not only experience in business and production and the relations of government thereto, but also trained, scientific minds. Therefore, I am appointing as members of this committee, Honorable Bernard Baruch, Chairman; Dr. James B. Conant, President of Harvard University; and Dr. Karl T. Kompton, President of Massachusetts Institute of Technology. They will be equipped with adequate scientific staff and will, I know, submit their report at the earliest possible moment. I am asking them to investigate the whole situation and to recommend such action as will produce the rubber necessary for our total war effort, including essential civilian use, with a minimum interference with the production of arms and ammunition.
Calendar No. 1562

77th CONGRESS
2nd Session

S. 2600
[Report No. 1516]

IN THE SENATE OF THE UNITED STATES

JUNE 16, 1942

Mr. Gillette (for himself, Mr. Wheeler, Mr. Thomas of Oklahoma, Mr. McNary, and Mr. Norris) introduced the following bill; which was read twice and referred to the Committee on Agriculture and Forestry

JUNE 25 (legislative day, June 18), 1942

Reported by Mr. Thomas of Oklahoma, without amendment

A BILL

To expedite the prosecution of the war by making provision for an increased supply of rubber manufactured from alcohol produced from agricultural or forest products.

1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

2. That this Act may be cited as the “Rubber Supply Act of 1942”.

3. For the purposes of this Act (a) the term “rubber” unless the context otherwise indicates, means rubber produced from alcohol as the basic material; (b) the term “alcohol” shall mean any chemical developed from agriculture or forest products.

10. SEC. 2. There is hereby created and established an
agency of the United States to be known as the Rubber
Supply Agency (hereinafter referred to as the “Agency”).

At the head of the Agency there shall be a Director of Rub-
ber Supplies (hereinafter referred to as the “Director”),
who shall be appointed by the President, by and with the
advice and consent of the Senate, and shall receive a salary
of $10,000 a year. During his service, the Director shall
have no other vocation or employment and shall have no
financial interest in any enterprise with which he transacts
business in his official capacity.

SEC. 3. The Director shall employ and fix the compensa-
tion of such officers and employees, and shall make such
expenditures, as may be necessary for carrying out his func-
tions and the functions of the Agency. The Director is
authorized to accept gifts or loans of real and personal prop-
erty and to utilize voluntary and uncompensated services.

With the consent of the head of the department or agency
concerned, any officer or employee of any department or
agency of the Government may be assigned to assist in the
work of the Agency. Any function of the Director may be
exercised by such officers or employees of the Agency as
designated by the Director.

SEC. 4. (a) It shall be the duty of the Director to pro-
vide and make available at the earliest possible time an ade-
quate supply of rubber which, when added to the rubber
being supplied by other agencies, will be sufficient to meet
the military and civilian needs of the United States.

(b) To provide and make available at the earliest pos-
sible time an adequate supply of alcohol produced from agri-
cultural products to meet any military or civilian need of
alcohol in the United States.

c) The Director is hereby empowered—

(1) To make loans or advances, on such terms and condi-
tions and with such maturities as he may determine, for
the purpose of aiding in or providing facilities for the pro-
duction and processing of rubber and for the production of
alcohol for military or civilian use.

(2) To purchase, lease, or otherwise acquire such land
and to purchase, lease, construct, or otherwise acquire such
plants, equipment, facilities, machinery, materials, and sup-
plies as may be necessary for the production and processing
of rubber and alcohol (including experiments relating
thereto), and other materials needed for such production
and processing.

(3) To provide, by contract or otherwise, for the utiliza-
tion or operation of such land, plants, equipment, facilities,
machinery, materials, and supplies for the production and
processing of rubber and such other materials.

(4) To enter into such contracts and agreements as may
be necessary or appropriate for carrying out his powers and
duties. The Director is specifically authorized in his discretion to enter into contracts with nonprofit corporations and cooperative organizations.

(5) The Director is authorized and directed to establish within the Agency a research staff, which shall conduct research and experimentation for the purpose of furthering the technical development of synthetic and artificial rubber from agricultural or forest products, utilizing insofar as is practicable the facilities and services of the Department of Agriculture and the Bureau of Standards.

SEC. 5. The authority granted in this Act to the Agency herein authorized shall be independent and separate from any authority granted by law or any contract or order made in pursuance of law.

SEC. 6. Copies of all contracts, plans, and processes for the manufacture of rubber that are on file with any governmental agency shall be made available by such agency to the Director.

SEC. 7. When and if the Director finds that any article or material with respect to which priorities are in effect under any regulation or order of the War Production Board, or any other agency of the Government is needed for the purposes of this Act, he shall certify such fact to such Board, or other agency, and such Board or other agency shall provide that delivery of such article or material for use for the purposes of
this Act shall have priority over all deliveries of similar article
or materials for private account.

SEC. 8. For the purpose of preventing the monopolistic
control of the synthetic or artificial rubber industry, and for
the purpose of preventing such control in the production of
alcohol manufactured from agricultural or forest products, no
private corporation, and no group of private corporations,
which are affiliated through stock ownership or otherwise,
shall control more than 10 per centum of the production of the
total requirements of rubber as defined in this Act of the
United States for its military and civilian needs or more than
10 per centum of the materials from which such rubber is
produced and the Director is hereby authorized and directed
by the proper order to prevent such control.

SEC. 9. The Director is authorized to prescribe such rules
and regulations and to make and issue such orders and direc-
tions as may be necessary for the purpose of carrying out the
provisions of this Act.

SEC. 10. Such sums as may be necessary for carrying out
the purposes of this Act are hereby authorized to be appro-
priated.
A BILL

To expedite the prosecution of the war by making provision for an increased supply of rubber manufactured from alcohol produced from agricultural or forest products.

By Mr. Gillette, Mr. Wheeler, Mr. Thomas of Oklahoma, Mr. McNary, and Mr. Norris

June 28, 1942

Read twice and referred to the Committee on Agriculture and Forestry

June 30 (legislative day, June 30), 1942

Reported without amendment
provide increased supply of manufactured rubber

fermentation of grain. It holds great promise of a larger yield of butadiene than from alcohol. It has the advantage of being produced from present alcohol plants. Engineers explain that the conversion of plants from the making of alcohol to butylene glycol involves no radical rebuilding program.

One of the distillers is building a pilot plant in Louisville, Ky., for the production of butylene glycol. The plant will consume 500 bushels of grain, and produce 4,000 pounds of butadiene a day. Apparently this pilot plant is experiencing no difficulty in securing priorities. However, a concern in Florida that wanted to utilize the butylene glycol process in a commercial plant with sweetpotatoes as its raw material has been denied any priority assistance whatsoever.

The subcommittee is convinced that whether the alcohol or butylene glycol method is followed, the quickest way to secure a supply of synthetic rubber with the use of the least amount of critical materials is through the fermentation of the products of farm and forest. While any farm crop containing sugar or starch can be utilized, it appears most practical for commercial operation on a year-around scale in the Northern States to use dry grains such as corn or wheat, or sulfite pulp (a byproduct of our forests), and in the Southern States sorghums or sweetpotatoes.

EXPEDITING THE PROSECUTION OF THE WAR BY MAKING PROVISION FOR AN INCREASED SUPPLY OF RUBBER MANUFACTURED FROM ALCOHOL PRODUCED FROM AGRICULTURAL OR FOREST PRODUCTS

June 25 (legislative day, June 18), 1842.—Ordered to be printed

Mr. Thomas of Oklahoma, from the Committee on Agriculture and Forestry, submitted the following

REPORT
[To accompany S. 2603]

The Committee on Agriculture and Forestry, to whom was referred the bill (S. 2603) to expedite the prosecution of the war by making provision for an increased supply of rubber manufactured from alcohol produced from agricultural or forest products, after having considered the same, report thereto favorably with the recommendation that the bill do pass.

The purpose of the legislation is to establish a Rubber Supply Agency to be headed by a Director appointed by the President and with the advice of the Senate, which agency shall provide an adequate supply of rubber produced from alcohol as the basic material which, when added to the rubber being supplied by other agencies will be sufficient to meet the military and civilian needs of the United States. The agency will also provide for an adequate supply of alcohol produced from agricultural or forest products to meet any military or civilian needs of alcohol in the United States.

To accomplish the purposes of the bill the Director is empowered:

1. To make loans or advances, on such terms and conditions and with such maturities as he may determine, for the purpose of aiding in or providing facilities for the production and processing of rubber and for the production of alcohol for military or civilian use.

2. To purchase, lease, or otherwise acquire such land and to purchase, lease, construct, or otherwise acquire such plants, equipment, facilities, machinery, materials, and supplies as may be necessary for the production and processing of rubber and alcohol (including experiments relating thereto), and other materials needed for such production and processing.

3. To provide, by contract or otherwise, for the utilization or operation of such land, plants, equipment, facilities, machinery, materials, and supplies for the production and processing of rubber and such other materials.

4. To enter into such contracts and agreements as may be necessary or appropriate for carrying out his powers and duties. The Director is specifically author-
provide increased supply of manufactured rubber

acted in his discretion to enter into contracts with nonprofit corporations and cooperative organizations.

The production is authorized and directed to establish within the agency a research staff, which shall conduct research and experimentation for the purpose of furthering the technical development of synthetic and artificial rubber from agricultural or forest products, utilizing insofar as is practicable the facilities and services of the Department of Agriculture and the Bureau of Standards.

Section 5 of the act, by making provision for the agency as an independent establishment, leaves the program for production of synthetic rubber from petroleum in the hands of the agencies that have thus far undertaken that work.

Provision is made for the new agency to have access to processes on file with any governmental agency and for securing the necessary priorities for the building or conversion of plants. The bill also seeks to prevent a new industry from becoming controlled at the start by provision in section 8 that no more than 10 percent of the rubber produced from agricultural and forest products shall be controlled by one concern.

A subcommittee of the Committee on Agriculture and Forestry, authorized and directed by Senate Resolution 224:

To make a full and complete study and investigation of the production and means of production and plans for production of industrial alcohol, synthetic alcohol, and synthetic rubber, including the utilization of our natural materials for such purposes, the construction and location of production plants for the necessary processing of materials and resources in the manufacturing of these commodities; and so forth.

has held extensive hearings from March 20, 1942 to date. The hearings have not been concluded nor has a final report been drafted. However, sufficient information had been secured to justify the subcommittee conducting the hearings to unanimously endorse the introduction and passage of S. 2600.

The subcommittee has had undisputed evidence presented to it by outstanding chemists and engineers of national reputation to justify the conclusion that the quickest way to bring about the production of synthetic rubber, with the use of the least amount of critical materials, is through the conversion of alcohol from grain or forest products to butadiene (the principal ingredient necessary for the manufacture of synthetic rubber). The subsequent synthetic rubber is a well-established process. The bottleneck in the synthetic-rubber program is the production of butadiene.

It is undisputed in the record of the subcommittee that the only known and commercially tested processes for the production of synthetic rubber, developed principally in continental Europe by the Germans, Poles, and Russians, were from alcohol produced from grain and potatoes. There is no explanation by any responsible official of why this country in setting up a program for the production of synthetic rubber gave consideration only to untried laboratory experiments from petroleum which will require twice the time and many times the critical material needed to produce the same synthetic rubber from alcohol.

The only plausible explanation seems to be that the dollar-a-year men in the Chemicals Branch of the War Production Board were fearful that the war might end suddenly and that there might then be some surplus industrial alcohol that would provide competition for companies with which many of these officials have been associated for a long period of time.

The production of synthetic rubber has been handicapped and delayed by an apparent lack of coordination within the governmental departments charged with, or which assumed to handle, the petroleum Lip service has been generously given to the principle of utilizing process which would produce the synthetic rubber in the quickest time with the least amount of critical materials. Yet, belatedly and only after months of hearings was the program for production of butadiene products allowed to share in the program—and then only to the point—and not one step beyond—that whisky and molasses distilleries could be converted to the making of industrial alcohol from grain. Such meager care to avoid the possibility of post-war competition may bespeak a high degree of business shrewdness, but it likewise portrays a serious failure to appreciate the necessity of keeping America on wheels and winning the war.

The subcommittee has had ample demonstration to it that there is one process for making of butadiene from alcohol that is far beyond the experimental stage in this country. This process is controlled by the Carbide & Carbon Chemicals Corporation. The pilot plant is an overhead chlorination of the first large unit, construction upon which was started March 1, 1942, will be in operation on January 1, 1943. From the figures submitted there is no question but what this plant is far ahead of the petroleum or other plants proposed by the Rubber Reserve Company. Comparisons of its equipment requirements indicate that they will be less per unit produced than any of those from petroleum.

Originally Carbide & Carbon were allocated the production of 20,000 tons of butadiene to be made from alcohol—but this original plan contemplated the use in the making of butadiene of only synthetic alcohol from petroleum, and this synthesis of alcohol from petroleum is a highly complicated process using tremendous amounts of critical materials and machinery as compared to the simple fermentation process. The Carbide & Carbon Corporation needed 18,000,000 gallons of alcohol for this purpose. It had one plant producing 9,000,000 gallons and has been given priority assistance to complete the second plant. It was not until the subcommittee had conducted many hearings that the Carbide & Carbon Corporation were given an additional allotment of butadiene to be produced from alcohol. While no commitments were made, the subcommittee was led to believe that this additional alcohol will come from grain sources.

The subcommittee has had before it a Polish engineer who, for several years prior to the outbreak of the present war, operated a commercial plant manufacturing rubber from alcohol in Poland. This engineer perfected a small test plant in this country that is producing 100 pounds of butadiene per day. Plans for a full-scale pilot plant and the development of a commercial plant are going forward. This process is simpler than the one previously mentioned and utilizes even less critical materials. But the backers of this Polish engineer have been given no encouragement from those officials in charge of the present synthetic-rubber program.

Important developments are under way in the Peoria laboratory of the Department of Agriculture for the production of butadiene from butylene glycol, a substance which, like alcohol, is produced by the
RUBBER SUPPLY ACT OF 1942

JULY 21, 1942.—Committed to the Committee of the Whole House on the state of the Union and ordered to be printed

Mr. FULMER, from the Committee on Agriculture, submitted the following

REPORT

[To accompany H. R. 7257]

The Committee on Agriculture, to whom was referred the bill (H. R. 7257) to expedite the prosecution of the war by making provision for an increased supply of rubber manufactured from alcohol produced from agricultural or forest products, having considered the same, report thereon with a recommendation that it do pass, without amendment.

The purpose of the proposed legislation is to establish a Rubber Supply Agency to be headed by a Director appointed by the President by and with the advice of the Senate, which Agency shall provide an adequate supply of rubber produced from alcohol as the basic material which, when added to the rubber being supplied by other agencies, will be sufficient to meet the military and civilian needs of the United States.

The Agency will also provide for an adequate supply of alcohol produced from agricultural or forest products to meet any military or civilian needs of alcohol in the United States.

To accomplish the purposes of the bill the Director is empowered:

1) To make loans or advances, on such terms and conditions and with such maturities as he may determine, for the purpose of aiding in or providing facilities for the production and processing of rubber and for the production of alcohol for military or civilian use.

2) To purchase, lease, or otherwise acquire such land and to purchase, lease, construct, or otherwise acquire, such plants, equipment, facilities, machinery, materials, and supplies as may be necessary for the production and processing of rubber and alcohol (including experiments relating thereto), and other materials needed for such production and processing.
To provide, by contract or otherwise, for the utilization or operation of such land, plants, equipment, facilities, machinery, materials, and supplies for the production and processing of rubber and allied rubber materials.

To enter into such contracts and agreements as may be necessary or appropriate for carrying out his powers and duties. The Director is specifically authorized in his discretion to enter into contracts with nonprofit corporations and cooperative organizations.

The Director is authorized and directed to establish within the Agency a research staff, which shall conduct research and experimentation for the purpose of furthering the technical development of synthetic and artificial rubber from agricultural or forest products, utilizing, so far as is practicable, the facilities and services of the Department of Agriculture and the Bureau of Standards.

Section 5 of the Act, by making provision for the Agency as an independent establishment, leaves the program for production of synthetic rubber from petroleum in the hands of the agencies that have thus far undertaken that work. Provision is made for the new Agency to have access to processes on file with any governmental agency, and for securing the necessary priorities for the building or conversion of plants. The bill also seeks to prevent a new industry from becoming controlled at the start by provision in Section 8 that no more than 10 percent of the rubber produced from agricultural and forest products shall be controlled by one concern.

This bill, which has multiple sponsorship in both the House and Senate, has for its basic, undisputed evidence supplied by outstanding chemists and engineers of national and international reputation, that the conclusion that the quickest way to bring about the production of synthetic rubber, with the use of the least amount of critical materials, is through the conversion of alcohol from agricultural or forest products to butadiene (the principal ingredient necessary for the manufacture of synthetic rubber). The subsequent synthesis of butadiene with styrene to make finished rubber is a well-established process. The bottleneck in the synthetic rubber program is the production of butadiene.

Members of the committee have been acutely aware of the confusion, misunderstanding, and conflict of statements surrounding the rubber-supply situation since Pearl Harbor. They have carried on private investigations of their own and sought the most responsible advice they could secure on the subject. Their general conclusions have been that the only well-known and commercially successful process for manufacturing synthetic rubber is that developed principally in continental Europe by the Russians, Poles, and Germans who use alcohol produced from grains and potatoes as their basic raw materials.

On the other hand, there has been no explanation by any responsible official why this country in setting up its program for the large-scale production of synthetic rubber gave consideration only to untied laboratory experimental processes from petroleum which will require at least twice the time and many times the critical material needed to produce the same amount of synthetic rubber from alcohol.

It is quite generally agreed by members of the committee that various monopolistic interests have endeavored to supplant the use of farm products as a source of synthetic rubber. It is obvious that should they obtain such monopolistic control over this new industry, they would be in a position to reap vast profits both during and after the war.

It has been charged that the controversy over the use of farm and forest products as against petroleum in the synthetic rubber program is motivated by selfish enterprise and selfish interests. This contention is not true. The committee is only concerned with getting the greatest amount of rubber for military and civilian requirements in the shortest possible time and are convinced that agricultural products are the best means to achieve that purpose.

No better proof of this contention can be found than the fact that the Rubber Reserve Company has belatedly determined to allot a 200,000-ton contract for synthetic rubber to the Carbide & Carbon Chemicals Corporation, which controls one process for making butadiene from alcohol. A pilot plant has been built by this corporation and is now in operation and its first large commercial production unit is planned to come into operation on or before January 1, 1943.

The amount of critical materials to build this plant is very much less than that required for the extraction of butadiene from petroleum and the time element in construction is at least one-half that for the one or more of petroleum plants authorized and financed by the Rubber Reserve Company.

Fortunately, there need be nothing experimental in the manufacture of synthetic rubber from alcohol. A refugee Polish chemist now in this country, who operated commercial alcohol-synthetic rubber plants in Poland for several years before the war, is ready and eager to permit the Government to use his tested rubber process. But for some unexplainable reason, those in charge of the rubber program have not been able to utilize the process that has proven so effective in the German and Russian war.

Recently the United States Department of Agriculture announced that its chemists at the Northern Regional Research Laboratory at Peoria, Ill., have perfected a process for the production of butadiene from butylene glycol which, like alcohol, is a substance produced by the fermentation of grains. This particular process, while still untied commercially, promises a higher yield of butadiene than from alcohol, but its basic raw material is the same, namely, farm products. Its advantage lies largely in the fact that it can be produced by existing alcohol plants.

During the past year many responsible individuals and organizations have endeavored to secure the approval of the War Production Board for the construction of grain-alcohol and synthetic-rubber plants in their respective communities. Almost without exception these proposals have been turned down on the premise they could not be built because of the scarcity of the materials needed for their construction. At the same time approximately 30 petroleum plants were not only approved by the War Production Board, but financed by the Rubber Reserve Company, even though the petroleum process is
mainly unproven, its material requirements vastly greater, and the
time element for construction 100 percent higher.
The committee are not opposed to the use of petroleum or any other
material that will produce rubber in quantity. They believe that every
practical process should be exploited to the fullest to meet the vital
demand for rubber for military and civilian needs. However, in view
of the reluctance of certain Government officials to take advantage of
the most successful synthetic-rubber process known to meet wartime
requirements for this material it is deemed necessary to do by legisla-
tion what apparently cannot otherwise be achieved. Therefore, the
committee respectfully urge passage of this bill.