

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

Approximately ten thousand printed pages are covered by the minutes of the hearings of the latest Congressional investigations of the military aircraft expenditures, which totalled to over one billion dollars since 1917. It is not surprising, therefore, that the Congressional Committees find it hard to make an adequate report of the situation in less than two hundred printed pages. AERIAL AGE is likewise limited by the amount of space available and will be forced to publish only a comprehensive digest of the hearings and conclusions of this latest Congressional investigation of aircraft expenditures.

The reports of the Frear Committee will be printed first, in full. As regards the Manufacturers Aircraft Association, this Committee found conditions to be identical with the conditions found by the Senate Investigating Committee summarized in AERIAL AGE for February 9th and 16th and by Mr. Hughes in his 1918 investigation.

This investigation does not, however, cover the charges of lobbying and other recent alleged pernicious activities of some misguided individuals who have turned Congress against the Aeronautical Movement by their ill-advised actions.

Expenditure in the War Department—Aviation

Mr. Graham, of Illinois, from the Select Committee on Expenditures in the War Department, submitted the following report:

Subcommittee No. 1, on Aviation, of the Select Committee on Expenditures in the War Department, and composed of Hon. James A. Frear, chairman, and Hon. Walter W. Magee and Hon. Clarence F. Lea, were given the following jurisdiction by said select committee:

This subcommittee will have jurisdiction over all expenditures and contracts of the Signal Corps and for aviation generally, whether such supplies were purchased or contracts made by the Signal Corps or by any other subsequently organized bureau or division of the Army. This will include all aviation expenditures in the United States and until the supplies for which such expenditures are made are landed in foreign countries. By arrangement between Subcommittees No. 1 and No. 3 this subcommittee may make investigations in its work as to activities in foreign countries.

Included in the work of this subcommittee will be the Spruce Production Division and all aviation fields of the Military Establishment of every kind, with their supplies and equipment.

Since its appointment, on June 17, 1919, the subcommittee has been investigating the various matters submitted to it and has taken a very great volume of testimony, which will be found in the printed hearings of the committee, pages 1 to 3880, serial 2.

On February 9, 1920, the said subcommittee presented its report to said select committee, which, on motion, has been adopted as the report of said committee and is as follows, to wit:

The Select Committee on Expenditures in the War Department was directed by House resolution of June 4, 1919, to investigate all contracts and expenditures made by the War Department, or under its direction, during the war. Pursuant to such resolution the committee of 15 members therein provided divided the work among five subcommittees, of which "Subcommittee No. 1 (Aviation)," consisting of James A. Frear, chairman, Walter W. Magee, and Clarence F. Lea, were given jurisdiction over all expenditures and contracts of the Signal Corps and of aviation.

The following summary includes a review of the investigation hearings, which comprise about 3,900 printed pages:

During our 19 months of war with Germany the American Congress appropriated for Signal Corps and aviation purposes as follows:

Appropriations	\$1,692,336,424
Revocation of excess after the war (Feb. 5, 1919)	487,000,000

Balance available for use	\$1,205,336,424
Expended or obligated to June 30, 1919	1,051,511,988

The above statement is approximately correct. (Exhibit 9, p. 2856.)

During this period expenditures or commitments of over \$1,000,000,000 produced the following machines used by American aviators on the French fighting front:

American-built pursuit or combat planes	None
American-built bombing planes	None
American-built observation planes (D. H. 4's)	213
Machines bought from our allies	527

Total planes on French front Nov. 11, 1918	740
(Pp. 178, 179, 180, 185.)	

These facts confronted the committee at the outset of this investigation and whatever explanations or excuses may be offered of prospective quantity production, the fact remains that while the American Congress and the people gave ungrudgingly and were beguiled by responsible officials with promises of 20,000 American aeroplanes that were to precede our American armies to France, when the armistice was signed over 2,000,000 American soldiers had reached France and turned defeat into victory, while America's fighting aeroplane expectations and promises existed only on paper.

Three thousand American aviators available for flying were in readiness on the front in August, 1918, but fighting planes were not to be had, according to testimony of Gen. Kenly, Director of Aviation and an experienced aviator (p. 3494).

The number of American flyers on November 11, 1918, was 11,425, of whom 4,307 were in Europe and 7,118 in the United States (p. 284).

Testimony, October 31, 1919, before the Joint Military Committee briefly gives the story of America's aviation record from a witness of ecknowledged authority:

Senator CHAMBERLAIN. Did you at any time have enough planes of any make of American or foreign to train that body [aviators then in France]?

Gen. PERSHING. No; we were always short.

Senator CHAMBERLAIN. In other words, we had a body of young men over there to be trained that could not be trained because we did not have the facilities to train them.

Gen. PERSHING. Yes, sir. That is true (p. 1693, joint military hearings).

Mr. JAMES. How many American fighting planes were there in France at the signing of the armistice?

Gen. PERSHING. None. We had the De Haviland 4s.

Mr. MILLER. I mean combat planes.

Gen. PERSHING. No combat planes.

Mr. KEARNS. Do you know the reason why there were no other American-made planes over there?

Gen. PERSHING. I know very little of the construction program in America nor the reasons why we had no further planes. The only reason that I can give is that there were no planes ready to ship (p. 1611, joint military hearings).

Bearing on the same question Col. Patrick, Chief of Air Service, A. E. F., in August, 1918, testified:

Mr. FREAR. Two thousand seven hundred and twenty machines were necessary for 1,000,000 men (or 3,400 machines for American forces at the front)?

Col. PATRICK. That would be it, approximately.

Mr. FREAR. So we were woefully weak in our own Air Service, both in machines and men?

Col. PATRICK. Yes, sir (p. 187).

Our utter failure to produce fighting planes after 19 months of war is disclosed by one question:

Mr. MAGEE. As far as the manufacture of pursuit planes or bombing planes in the United States is concerned, we are practically in the same position (August, 1919) we were in when we entered the World War?

Col. PATRICK. Quite true (p. 232).

That, in brief, is the story of America's aircraft production failure, occasioned by a record of stupidity and stubbornness that involved inexcusable waste of men and money and invited military disaster.

The details would fill volumes, but this committee can only point out briefly recognized causes, as set forth in this and previous investigations and, so far as possible, fix responsibility for the record made.

War means waste and extravagance and, unless expenditures are of a questionable character, criticism does not ordinarily follow. Where incompetence, inexperience, blundering, or personal interests were permitted to delay or thwart aviation production and thereby jeopardize the winning of the war with attendant unnecessary loss of lives, responsibility should be placed upon those in actual authority. Your committee presents what are believed to be the facts in the firm hope that the Government may profit from errors of the past. Apologists can offer their own explanations.

The members of this committee were appointed without solicitation, but influenced by a unanimous vote of the House they accepted the assignment from a sense of public duty. Notwithstanding propaganda of a political character designed to discredit and interfere, begun before a single witness had been called, the hearings covering testimony of over 100 witnesses tell the story, and this brief report is offered without conscious prejudice, political or personal.

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

(Continued from last week)

Findings of Justice Hughes and Attorney General Gregory

No unprejudiced man will question the judgment of President Wilson in appointing Justice Hughes to investigate and report why our aviation branch of the service has been a failure. No intelligent man will question Justice Hughes' ability, thoroughness, and fairness as disclosed by his voluminous report found on pages 3712 to 3806 of the record. With his conclusions of incompetence and inefficiency in American aircraft production there can be no reasonable difference of opinion, and this committee recommends a careful reading of that exhaustive report to anyone who desires to know the appalling record of orders and counter orders, ignorance and bickerings, waste and extravagance, evidences of self-interest, and of improper practices disclosed. A condensed statement of certain important findings in that report is attached, as Addenda A, to this report.

Justice Hughes' conclusions were agreed to by the chief legal adviser of the Government when, on October 31, 1918, or 12 days before the signing of the armistice, Attorney General G. W. Gregory supported the Hughes report (p. 3706). No higher authority need be offered by any committee to support findings and conclusions of incompetence and inefficiency than the reports of Justice Hughes and of the Attorney General of the United States.

Findings of the Thomas Senate Committee

The Hughes hearings were conducted behind closed doors, so that in May, 1918, the Senate Committee on Military Affairs, acting on evidence of gross inefficiency and failure to get results in aviation, appointed a subcommittee—over a year after America's entry into the war—to investigate the aircraft situation. That committee consisted of Senators Thomas, of Colorado; Reed, of Missouri, and Hoke Smith, of Georgia, Democrats, and New, of Indiana, and Frelinghuysen, of New Jersey, Republicans. It held exhaustive hearings for several months, covering over 1,200 printed pages in extent.

Unwarranted political charges of partisanship or of prejudice may have been made against this committee, against Justice Hughes, or against Attorney General Gregory, but if so no intelligent man will question the ability and absolute fairness of the strong Senate subcommittee, a majority of whose members were Democratic Senators of national reputation, and who were demanding air protection for our country and for our forces overseas.

An Unanswerable Indictment of America's Aircraft Production Record

The Senate committee's report, made to the Senate late in August, 1918, is found on pages 3693 to 3706 of the record and, like the Hughes report, is there printed in full because of its definite criticisms as to inefficiency at a time when our country was engaged in the mightiest struggle of all history. In view of the necessity for careful statement, plain speaking, and unquestioned authority during times of war, the Thomas Senate subcommittee report is astounding in character and certain in its conclusions. Quoting an extract from that report, we find stated (p. 3693):

On April 6, 1917, the United States entered the war. On June 8, 1917, public announcement was made that a great fleet of 25,000 aeroplanes was about to be created and would be decisive of the war months before an effective Army could be put in Europe.

July 24, 1917, Congress appropriated \$640,000,000 to carry out the aircraft program. The fund has been either by actual expenditure or by commitments exhausted. A further appropriation of \$884,304,758 has been found necessary.

In the opinion of the committee a substantial part of the first appropriation was practically wasted, while an Army of three and one-half million men has been raised, the aircraft situation is as follows:

(a) Six hundred and one De Haviland 4s have been embarked for France up to August 1, 1918. Of these 67 reached the front by July 1.

(b) We have not a single American-made Chasse or bombing plane upon the battle front.

(c) We have not a single American-made heavy bombing plane upon the battle front.

(d) We have not developed or put in quantity production a successful Chasse or fighting plane.

(e) Our attempt to create a fighting plane was centered in an attempt to adopt the Bristol fighter and De Haviland to the Liberty motor. The Bristol was, without sufficient tests, put in quantity production, over

\$6,500,000 expended and the lives of several gallant men sacrificed, when the machine was condemned and its manufacture discontinued.

(f) The Standard J training machine was equipped with the Hall-Scott engine and put in quantity production. After more than 1,200 had been manufactured at a cost of \$6,000,000 the machine thus equipped was condemned as dangerous and placed in storage.

(g) The Spad is a Chasse or fighting plane of the highest type. Early in September an oral order was given to the Curtiss Aircraft Corporation for the manufacture of 3,000 of these machines. Work was at once begun and drawings practically completed. October 8, the contract was canceled, the reason given being that the single-seat fighter was regarded as obsolete. But the fact is that on April 23, 1918, a contract was let to the Curtiss Co. to build 1,000 single-seat fighters known as the SE 5, which is the English equivalent of the French Spad.

(i) The cancellation of the Spad contract and the failure of the Bristol left us without either a single or two-seated fighter. . . .

(k) As early as the month of October, 1917, we were in possession of the necessary facilities to construct the Caproni, a powerful and successful heavy bombing plane, approved both by Italian and English aeronautical engineers. Expert Italian engineers have been upon the ground since the month of January, yet the fact remains that we have up to date constructed only one experimental machine, which is equipped with Liberty motors.

(l) The Handley-Page heavy bombing machine furnishes another example of delay. Plans were furnished the Signal Corps in the summer of 1917, but were not availed of. . . . A sample plane ordered in March, 1918, was flown last July. Tests are not yet complete.

The foregoing record of our tragic failure in aircraft production, as determined by a Senate committee late in August, 1918, shortly before the end of the war, is here submitted, together with the caustic report of Justice Hughes and Attorney General Gregory made late in October, 1918. These nonpartisan, impartial, and vigorous reports show the deplorable conditions existing in our aircraft program just prior to the armistice and after an expenditure or commitment on contract at that time of a large part of the \$1,000,000,000 eventually spent.

America's Humiliating Airplane-production Record

Undisputed facts found by the Thomas Senate committee disclose that on August 1, 1918, about 16 months after the declaration of war, 67 DH-4 observation planes—America's only contribution—had reached the fighting front. On November 11, 1918, three months thereafter, when the war ended, the 67 DH-4 observation planes in operation on the front had increased to 213 (p. 190). Apart from 527 foreign machines begged, bought or borrowed from our Allies, whether up to date, obsolescent or obsolete, it is conceded America only had 213 observation planes of American make on the front November 11, 1918 (p. 178), with which to supply 1,250,000 American soldiers then on the battle line (p. 186). The French, after many losses in battle, had 3,321 planes for their 1,500,000 French soldiers then on the line, an insufficient number, but 15 times as many, proportionately, as those of American make.

The British had 1,758 planes for their 900,000 men, or a slightly less proportion (p. 170). The Germans, though hard pressed toward the end, with many destroyed machines, still had 2,730 planes on the line (p. 170). The 527 foreign machines used by American aviators at the front, whether obsolete planes or otherwise, were borrowed or bought from our sorely pressed Allies, who needed them, if serviceable, for their own use.

In response to the contention of apologists that Allied planes were used to protect American soldiers, the patent fact remains that the Allies were short of planes, and if the planes which we received from them were of any value, then, in helping America, they necessarily weakened themselves.

Testimony from America's Greatest Aviator

The following, from America's greatest aviator, Eddie Rickenbacker, tells the actual situation at the front during the momentous summer of 1918. Rickenbacker's book was recommended to the committee by Secretary of War Baker. Rickenbacker and Meissner, two of America's best fighters and best judges of fighting planes, both testified before the committee confirming conditions graphically contained in the book, and Rickenbacker said that statements set forth in his book were absolutely true and based on accurate data made by him at the time.

On page 14 he says (p. 196 of the record):

The Germans . . . had seen the spring months pass, and instead of viewing with alarm the huge fleet of 20,000 aeroplanes sweeping the skies clear of German Fokkers they had complacently witnessed the Fokkers occupying the air back of our lines whenever they desired it with never an American plane to oppose them.

Of equally thrilling interest are his vivid descriptions of our air helplessness on pages 197 and 198 of the record.

Again he says (p. 119 of his book):

From the frequency of accidents to our Nieuport it may be wondered why we continued to use them. The answer is simple; we had no others we could use. The American Air Forces were in dire need of machines of all kinds. We were thankful to get any kind that would fly. The French had already discarded the Nieuport for the staid, stronger Spad, and thus our Government was able to buy from the French a certain number of these out-of-date Nieuport machines for American pilots—or go without. Consequently, our American pilots in France were compelled to venture out in Nieuports against more experienced pilots in more modern machines. None of us in France could understand what prevented our great country from furnishing machines equal to the best in the world.

Many a gallant life was lost to American aviation during those early months of 1918, the responsibility for which must lie heavily upon some guilty conscience.

The German Fokker, Rickenbacker said, was superior to any fighting plane possessed by the Allies and far excelled the discarded French Nieuport or even the French Spad (p. 3649-3650).

Col. Patrick, when, before our committee, speaking of Rickenbacker, says (p. 197):

He had 26 victories, I think. I decorated him. I gave him the distinguished service cross.

Disclosing our complete helplessness in the face of the enemy, Rickenbacker again says:

The truth is that not one American-made fighting machine came to the front until the war was ended (p. 197).

Reckless Blundering of Responsible Officials

Responsible American officials who refused to have manufactured recognized types of fighting machines then in service; who recklessly blundered with attempted quantity production of the worthless Bristol that could not carry the Liberty motor; who canceled the 3,000 Spad order given our factories in September, 1917; who ignored Gen. Foulois' request from France early in July, 1917, for 800 SE-5's, 800 Spads, 800 Sopwiths, and 8,000 specifically named fighting machines like planes then in use (p. 360-670); who ignored the request of Gen. Mitchell and the French Government (p. 2614-2617) for planes and aviators, have not suffered from "guilty conscience," but have sought to justify their record of mistakes and their appalling inefficiency with flimsy excuses.

Swivel-chair experts have declared to our committee that American aviators were furnished similar machines to those used by our Allies and that the 213 DH-4's eventually furnished by America's expert designers on the front were the equal of machines possessed by the Allies or by the enemy. Chief Ace Rickenbacker, Meissner, Archibald, Gen. Mitchell, Gen. Kenly (p. 3496), and many others have nailed such untrue statements in their testimony (pp. 2623, 3498), while many other authorities have shown the uselessness of the DH-4 in any real fighting.

Like the promised 20,000 to 25,000 American planes, fabrications regarding production were used to deceive the American people; but those at the front in France, who were meeting great odds, knew the truth. A billion dollars for aircraft, a large part of which the Thomas committee found to have been wasted, was a miserable record, but of little importance compared to Rickenbacker's brief comment, "Many a gallant life was lost to American aviation . . . the responsibility for which must lie heavily upon some guilty conscience." The Hughes and Thomas investigations have placed the facts before the country for consideration of those who ungrudgingly raised a billion dollars that our troops might be protected with aircraft. Congress appropriated every dollar asked for, according to Gen. Squier (p. 3590), and with this record of failure, Col. Deeds, Director of Aircraft, who had been removed and who had been recommended for court-martial by Justice Hughes, was banqueted in Washington by Chief Signal Officer Squier and other admirers for the kind of record he had made (p. 59).

Rickenbacker repeatedly describes the helplessness of the DH-4 on pages 197 and 198 of the committee record.

"Flaming Coffins" Furnished American Aviators

What more fearful arraignment can be offered than the following description by Rickenbacker of their helplessness in action (p. 198 of record):

From every side Fokkers were piquing upon the clumsy Liberty machines (DH-4's) which, with their criminally constructed fuel tanks, offered so easy a target to the incendiary bullets of the enemy that their unfortunate pilots called this boasted achievement of our Aviation Department their "flaming coffins." During that one brief flight over Grand Pre I saw three of these crude machines go down in flames, an American pilot and an American gunner in each "flaming coffin," dying this frightful and needless death.

Equally vivid is the following brief, bitter experience that needs no additional explanation. Capt. Sweeney, an American engineer, testified before our committee as follows (p. 1354):

On the 22d of August, 1918, in Clarmont, France, about 16 men (American aviators) were lined up that had been ordered to the front. I think there were about four or six DH-4 machines, and the rest were French machines. They were second-grade machines. The French did not give the first-class machines to the Americans. They shook hands with everybody and said, "Well, this is not au revoir, this is good-by." Capt. Williams (in charge of the aviation group) and I were standing opposite, and I asked him why all this gloom. He said, "Well, those American machines have no protection. As soon as a bullet hits that gasoline tank it is certain it will take fire immediately, and the men—the pilot and observer—have no chance to get away." He said the boys called those "flaming coffins."

Mr. MAGEE. Sure death?

Capt. SWEENEY. I presume so. I did not ride in any of them.

Mr. MAGEE. What did he say about that—the captain in charge?

Capt. SWEENEY. He said they would not come back; that when one of the machines was struck it was the finish. The French machines were old and not up to date. They were not as fast as the German machines and, therefore, they did not figure they had much chance in these machines, either. I saw Capt. Williams about a month afterward and asked him particularly if those fellows came back. He said he had never heard of any of them. He said they had fallen inside the German lines and had been captured or killed.

Capt. Sweeney's statement and Rickenbacker's vivid description can be fully understood when nine men were killed in 39 unconverted DH-4's in the recent October transcontinental races and many other DH-4 machines like those we sent to France were wrecked or damaged, which in battle would have meant certain death or capture to the flyers engaged.

Responsibility Fixed for Use of "Utterly Unsafe" Planes

In spite of wanton waste of lives, these DH-4's, the only American-made planes that reached the front, were kept in production after their dangerous and clumsy construction was a matter of common knowledge. The last Director of Aircraft, Mr. John D. Ryan, just prior to his long European trip with Secretary Baker in August, 1918, testified before the Thomas Senate subcommittee a few weeks after he had canceled the order for the utterly useless Bristol that could not carry the Liberty motor. The following testimony is from Director Ryan on the DH-4. His responsibility for aviation and needless waste of life was then being weighed by that committee:

Senator REED. You know that the best and most experienced flyers, a number of them in this country, have testified before this committee that they regard the DeHaviland machine as utterly unsafe and that they would refuse to go up in it or send subordinates up in it?

Mr. RYAN. I understand that some have testified that they have refused to go up in it or let subordinates go up in it.

Senator REED. You propose to go on making the DeHaviland 4 machines?

Mr. RYAN. Until we can put the DeHaviland 9 in production.

Senator REED. Do you intend to do that regardless of any testimony that may be given by experienced flyers that the machine is utterly unsafe?

Mr. RYAN. I am not convinced that the burden of testimony of the flyers throughout the country is that the DeHaviland 4 is an unsafe machine (p. 42).

This testimony is taken from the official record of the Thomas Senate committee hearings to show the purpose of responsible American aircraft production officials from Squier and Deeds, at the beginning, and down to Ryan at the finish, to keep manufacturing for use of American aviators the "utterly unsafe" DH-4. Equal responsibility rests with the head of the War Department, who was informed of the facts—for Secretary Baker, who approved the Squier program at the outset, was before the Thomas committee in August, 1918, when the following startling statement was made to him by a Senator of that committee:

Senator NEW. It is a fact that every flyer that we have had before this committee as a witness, including several who have seen long service abroad, both with our own forces, the British forces, and the French forces, have testified that the DeHaviland 4 machine, with the defects appearing in it as it has been produced at the Dayton-Wright factory, is highly dangerous and ought not under any circumstances be used; and at least one officer has testified that he would no longer send men up from his field in a machine of that type until after these defects had been remedied. In view of that condition, as it has been expressed and recorded by the men who are best qualified to pass upon the conditions and quality of that machine, I at least think that it was a very great error of policy and judgment to have sent them forward before these mistakes were corrected, and I wanted to know whether or not you agreed with that view?

Mr. BAKER. The subcommittee, of course, has a great advantage over me in that I have not been permitted to see any of the testimony the committee has taken, so that I do not know anything about this concurrence of opinion to which you refer.

Senator NEW. I am telling you now what that opinion is (p. 34).

More specifically, Secretary Baker testified before our own committee, July 31, 1919, as follows (p. 42):

Secretary BAKER. Mr. Ryan and I talked over the general question . . . and I approved that we should not suspend making any machine we were then making, but we should go on and make it and get ready to make others.

This was Mr. Baker's judgment when the only machine apart from training planes then or thereafter produced by the United States was the "utterly unsafe" DH-4 plane.

Secretary Baker and Mr. Ryan, his appointee, were both faced by the Senate committee with these facts, which were pressed upon them when they sailed together for Europe in August, 1918, at which time Mr. Ryan declared to Senator Reed that he proposed to go on making the dangerous DH-4's.

Thousands of Unsafe Planes Built with Full Knowledge of Their Defects

Many combat flyers testified before the Hughes investigation, the Thomas committee, and this committee regarding the unsafe and clumsy DH-4 planes, but not one witness out of the 740 American flyers at the front has been found to defend its use for fighting purposes in battle.

One thousand and ninety-seven of these DH-4 machines, which Rickenbacker called "criminally constructed," were produced in October, 1918, alone at a cost of ten to fifteen millions of dollars, and they were kept in production up to the end of the war. A certainty exists that fatalities among American aviators would have largely increased but for the failure of Gen. Pershing to receive more than 213 of these DH-4's with which to face the enemy.

Good judgment was displayed when over 1,000 DH-4's were scrapped and burned in France after the armistice, whereas we brought back 1,000 used and unused foreign planes, including about 300 obsolete Nieuports and Sopwiths, discarded by the Allies long before the end of the war (p. 3317). "Very few of these were new," and yet were sent here in preference to the "utterly unsafe" DH-4's (pp. 3317-3320).

Gen. Pershing's cablegram (p. 203), showing over 50 defects in DH-4 planes received by him in Europe, specifically indicted the clumsy, dangerous machine, and apart from the 213 used at the front the remainder of the DH-4's were put to better use by being kept boxed and stored in this country as coffin-shaped monuments to official stupidity and criminal stubbornness.

Sending American aviators into action with these DH-4's was more wasteful of human life even in the hands of the best-trained aviators than it would have been to equip shock troops with wooden guns. American aviators made a name for American valor, courage and skill, although equipped with second or third rate machines, as described by the different witnesses. Individual aviators stood out brilliantly, but with all their bravery, which was emulated by their comrades on the ground when going over the top, the fact remains that nothing injured the morale of flyers, or of the soldiers whom they were protecting, more than knowledge that their machines in use were discarded French Nieuports or unsafe American planes far inferior to machines then in use by the enemy (pp. 3649-3652).

Misleading Production Figures

Testimony was placed before the committee relating to production figures, actual and prospective. Estimates were frequently measured by the imagination of witnesses, while grossly misleading evidence, confusing to the average mind, shows that anything may be proved by figures.

As stated, Secretary Baker testified in effect before our committee that at the end of the war we had not a single American-built fighting or bombing plane at the battle front, and Col. Patrick stated that the only machines in use at the front by Americans were 527 foreign bought or borrowed planes, supplemented by 213 observation DH-4's (p. 178).

Gen. Pershing testified before the Joint Military Committee that we never had any American-built fighting plane at the front, yet we find Assistant Secretary of War Crowell, in a report on American munitions (p. 243 of report), giving figures that carry a wealth of misinformation characteristic of similar testimony placed before the committee and before the country. He says:

On the day the armistice was signed we had received from all sources 16,952 planes. Of these, 5,198 had been produced for us by the Allies.

Of 11,754 planes claimed to have been built in America, according to this same authority, we had produced "3,328 fighting planes." That is his statement.

Drawing on Our Exhausted Allies

Mr. Crowell includes Penguin wooden "grasshoppers" in his list of "planes" and also scores of worthless Bristols and 1,660 condemned Standard J training planes (p. 3769), together with other similar disastrous experiments, including 4,000 "utterly unsafe" DH-4's, in order to reach the figures

contained in his remarkable statement; but when he states that "3,328 fighting planes" were produced in America, the astonishing error is manifest.

Rickenbacker's brief statement is undenied (p. 197): "The truth is that not one American-made fighting machine came to the front until the war was ended." Secretary Baker, Mr. Ryan, Gen. Pershing, and all other witnesses before all the committees agreed to this proposition. Neither 3,328 nor any American-made fighting machines were produced for use before the end of the war, but Mr. Crowell's statement calls to mind a most pitiful picture of our own inefficiency during the war when he says that 5,000 planes of various types, largely training, including over 2,000 obsolete Nieuports and Sopwiths, were purchased from the Allies during the war, equal in number to the total real fighting planes on the front owned by France and England combined. Bleeding France and exhausted England, with their backs against the wall, with reserves strained to the utmost limit, were called on to furnish planes to the opulent, prosperous United States that had raised a billion dollars for planes and then had to depend on the Allies for 527 fighting planes, including Nieuports and Sopwiths—all that we could get—because of our own failure to produce. Gen. Pershing testified that we were short of both fighting planes and training planes. Criminally short, he might truthfully have added.

The picture is humiliating when we contemplate the efforts of our Allies to provide planes for their own protection, as disclosed by the testimony, and by their payment to us per thousand feet on a 10 per cent salvage basis, of \$802.20, \$287.20 and \$895.20 for spruce, fir and cedar, respectively, which was used by them in building planes for our mutual defense (p. 2304), while many of our own factories were standing idle, according to the Hughes report.

We had the factories, men and money, and might have turned out planes at a wholesale rate, when the uselessness of DH-4's in battle was demonstrated at the outset, but that was the only American machine ever produced for use at the front.

So much for the record of American aircraft production during 19 months of war. If the war had lasted two or three years longer and until responsible American officials decided to build Spads, Capronis, and real fighting machines, without constantly canceling orders, we might have shown results. Production of all Army planes, apart from DH-4's, in January, 1918, reached 744. Seven months afterward, during strenuous war needs, American production reached 489 planes in August, 1918, or a loss of about 35 per cent compared with the month of January.

American Airplane Production—1918

(P. 518.)

January	744	June	448
February	725	July	666
March	934	August	489
April	728	September	450
May	598	October	554

The foregoing does not include the "quantity production" of DH-4's, but it does include all training planes, "sea sleds" and several hundred Penguins, or what are known as wooden "grasshoppers." It also includes 1,660 discarded worthless Standard J planes, described in the Thomas committee report, and scores of Bristols, also discarded. About 4,500 useless DH-4's were paid for by the United States at a cost of over \$50,000,000.

The following statement gives comparative production of airplanes in Italy, France, England and United States by months from January 1 to September 30, 1918, according to testimony of Gen. Menoher, Chief of Air Service.

Total production of airplanes in Italy, France, England, and United States, by months, from Jan. 1 to Sept 30, 1918

	Italy	France	England	United States*
1918				
January	305	1,484	2,347	729
February	349	1,615	2,288	734
March	189	1,609	2,587	938
April	161	2,150	2,107	743
May	291	2,023	3,051	751
June	435	2,262	2,650	784
July	459	2,595	3,474	1,150
August	365	2,857	2,279	713
September	374	2,238	2,726	1,207
Total	2,928	18,833	23,509	7,749

*The apparent discrepancy in American airplane production shown by the two tables is due to the DH-4's, which are included in the second table.

Wasted Three to Five Months

March 13, 1918, Gen. Pershing cabled Gen. Squier:

Approximately 700 cadets in Europe awaiting flying training. These cadets have already wasted from three to five months for training and it is estimated some of them will have to waste at least four months before their training can be commenced. . . . These conditions have produced profound discouragement among cadets (p. 3751).

The whole country was becoming discouraged with Squier, Deeds, et al., and no relief ever in sight.

Vice-President Keys, of the Curtiss Co., sets forth some of the contradictory orders received (pp. 3481-3483) while 789 changes were made under orders of the War Department in the attempted production of the discarded Bristol. The following testimony is illuminating regarding this one firm manufacturing planes:

Mr. FREAR. How many men were you employing?

Mr. KEYS. 18,700.

Mr. FREAR. What was your possible production capacity?

Mr. KEYS. Our plant was designed for a maximum of 100 machines a day of any type small machines. . . . We contracted in September, 1918, to deliver 100 machines (fighting planes) a day (pp. 3456-3457).

The Curtiss firm received an order for 3,000 fighting "Spads" on September 19, 1917. The order was canceled November 7, 1917 (p. 3755). But this one factory could have produced 30,000 fighting planes a year, according to Keys, if given a free hand.

Borglum stated several months before the Hughes investigation was started that at the Curtiss plant 13,000 or 14,000 people were on the pay rolls (cost plus) and "it has been suffering from 60 to 70 per cent idleness. Very much the same conditions prevail at the Standard Co." (p. 27). All were waiting for orders from the experimenting experts.

Gen. Squier, before the Senate Military Committee, January 30, 1918, explained his own state of mind at that early date when he said:

I think we shipped no training planes to France at all. It is looming on the horizon that we may be producing more than we can get across and thereby be upsetting industry (p. 24).

Upsetting Industry

Gen. Squier's statement before the Senate Military Committee was made shortly before Gen. Pershing cabled to him that 700 flying cadets had been from three to five months delayed in their training because of absence of planes.

While Gen. Pershing, Gen. Mitchell, Maj. Foulois, and others in France were frantically calling for planes with which to train and fight, Gen. Squier was calmly studying "the horizon" to discover whether we should "upset industry."

"Upsetting industry" has been a besetting fear with the War Department, which made eight hours a day's work for soldiers on the coast. It has salvaged airplanes, copper, trucks, and all other properties, including foodstuffs in a manner not to upset industry. It has frequently sold back for a song articles produced under Government contract, to the original producers in order not to "upset industry." Airplanes costing the Government \$20,000,000 were resold to the Curtiss factory for \$2,700,000, or about 13 per cent of cost. Thousands of American aviators were compelled to buy at full price from the Curtiss Co. if they wanted these machines.

In his final report to the Secretary of War, evidencing the failure to receive American planes, Gen. Pershing says (p. 76 of report):

In aviation we were entirely dependent upon our allies. . . . Without going into a complete discussion of aviation material, it will be sufficient to state that it was with great difficulty that we obtained equipment even for training.

Nothing need be added to this significant statement of failure of responsible officials in this country to provide airplanes.

America's aviators, with all their handicaps through poor planes, are described as follows by the same high authority:

As to our aviators, many of whom trained with our allies, it can be said that they had no superiors in daring and in fighting ability. During the battles of St. Mihiel and Meuse-Argonne our aviators excelled all others. They have left a record of courageous deeds that will ever remain a brilliant page in the annals of our Army.

Hughes and Thomas Committee Reports

This committee has embodied in its hearings as exhibits the hearings and reports of Justice Hughes and of the Senate subcommittee, because early in the investigation it was determined to avoid duplicating hearings and overlapping of investigations so far as possible. With that purpose in view, your committee has accepted the conclusions based on specific facts of the two other investigations with a belief that the desire of the House is to have facts brought down to date,

together with an investigation of the spruce situation, which was suggested in the Hughes report. The Maj. Ray spruce investigation, and various hearings in other investigations, are also herein referred to.

The Hughes report fixed responsibility on certain officials, from Gen. Squier and Deeds down to subordinate officers, and recited failures in measuring up to requirements. The Thomas Senate committee report devoted brief consideration to individual inefficiency, but pointed out the disastrous policy pursued in sacrificing everything and subordinating all energies to perfecting the Liberty motor.

In the judgment of this committee both the Hughes report and the Thomas report reached correct conclusions, and it is not necessary to reiterate those conclusions; but responsibility for failures should be chargeable to those at the top who permitted inefficiency and stupidity to govern what ought to have been a vigorous branch of our military program. Addenda A in part 2 of this report gives an extended summary by Justice Hughes of production figures and other data down to October, 1918.

Official Responsibility for Aviation Failures

A sufficient warning was given the department by Gen. Squier before the Senate Military Committee, January 30, 1918, when he said:

We had to make a momentous decision back in April, 1917, when we decided to make the Liberty motor. . . . We had to throw the die. I think we did right. We had to decide whether we would go over to England and get those planes and engines and try to produce them or try to pool everything we had. That decision was taken boldly, and I think it was a very wise one (p. 23).

Justice Hughes' report says of Gen. Squier (p. 3773):

The duty of providing an adequate organization for aircraft production was left to the Signal Corps. It is quite clear that this undertaking was beyond the competency of the Chief Signal Officer.

This reckless, foolish policy threw aside every tried life preserver, every efficient air weapon used by all other countries after 30 months of war, and resulted in disastrous blunders and inexcusable delays, when delays meant unnecessary loss of life and possible loss of battles. Gen. Squier threw the die in April, 1917, and pooled everything for the Liberty motor experiment, which was used in the hopeless DH-4's, ignoring all other weapons.

Secretary of War Baker, while before our committee, said he approved Gen. Squier's course when he responded, "That was my judgment at the time and still is my judgment" (p. 23).

On Secretary Baker's shoulders must rest equal responsibility for failure to procure other engines and other planes when pooling all energies in the Liberty motor. Thousands of workmen were idle in airplane factories waiting for work, while Europe shouted for planes. Gen. Squier was finally relieved from active production about the time he testified before the Senate committee after nine months of valuable time had been wasted. All energies continued to be bent in building the useless DH-4, as shown by Director Ryan's testimony previously cited, and the same disastrous policy was thereafter pursued to the end of the war and approved by Secretary Baker (p. 42).

It is not the province of this committee to declare the measure of responsibility of any official, but we would be derelict in duty if we failed to present to the House what we believe to be the causes for America's aviation failure and the resulting lack of confidence in any present War Department aviation plans.

Official responsibility reaches back prior to the war when Congress created a Council of National Defense, August 29, 1916. An active, virile organization that would insure ample protection to the country in time of peace and full preparation if our country became involved in war was needed. Over six months elapsed, while "Rome was burning," before the council was finally organized on March 3, 1917, with Secretary of War Baker as chairman. Gen. Squier, then Chief Signal Officer, was in control of aircraft matters. Nothing has been done in aviation—nothing was likely to be done. He pooled everything on the Liberty motor when he did start, after the war was on, and put all the Nation's aviation program eggs in one basket.

(To be continued)



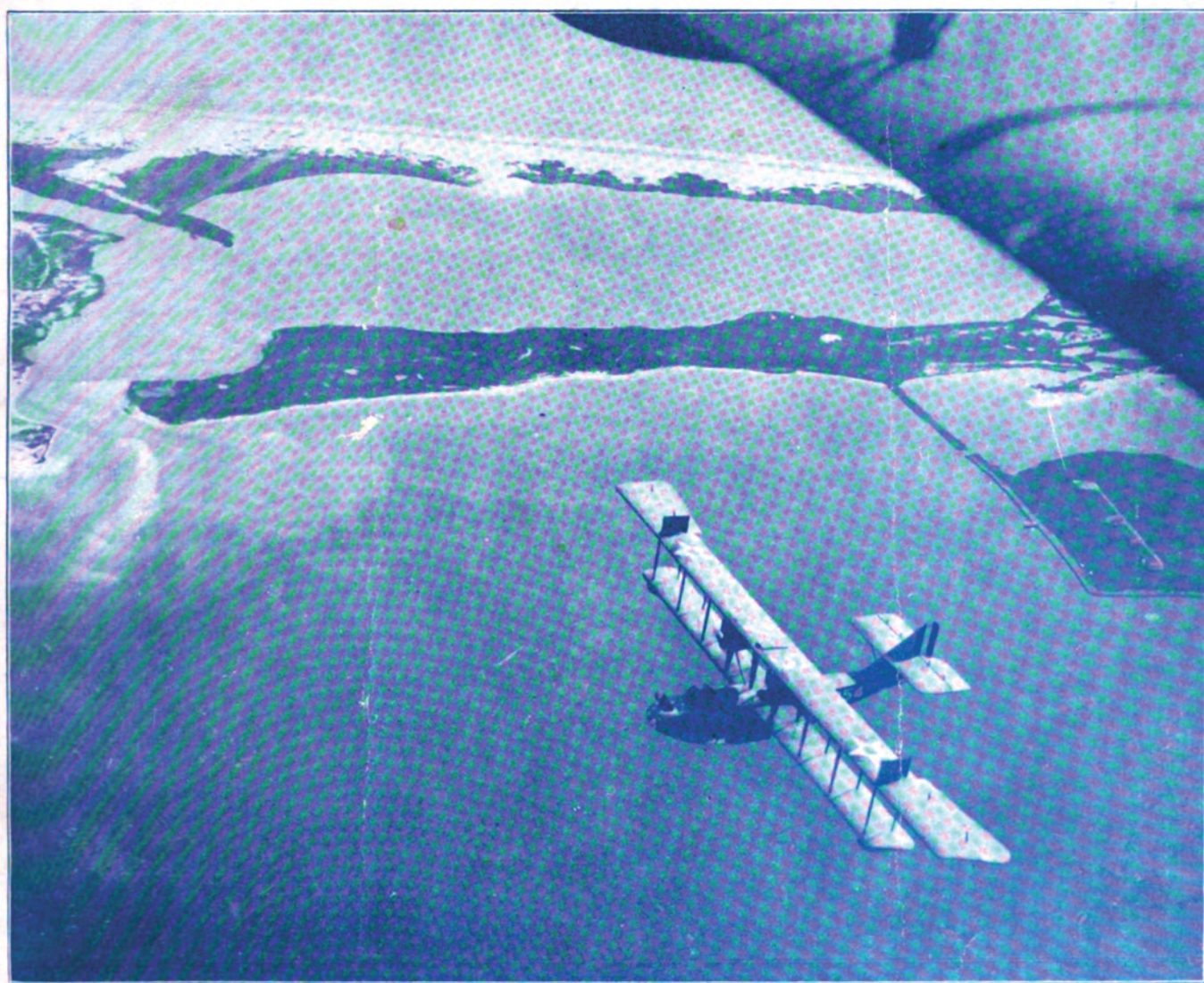
AERIAL AGE

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U. S. Naval Flying Boat Flying Over the Harbor at Pensacola

Rules for 1920 International Aviation Trophy Provide for Factor of Safety

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

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The reports of the Frear Committee will be printed first, in full. As regards the Manufacturers' Aircraft Association, this Committee found conditions to be identical with the conditions found by the Senate Investigating Committee summarized in AERIAL AGE for February 9th and 16th and by Mr. Hughes in his 1918 investigation.

This investigation does not, however, cover the charges of lobbying and other recent alleged pernicious activities of some misguided individuals who have turned Congress against the Aeronautical Movement by their ill-advised actions.

(Continued from last week)

Responsibility for Deeds

Col. Edward A. Deeds, of Dayton, Ohio, was placed in charge of the Equipment Division of Aviation under Gen. Squier in August, 1917, four months after our entry into the war. Nothing appears in any of the hearings of any investigation to show why Deeds was appointed. Deeds knew nothing of aircraft. Deeds had never been connected with any Government activity. Secretary Baker says he never saw Deeds until after his appointment, although Deeds and Secretary Baker were both from Ohio.

Justice Hughes' report found that Deeds began his activities by centering aircraft operations at Dayton, Ohio; that he gave large contracts to his business associates—Kettering, Talbott, and others in that city, although they had no previous experience in such matters; that he located several aviation fields around Dayton in improper locations, and also located fields in Florida without authority or explanation; that Deeds was largely interested in corporations controlling the Delco ignition system used in the projected Liberty motor, whereas prior to its use on the Liberty the magneto system had been used on all airplane engines (p. 58).

The following is from the Hughes report (p. 57 of record):

At the inception of the Government's aviation activity in connection with the war and within the sphere of Col. Deeds' important if not commanding influence, his former business associates were placed at once, through Government contracts, in a position where they had assurance of very large profits upon a comparatively small investment of their own money, and in addition were able to secure generous salaries which they charged against the Government as part of the cost of manufacture.

After reciting evidence in support of his conclusions, Justice Hughes finds:

The evidence with respect to Col. Edward A. Deeds should be presented to the Secretary of War, to the end that Col. Deeds may be tried by court-martial under articles 95 and 96 of the Articles of War.

Justice Hughes' report in part 2 of this report includes a detailed statement of testimony on which the finding was based.

In the Attorney General's report (page 58 of the record) this finding appears:

I acquiesce in the recommendations of Judge Hughes that the facts be submitted to the Secretary of War.

Because of these findings and recommendations for court-martial it is proper to say that about four years before his appointment to produce aircraft, Deeds achieved considerable notoriety in Ohio, where he was prosecuted in the Federal Court for alleged bribery and criminal methods in driving his competitors out of the cash register business, and was convicted by a jury after a trial lasting over a month and sentenced to imprisonment for one year.

An appeal was taken, with 50 assignments of error, and the case was reversed and no retrial was ever had (p. 50-52). Deeds' innocence may be conceded, for the sake of argument, though no second trial occurred, but the charge, conviction and court record were enough to put any responsible official on inquiry before giving Deeds a place of transcendent importance in charge of matters about which he knew nothing.

Why Was Deeds' Court-Martial Prevented?

For Deeds' alleged efforts to place large Government contracts with his business associates in Dayton, under questionable arrangements, and for other reasons stated in his report, Justice Hughes recommended Deeds for court-martial (p. 57-58), and Attorney General Gregory joined in the report to the extent of declaring Col. Deeds' conduct inexcusable, reprehensible and censurable, and recommended that all the facts be submitted to the Secretary of War (p. 58).

Based on the Hughes record, the Judge Advocate General's office on November 11, 1918, submitted its report approving the Hughes recommendations and holding, in addition, that if Col. Deeds was under oath when testifying before the Senate committee he should be court-martialed for perjury, if false statements were shown to have been made (p. 2652).

Subsequently, Secretary of War Baker sent word to the Judge Advocate General's office requesting that other witnesses be heard on behalf of Deeds and that the report be reconsidered (p. 2653). This action, your committee is informed, was unprecedented. Col. Deeds' attorney and two business associates, connected with these same Government contracts, were thereupon heard and a new report rendered exonerating Deeds (p. 2687). Secretary Baker's activity in protecting Deeds against Justice Hughes' finding is at once astonishing and significant. With a record that affected lives of men and charges of inordinate selfishness supported by specific facts, Deeds should have been placed on trial to be convicted if guilty, to be vindicated if innocent. According to the testimony, Secretary Baker prevented such action.

Col. Deeds was thereupon banqueted in Washington (p. 59) and praised by Gen. Squier for his record in aircraft production.

The approval of Deeds by Squier and the saving of Deeds from court-martial by Secretary Baker require no further discussion to reveal disheartening conditions surrounding American aircraft production in 1917. Whether conditions ever improved is a matter of grave doubt. Gen. Squier is still Chief Signal Officer and Gen. Menoher is now in charge of aviation—an artillery officer, courteous and obliging, but without aviation training or experience. Secretary Baker's judgment is a matter of record.

Deeds, after filling many positions in the aircraft production branch of the Signal Corps, was finally sidetracked about January, 1918, and Col. Robert L. Montgomery, a bond dealer, was placed at the head of the Equipment Division, "but despite the change in technical relation it is apparent that Col. Deeds remained in practical charge, under the Chief Signal Officer, of production." (Hughes' report.)

Potter and Ryan, Directors

In February, 1918, William C. Potter became the head of the Equipment Division and remained in this position until May 20, 1918, when Gen. Squier was removed from aviation duties and John D. Ryan, who had been acting since April, was appointed Director of Aircraft Production, with Potter as assistant director.

Apart from the responsible officers named a number of advisory boards existed—of doubtful value, and with no powers or responsibilities. They included an Advisory Committee for Aeronautics, a Joint Army and Navy Technical Aircraft Board, an Aircraft Production Board, and an Aircraft Board. These boards were in existence at different times, but could only advise and recommend. To what extent their advice was followed or ignored does not appear, other than as it may have been adopted by Deeds, Potter or Ryan, who were the responsible aviation officers during practically all the time from August, 1917, to the end of the war.

In an official War Department publication, published by Maj. Mixer, on "Aircraft Production Facts," appears the following:

In January, 1918, W. C. Potter, of the Guggenheim interests, became Chief of the Equipment Division. When the Air Service was separated from the Signal Corps in May, 1918, John D. Ryan, of the Anaconda Copper Co., was appointed Director of Aircraft Production and later an Assistant Secretary of War and Director of Air Service. Mr. Potter continued as First Assistant Director of the Bureau of Aircraft Production (p. 61 of the record).

(To be continued)

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(Continued from last week)

This statement, presented under military authority, proudly sets forth the great copper interests of Mr. Potter and Mr. Ryan, of which they were the respective heads. It is no part of this report to recite the enormous increase in profits of these copper interests during the war, as shown by the hearings (pp. 73, 86), nor of their dealings with the Government, as disclosed at pages 63, 64, 73, 74, 75, 84, 85 and 86 of the hearings. These controlling copper interests of which Ryan and Potter were the heads are alleged to have added \$50,000,000 more to their coffers since the war, according to statements heretofore presented to the House by another subcommittee of the Select Committee of Fifteen appointed to investigate the expenditures of the War Department. The intimate connection of these powerful interests and of Mr. Potter and Mr. Ryan with Secretary Baker, representing the Government, has never been explained.

Deeds, Potter and Ryan Without Any Knowledge of Aircraft

Deeds had no knowledge of aircraft nor have any known reasons ever been given for his appointment. Equally inscrutable are reasons for appointment by Secretary Baker of either Potter or Ryan to their positions of great aircraft responsibility. Testifying before the Thomas Senate committee, Director Ryan was asked:

Senator REED. What was Mr. Potter's occupation or business before he came in?

Mr. RYAN. He was in the mining and metallurgical business and connected with the Guggenheims.

Senator REED. And never had anything to do with aircraft?

Mr. RYAN. I think not (p. 65).

That briefly presents Potter's aircraft qualifications.

Testifying before the same Thomas Senate committee, Director Ryan was asked regarding Potter, Kellogg, Wolff, Brown, Fletcher, Downey, Lockhart, Mixter, and Leadbetter, all of whom were his assistants in aircraft production:

Senator REED. There was not a single one of these men who had had experience so far as you know in aircraft production?

Mr. RYAN. Not so far as I know.

Senator REED. They were men that you think had the final say in regard to contracts before you took charge?

Mr. RYAN. Subject, of course, to Gen. Squier, who was Chief of the Signal Corps. They were under him (p. 70).

These men had charge of aircraft production during the most critical months of the war with Germany. Mr. Ryan was appointed director May 20, 1918. In July he went to Portland, Ore., and other places, as will later appear, returning from his 6,000-mile trip in August, and, after a few days spent in the East, sailed for Europe in August in company with Secretary of War Baker, who had made Mr. Ryan also an Assistant Secretary of War a day or so before they sailed. Both remained away until October 13, or shortly before the end of the war. Apart from the two trips that took him away from aircraft duties in Washington for several months, Mr. Ryan had large private business interests and other duties to care for. His absence was commented upon by Henry Ford, who was complaining about delayed production in aircraft during those critical times of war and gave his reasons to the

Thomas committee. Mr. Ford, of Detroit, was probably the largest producer of aircraft engines in the country during the war.

Mr. Ford's Criticisms "Obviously True"—Baker

In July, 1918, he said (p. 38 of the record):

I do not know how you can have the head of the aircraft division around New York sitting down there and have him do very much. This is the first time I have said anything about Mr. Ryan and I do not know anything about him. I think they ought to be on the job no matter who they may be. It is necessary to have somebody who is broad and knows what he is talking about to go around to the different factories and tell them what to do.

To this common-sense view Secretary Baker responded to our committee (p. 38):

Well, his (Mr. Ford's) observations are not only those of a very great expert, but they are obviously true.

Mr. Ford's testimony before the Senate committee was given several weeks prior to the extended trip to Europe, taken by Assistant Secretary of War and Aircraft Director Ryan with Secretary Baker.

No higher authority in administration circles need be quoted than Mr. Ford, yet so far as appears from testimony before the committee none of the various officials in charge of aircraft production from Director Ryan down had any particular knowledge of the subject, nor did they go around to the different factories and tell them what to do, for obvious reasons.

Responsibility of Army Officials

Responsibility for failure of our aircraft program rested upon those in authority, who have been named, and with equal force responsibility rested on Army officers in this country whose duty it was to provide an efficient aircraft force. Officers of the Army, who for many years have been subject to strict Army discipline, generally are loath to express themselves freely when their associates or superiors are concerned. Testimony from three responsible aviation officials, two of whom were in France charged with work on the front, is self-explanatory. All these officers were old experienced flyers of undoubted ability.

General Foulois, early in 1917, shortly after the declaration of war, testified that he prepared for the General Staff and Congress an aircraft program covering 22,625 planes of specified types; 5,000 pilots, and 50,000 mechanics, at an estimated expense of \$640,000,000, which amount Congress immediately appropriated (p. 367).

Gen. Foulois further testified:

I was the responsible officer (in France) under the commander in chief. . . . Certain members of the General Staff were willing to be educated, but that was a very small minority. Other members were more or less disinterested and a certain proportion opposed to aviation.

Mr. FREAR. What was that opposition grounded on?

Gen. FOULLOIS. . . . We could hear constant complaint about these young aviators running wild all the time, and too much rank and a great many features of that kind. . . . In my 21 years of service I have never seen it (jealousy in the Army) more prevalent than it is to-day. . . . Gen. Pershing, in my opinion, is the best friend aviation has in the Army. If it had not been for him, on a great many occasions we would not have had any Air Service.

Gen. Mitchell was commander of Air Service for a long period in France and was in the American Expeditionary Forces from the beginning to the end of the war and an experienced aviator.

Gen. Mitchell, with Ambassador Sharp, sent a cablegram April 16, 1918, to Gen. Squier strenuously urging 20,000 fighting planes for control of the air as described in program submitted (p. 2615). Again in May, 1918, a strong cablegram was sent Gen. Squier (p. 2618). These telegrams were never acknowledged. "They did not know in this country whether we knew anything about it. There were no dealings with the Signal Office. We could get absolutely nothing out of them" (p. 2638).

Gen. Kenly was Chief of Air Service from May, 1918, to practically the end of the war. He testified before the committee to the following effect: That appointments to the Air Service, as well as to the command of the Air Service, were not made because of any experienced of the one appointed, and that such condition exists to-day. It may be due to favoritism or due to relationship, but it affects the morale of the department. Gen. Kenly advised that the Air Service should be put into the hands of a man conversant with the work and thoroughly in earnest about it (p. 3497).

(To be continued)

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(Continued from last week)

The DH-4 and Its 3,600 Changes

Testimony before the committee showed that 789 changes were ordered in the construction of the Bristol, which was a reckless attempt to fit a foreign machine to the heavy Liberty motor in which all our interests were pooled (p. 3450). After wasting \$6,000,000, according to the Thomas Senate committee report, the Bristol was discarded early in 1918. According to the Hughes report, subject to salvage, \$17,500,000 was wasted on 1,600 S.J.-1 training planes. About \$50,000,000 was spent for 4,000 "utterly dangerous" DH-4s during the war. This accounts for nearly \$75,000,000 largely wasted on three useless experimental planes.

No question exists but that the Liberty motor, when fully developed in 1918, could be used for bombing and observation planes, but for fighting planes it was entirely unfitted.

The claim that approximately 3,600 changes were made in the DH-4 observation plane during its development and that engine experimental development was equally difficult and involved, gives full significance to the danger of pooling all interests in experimenting on one air machine or on one engine for all air machines.

Apart from DH-4's, the record of aeroplane production, good, bad and indifferent, none of which were fighting planes, reached a total of 6,342 during the 10 months of 1918, when the country supposed production was five times that number of fighting machines. What is more remarkable, the first five months' total of 3,729 dropped to 2,613, or about a 30 per cent loss during the last five months of war (p. 518).

Wasted Public Funds

A brief examination of the Hughes and Thomas hearings, covering an aggregate of probably 20,000 typewritten pages of testimony, discloses great waste of time and money accompanying many activities of aircraft production. Evidence of waste and of glaring mismanagement and inefficiency set forth in the Hughes and Thomas reports are found in this committee's hearings, but will not again be recited at length. Although reckless expenditures reached a large part of the great total appropriation made for aircraft by Congress, it is wasted time to mourn for water that has gone over the wheel.

Fabulous amounts were expended or contracted for castor oil, used as a lubricant, acetone used for dope, spruce used for wing beams, and for various other things that went into aeroplane construction.

A statement covering the operations of either branch of production necessarily reaches beyond the limits of any report that will be read or digested by the House. Justice Hughes, however, said in his report:

In particular it is recommended that the activities in relation to spruce production, which being largely centered on the Pacific coast, it was impracticable to embrace in the present inquiry, should be carefully scrutinized (p. 3806).

Spruce Production Record

The Committee of Fifteen, of which the aviation subcommittee is a part, by unanimous vote directed that the Spruce Production investigation be undertaken and, pursuant to that vote,

hearings were held by us on the Pacific coast, where spruce activities were centered. Several investigations had previously occurred and reports rendered to the War Department, including the Stansbury report and Maj. Howes' report, the latter being based on extended examination covering 40 pages of committee hearings, which investigation was conducted by Lieut. Kerrigan and a number of military operators in the employ of the Inspector General's Department (pp. 2342-2384). Kerrigan, a former member of the San Francisco police department, seemed to be fearless and thorough in his work.

Maj. Howes sent a telegram dated November 23, 1918, to the Intelligence Department, Washington (p. 97). A brief extract is submitted:

Lumbermen of the Northwest unanimous in demanding Federal investigation of lumber situation. Their principal contentions are: That John D. Ryan was director Milwaukee Railroad; that he was instrumental in giving cost-plus contracts Siems-Carey-Kerbaugh corporation for building railroad across Washington peninsula which tapped holdings of the Lacey interest and the Milwaukee Land Co.; that Sawyer, former chief engineer of the Milwaukee Railroad, was made major in Spruce Production Division and is building the road which joins the Milwaukee at Joyce, Wash.

Ryan approved the lending of \$6,000,000 to the Siems-Carey-Kerbaugh corporation and the copy of the mortgage is on file in Clallam County, Wash., approved by Assistant Secretary of War Crowell. This road according to Kerbaugh has cost about \$12,000,000 and taps no spruce until it travels over 40 miles, which brings it into the holdings of Lacey and the Milwaukee Land Co.

Secretary Baker's Representative Investigates

Capt. Gund, an attorney of Cleveland, Ohio, and Maj. Martin Ray of the Inspector General's Department, were sent by Secretary Baker to investigate the charges of Maj. Howes.

On December 28, 1918, after a personal investigation, Gund sent the following telegram to the War Department, Washington (p. 3445):

Have unearthed evidence indicating enormous graft, but do not consider case as yet ready for submission to legal prosecution. I deem it absolutely essential in obtaining connecting evidence to unearth contents of private offices. Doubt any present authority to act. I am proceeding with investigation as rapidly as possible pending your explicit confirmation which I again repeat is absolutely essential. (Signed) Gund.

Lieut. Kerrigan's supplemental report (pp. 3444-3448) states that on December 18, 10 days prior to Gund's telegram, he was called before Maj. Ray and "placed under oath, warned that anything I might say could be used against me." Kerrigan says he was not further consulted, although he had accumulated much data and in view of Ray's attitude he did not offer further information (p. 2342-2384). Gund on his own initiative learned of matters on which his telegram was based. Gund suddenly left for San Francisco and did not return and Maj. Ray, who is alleged to have announced on December 18 that Kerrigan had nothing but "the statements of a few Seattle lumbermen," was left in charge to conduct the investigation (p. 3444).

Major Ray Investigates His Superiors

Maj. Ray did not examine into important matters contained in Kerrigan's report (pp. 2342-2384 and 3447-3448), and this committee did not learn of the voluminous Kerrigan reports until after leaving Seattle and Portland. Any sincere, effective and conclusive investigation should have been conducted with the aid of Kerrigan and Howes, and at a time when witnesses and facts were easily available, unless the purpose was to shield those under suspicion. As the charges included the Director of Aircraft, an ex-governor, and various superior military officers, the conclusion is certain that a major selected to investigate his superiors was placed in a difficult, if not absurd position, and this fact may explain conclusions which differed from those of Capt. Gund, Maj. Howes, an officer of equal rank, and Kerrigan, all of whom were promptly relieved from Portland duties.

Ray's exoneration of all parties was according to form, and Secretary Baker thereafter asked Maj. Gen. McIntyre, of the General Staff, to pass upon the Ray report. In the opinion filed by Gen. McIntyre, the following significant statement appears, regarding the railway referred to by Maj. Howes (p. 837):

A possible congressional investigation with reference to the location of this railroad might prove embarrassing to the War Department, as the plain insinuation would be made that the decision was influenced by the large financial interests concerned.

When your committee reached the coast, important witnesses were found scattered and could not be located, and the investi-

gation was practically confined to Col. Disque's management of spruce production, the results accomplished in view of what ought to have been done, and to a few specific charges, including those made by Maj. Howes against Director John D. Ryan.

Nearly Fifty Million Dollars for Spruce

As stated before, total expenditures and commitments for aircraft reached about \$1,051,000,000. Of this amount \$48,762,826 were expended for "spruce" production, to be allotted to the several governments as hereinafter set forth (p. 2857).

This committee was fortunate early in its hearings to secure attendance of two witnesses—Frank R. Pendleton, of Everett, Wash., and George H. Kelly, of Portland, Ore., two leading lumbermen of the Northwest, one of whom was given the superintendency of spruce production in Canada, acting for the British Government, and the other was given charge of American lumber operations in France. These two men, in widely different fields, gave a demonstration of lumber production under extreme difficulties, important to understand, in comparison with American operations.

Pendleton, who lives at Everett, near Seattle, Wash., had a desire to place his abilities to good use, and volunteered about January, 1918, without compensation, to aid Canadian spruce operations (p. 1255). He was placed in charge of the entire Canadian work early in 1918 and began producing finished spruce aeroplane material in April and May of that year.

Pendleton's Canadian Spruce Operations

The best spruce timber suitable for aeroplanes in Canada was found growing on Queen Charlotte Island, 500 miles distant from Vancouver, B. C. (p. 1251). Pendleton secured the co-operation of all the private logging and lumbering interests and without any financing by the Government. Logging was started on the islands and the logs rafted to the mainland, a distance of 100 to 175 miles, and from there, when cut up, the lumber was transported 300 miles beyond Vancouver, B. C., for shipment and thence to Europe (p. 1253).

The rafting was across "the roughest water" on the Canadian coast and occurred with practically no loss in rafts. No soldiers or other outside aid were brought in; no outside financial help was given; no expensive logging roads were built; but, by co-ordinating available agencies, Pendleton had produced, when the armistice was signed, 26,500,000 feet of finished aeroplane lumber (p. 1261). Eight million feet of this was produced in November, 1918, or at the rate of nearly 100,000,000 feet of finished aeroplane lumber per year in an industry built up within about seven or eight months. Over 200,000,00 feet of logs were cut to get the 26,500,000 feet, which shows the extent of operations (p. 1253). At the rate of 2,000 feet per aeroplane—the Curtiss training plane takes only 600 feet and the Spad fighting plane 800 feet—enough spruce was being produced in November, 1918, in Canada alone, to make 4,000 planes, or more than double all the British fighting planes then at the front and nearly 20 times the number of American-built planes that reached the front in 19 months of war. At the same November rate, Pendleton in Canada could have furnished sufficient spruce for about 50,000 planes in one year, or several times the total number at the front belonging to all the Allies.

Quality of Canadian and American Spruce Lumber

Director of American Aviation John D. Ryan, in seeking to bolster up the pitiable American operations, said that American finished aeroplane lumber was better than the Canadian (p. 3100).

Pendleton, an American, who served Canada free and received high praise for his war work, replied (p. 3164-5) that Canadian spruce lumber was "far superior" to any other. And then Pendleton describes "wasteful methods and awful loss" resulting from inexperience in American spruce operations, which he frankly discussed (p. 3164).

In this opinion Pendleton is confirmed by Dant, a leading lumber exporter of this country, who had handled great quantities of American spruce lumber and who quoted the French representative, Capt. Holland (p. 2261), to the effect that 85 per cent of the American product was wasted in Disque's earlier operations by improper cutting, practically the same reasons as given by Pendleton.

Your committee has not attempted to determine the relative quality of American and Canadian spruce lumber, but believes from the testimony that Canadian production, under the direction of an experienced American lumberman, would not suffer by comparison with that of an admittedly green

novice at Portland. It was not disputed in all the hearings that the great logging interests of Puget Sound, Grays Harbor, Columbia River, and of Oregon, together with over 400 private sawmills, had a capacity of 9,000,000,000 feet of lumber annually. The total cut of Canadian lumbering operations reached about 800,000,000 feet annually, or only about 10 per cent of American lumbering facilities.

These figures are important to remember when drawing comparisons with America's comparatively small aeroplane lumber production. The Canadian experience is cited to show what could have been accomplished in this country in 1918 with ordinary facilities directed and undertaken by existing lumbering agencies.

That Canada's spruce production was not unusual is evidenced by America's lumbering operations in France under the direction of Col. George H. Kelly, of Portland, Ore. Portland, by a coincidence, was the headquarters of American spruce production.

American Lumbering in France

At the beginning of the war the Lumbermen's Association of the Pacific coast recommended Col. Kelly for American forestry work in France. He was one of scores of successful lumbermen of the coast and he was given charge of all American lumbering operations overseas (p. 2309). Within 11 days after landing in France, Kelly traveled from Brest to Landes, erected a sawmill in the wilderness and was logging and sawing lumber (p. 2309). With American soldier labor, working 10-hour shifts at enlisted men's pay of \$30 a month, a minimum fixed by Congress, Col. Kelly worked his men at times in 6 feet of snow with the thermometer sometimes below zero in the Vosges mountains, where large operations occurred (p. 2315).

He built camps and mills and, beginning from nothing, by October, 1918, or within one year (p. 2309), Col. Kelly was sawing 50,000,000 feet of lumber per month, used for all purposes, including spruce for aeroplanes (p. 2310). From one mill, at the start, he built 81 small mills, and guaranteed to deliver a monthly production of 100,000,000 feet of sawed lumber by February, 1919. What Col. Kelly promised to do he accomplished, because he was a practical man, like Pendleton in Canada, and understood the business. Great Britain and France were also conducting lumbering operations in France in districts assigned to each. Some of Col. Kelly's officers were killed by enemy fire while milling "right at the front" (p. 2317), but the soldiers were enthusiastic over their work through encouragement given and by force of example of Col. Kelly and those in command.

The record of two practical American lumbermen in Canada and France shows what might have been done by us—but wasn't.

Bearing on this same matter of airplane lumber, probably no testimony submitted on the subject was more significant than that of witness Edward K. Butler, a large manufacturer of Syracuse, N. Y., who was manufacturing experimental laminated wing beams for the Allies in 1915 and 1916, before our entrance into the war.

Mr. Butler demonstrated to the War Department experts that he could manufacture laminated wing beams out of small strips which passed the highest tests of the Forestry Department experts at Madison, Wis. (p. 2574). With slight encouragement he persisted in his offers to the Government until near the end of the war when he was promised an order for a thousand wing beams. These he agreed to furnish "at \$25 apiece, or any price they wanted to pay" (p. 2578). This price was nominal compared with our wasteful spruce operations.

The witness testified that he could unquestionably have turned out 4,000 or 5,000 feet a day, or 250 beams a day, or enough for 1,500 aeroplanes a month, or presumably double that number with extra shifts in his factory (p. 2582). Enough spruce from the Adirondacks alone could have been furnished to keep his factory running (p. 2583).

Mr. Butler stated that his formula for laminating was not secret, and that he would have been glad to have given access to his factory to anyone if the Government had been sufficiently interested (p. 2583).

Of equal importance was the statement of American aviators that the German Fokker machine, which outclassed all of the Allies' planes, was built with a tough steel frame welded together, wings without brace wires (p. 3627). If Germany could develop a steel frame for practical use in a high-type plane, it is a mystery why our own Government could not have used the same logical substitute for wood wing beams.

(To Be Continued)

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(Continued from last week)

American Aircraft Production—A Close Corporation

Many witnesses desired to testify regarding refusals to receive encouragement from the Army aircraft production officials for inventions whose practicability they declared had been demonstrated. Several witnesses were heard on the subject, all of whom contended that War Department officials were a close corporation, manifesting little interest in aircraft inventions or demonstrations not directly controlled by a small coterie of officers. While this subject undoubtedly has two sides that could not be heard by your committee, we believe that any recognized invitation to inventors generally or an apportionment of a small part of the \$1,000,000,000 aviation fund to testing new discoveries and inventions would have been a profitable investment for our country.

No stronger illustration of the stupidity of responsible Army airplane production officers need be offered than testimony of C. M. Keys, vice-president of the Curtiss Co., that employed 18,000 men and produced \$87,000,000 worth of aeronautical material (p. 3453):

Mr. MAGEE. Was it your contention that if your engineers had been given a free hand that you could have designed and constructed efficient aeroplanes for service at the front?

Mr. KEYS. There is no doubt in the world about that. We could have designed pursuit planes, bombing planes, observation planes—any types desired.

Mr. MAGEE. But you were not permitted to do that?

Mr. KEYS. We were not permitted to do it for the Army. The Navy permitted us, and we furnished them. . . . I don't want to be critical in regard to the Army. It was a very ghastly mistake.

Airplane Spruce Production Responsibility

In May, 1917, immediately after our entry into the war, the Aircraft Production Board was created by the Council of National Defense, of which Secretary Baker was chairman.

The board was headed by Howard E. Coffin, vice-president of the Hudson Motor Car Co., and Edward A. Deeds, of Dayton, Ohio, soon became the active man in charge of the equipment division.

Prior to our entry into the war the Governments of Great Britain, France, and Italy were receiving a small amount of spruce from private agencies and brokers in the United States. In June, 1917, Mr. Charles A. Sligh, a large furniture manufacturer of Grand Rapids, was asked by Chairman Coffin to take charge of the work, which included fixing grades and prices that the Government would pay for finished aeroplane lumber. An international conference, so called, was held in Washington, which was attended by representatives from France, England and Italy, and from the Forestry and Engineering Departments and by lumbermen from the Pacific coast (p. 575).

After a conference of several days a price was fixed of \$105 per thousand for No. 1 quality of spruce and \$55 for fir, with a maximum price for spruce wing beams of \$150 per thousand.

A practical illustration of quantity used for aeroplane construction is given in the testimony, wherein it was stated that from 500 to 600 feet of finished lumber was sufficient to build a Curtiss training plane, while 800 feet for a Spad and up to 2,000 feet for a large bombing plane was required.

Russell Hawkins, of Portland, Ore., one of the large loggers and lumbermen of the Pacific coast, was aiding Maj. Sligh

in production. Mr. Hawkins had been warmly recommended by Col. Kelly, who was in charge of American lumbering operations in France.

This committee believes that Maj. Sligh was a conscientious, hard-working official with much executive ability, but his powers were extremely limited, and he was handicapped by jealous and selfish interests, including those who desired no restrictions upon their own activities, so that a change in the system of production was decided upon, with the approval of Secretary Baker, in the fall of 1917. Russell Hawkins, an experienced lumberman of recognized executive ability, was at first proposed to take charge, but Col. Brice P. Disque was suddenly sent out from Washington, about October 15, 1917, to look over conditions and report.

Col. Disque in Charge of Spruce Production

Col. Disque had been a Cavalry captain in the Regular Army, and resigned late in January, 1917, after 19 years of service, leaving the Philippines, where he was then stationed, and going to Michigan, where he took charge of the Michigan Penitentiary (p. 1358). He resigned his position as warden in September, 1917, when he was made a lieutenant-colonel, and came to Washington in October of that year.

Col. Disque had "not the slightest" experience in logging or lumbering (p. 1364), and apparently did not know the difference between a spruce tree and a fir. He went to Portland in October, 1917, spending about a week there, and then returned to Washington. He then returned to Portland, relieving Mr. Hawkins, while Maj. Leadbetter, of Portland, was sent to Washington to relieve Maj. Sligh and to act as "liaison officer." Col. Disque disclaimed any connection with Leadbetter prior to the latter's appointment, but subsequent correspondence and telegrams show that they were very intimate later and that Maj. Leadbetter at Washington was used to further the schemes thereafter carried into force.

No Knowledge of Business Required

Like Col. Deeds, who was given charge of aircraft production early in 1917, with no knowledge of the business, with no public record of accomplishment, and no one to vouch for his appointment, Col. Disque, without the slightest knowledge of the business, without any record beyond the handling of Filipinos in Manila and of convicts in Michigan, without anyone to stand sponsor for his appointment and powers granted, took charge of spruce production in a district that had scores of able loggers and lumbermen of tried executive ability and high business standing like Kelly, Pendleton, Hawkins and many others who could have been named.

A remarkable situation occurred at Washington prior to Col. Disque taking charge at Portland, which Maj. Leadbetter, writing Mr. Howe, of the Aircraft Board, on January 4, 1917, described (pp. 1410-1411):

Col. Disque was instructed to take up the matter from a labor standpoint with Mr. Samuel Gompers. This was done, and in a final interview the matter was settled in a way satisfactory to Mr. Gompers and his assistants. Mr. Gompers then requested that Col. Disque and the writer accompany him to the Secretary of War's office where the Secretary of War approved of the general understanding and told Col. Disque to report to Gen. Bliss, Chief of Staff. . . . Col. Disque went West with this view of the situation. . . . Col. Disque met Gen. Squire in Portland . . . who told Disque that he would organize a complete department in Portland . . . and that he would increase his force to the maximum contemplated. Col. Disque came on East to get direct instructions from the Chief of Staff for this purpose. These he secured before Gen. Bliss left for Europe, and he . . . returned to the West. . . . The fact that he (Disque) was in close touch with Gompers, Mr. Morrison, Mr. Hamilton, and Mr. Gompers' other assistants and Assistant Secretary of Labor Post . . . goes to prove that no other man could have the confidence of these people that he has. The other method by which these soldiers who are going into the woods should be paid must, of course, be carried out. . . . (p. 1410).

Maj. Ray's report comments on this unprecedented proposition, which included a guaranty of an eight-hour day and civilian pay for an army of soldiers to be assembled at Portland.

Probably no arrangement of equal significance was ever had in this country during war as this one, wherein the Secretary of War agreed with Mr. Gompers and Col. Disque to farm out American soldiers in the woods and mills of Oregon and Washington, and to build railways for private contractors, to work eight-hour shifts in safe places, and at civilian wages, reaching as high as \$8 per day, while American soldiers in France, without limit as to hours, sometimes continuously day and night, were working and fighting at \$30 per month.

(To be continued)

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(Continued from last week)

Disque's Army of 30,000 Men

It has been difficult to secure data regarding the exact number of soldiers in the Northwest and their various employments, but it appears that in May, 1918, the number under Col. Disque reached 11,000 or 12,000. On November 1, 1918, the following disposition of troops existed, according to official records (p. 3689):

Cut-up plant, Vancouver, Wash.....	4,312
Disbursing quartermaster	9
Quartermaster	46
Portland headquarters	333
Medical Department	607
Logging and milling companies	17,571
Transportation unit	349
Loyal Legion	81
At cantonment	4,813
Total	28,121

This statement, the committee understands, does not include some 1,200 officers, many of whom were stationed at the eight-story palatial Portland headquarters. Col. Kelly, who was doing remarkable work for the American forces in France during this same period, had not to exceed 24 men at his camp headquarters (p. 2317).

In a book issued by the Spruce Production Corporation, the number of troops under Col. Disque were 27,661 enlisted men and 1,222 officers, or a total of 28,883, of which 536, including 132 officers, were at Portland headquarters and 356 other officers and 9,052 men were at Vancouver Barracks, five miles distant.

Col. Disque's army in the woods and soldiers at the cut-up plant and others in the above list, reaching about 23,000 or over, received civilian pay, reaching from \$3.50 and upward to \$8 per day, including compensation fixed by Congress, according to Director Ryan, which was paid by the Government. In the judgment of the committee, this was without any authority of law or other justification.

An estimated average of 15,000 troops were paid approximately \$50 extra pay per month from the Government for six months, or from May 1 to November 1, 1918. This is believed to be a conservative estimate, but reaches a total illegal payment by Government officials of \$4,500,000.

Soldier's Pay Fixed by Congress

In this connection the minimum pay of enlisted men per month in the Army was fixed by Congress at \$30, or double the old rate. (Sec. 10, act of May 18, 1917.)

Revised Statutes 1765 provide:

No officer in any branch of the public service or any other person whose pay salary or emoluments are fixed by law or regulation shall receive any additional pay, extra allowance, or compensation in any form whatever for the disbursement of public money or for any other service or duty whatever unless the same is authorized by law and the appropriations therefor specifically state that it is for such additional pay, extra allowance, or compensation.

Act 23, Army regulations 169, provide:

Enlisted men . . . will not be employed on extra duty in time of war nor in time of peace for labor in camp or garrison which can properly be performed by fatigue parties. . . . Payments made in

violation of foregoing rules will be charged against the officers who ordered the details. Duty of a military character must be performed without extra compensation.

Section 170:

Enlisted men on extra duty are entitled to 35 cents per day.

After farming out the soldiers of this Army in the Northwest for six months or more in violation of law, the War Department called upon the Adjutant's General's office for an opinion as to the authority of the War Department to pay soldiers the prevailing civilian wages. The Judge Advocate General's office rendered an opinion to the Secretary of War in the matter, under date of September 11, 1918, holding that the War Department had acted within its powers. The case cited to sustain this opinion is *United States v. Saunders* (120 U. S. 126). An examination of the record in that case discloses that it has no application to the matter in hand. In that case it was held that a clerk in the office of the President of the United States, who was also appointed to be the clerk of a committee of Congress, and who performed the duties of both positions, was entitled to receive the compensation appropriated and allowed by law for each.

It was also held that Section 1765 of the Revised Statutes of the United States has no application to the case of two distinct offices, places, or employments, each with its own duties and compensation, but both held by one person at the same time.

On page 129 the court says:

We are of opinion that, . . . the purpose of this legislation was to prevent a person holding an office or appointment, for which the law provides a definite compensation by way of salary or otherwise, which is intended to cover all the services which, as such officer, he may be called upon to render, from receiving extra compensation, additional allowances, or pay for other services which may be required of him either by act of Congress or by order of the head of his department, or in any other mode, added to or connected with the regular duties of the place which he holds.

We have examined this matter carefully because there is a principle involved in this unlawful exercise of power by the War Department, which the Congress of the United States cannot overlook nor condone. The Government is entitled to the full time of a soldier in the service in time of war at the compensation fixed by the Congress of the United States. The War Department has absolutely no authority to fix and pay out of Government funds, other and additional compensation than that fixed by congressional enactment. We are of the opinion that the Secretary of War and other high officials of the War Department, who were instrumental in making this unlawful expenditure of public funds, should be held strictly accountable therefor. It is high time, even in time of war, that all officials of the Government should be made to understand that they must respect and uphold and enforce the laws of the United States, and particularly those laws relating to the expenditure of public funds.

Discrimination Among Soldiers

Your committee has not sought to decide what motive was at the bottom of this unprecedented situation, but we believe that this farming out of soldiers was absolutely unjust to our soldiers, whether serving in Oregon or at the front in France, and an illegal assumption of authority by all concerned, and an unlawful expenditure of public money. Congress alone can determine the pay of soldiers and Congress alone can authorize payment from the Treasury. Millions of dollars were paid unlawfully by the Government to cost-plus contractors for civilian pay of soldiers on orders of Col. Disque, approved by Director Ryan and the Secretary of War.

If it was right to prevent over eight hours' work and compel the Government to pay cost-plus operators civilian wages for soldiers in Oregon and Washington in time of war and critical national danger, then it must have been right for Secretary of War Baker to have restricted to eight hours per day the fighting of American troops in the trenches.

If it was wrong for our soldiers to exceed union hours, or receive less than union scale wages, while in the mills and forests of Oregon, then it was wrong in the mills and forests of France.

If the policy agreed to by Messrs. Baker, Gompers and Disque in the western zone of safety during time of war and of unprecedented sacrifice had been the policy of Col. Kelly in his lumbering in France, or Gen. Pershing in his military operations overseas, then America and her soldiers probably would be fighting in Flanders to-day.

(To be continued)

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(Continued from last week)

Reasons Given for Disque's Army

Various reasons have been given for gathering over 28,000 enlisted men and 1,200 officers around Portland, including about 500 at headquarters, and then farming soldiers out to work in the woods and on railways under contractors who gave them poor board and poor quarters, according to testimony before the committee, and who collected from the Government civilian pay ranging from \$3.50 to \$8 per day, less the compensation fixed by Congress. In the construction of the Lake Crescent Railroad the subcontractors even collected a commission on the civilian pay of the soldiers in excess of compensation fixed by law.

Soldiers were needed in France in the trenches and in every arm of the service. Col. Kelly was using soldiers lumbering in the Vosges Mountains in six feet of snow and zero weather at \$1 a day each. Men in the lumber camps near the front were under fire and occasionally killed, men in the trenches and in aeroplanes were frequently killed, but back in Oregon and Washington, 6,000 miles from the front, Col. Disque, a modern soldier of fortune, set up an autocratic pompous military establishment that rivaled anything ever possessed by any European or Asiatic potentate.

Excuse was offered that these soldiers were needed to suppress the I. W. W., but no evidence of any sabotage or of any organized attempt at sabotage or rioting was presented to the committee among the many thousands of men employed in the woods and mills of Oregon and Washington. It is believed to be the first time, in peace or in war, that the War Department ever tried to buy peace by fixing American soldiers' duty at eight hours per day with civilian pay.

According to Maj. Sligh, Howard E. Coffin, chairman of the Aircraft Board, was advised in August, 1917, that four companies of United States troops would quell all disturbances that might occur on the coast. Coffin requested these troops from the Secretary of War, but his request was refused (p. 580).

It has been urged in some quarters that Disque's peculiar organization of soldiers was a haven for slackers. According to the testimony, doctors, teachers, clerks, and others were sent to Portland from New York, Ohio, and all over the country, who had no knowledge of logging, lumbering, and no qualifications of value in the woods or mills. Safety may have attracted some of those in the Disque army, but from the testimony it is certain that very many of his men would have preferred regular service with our troops in France.

Col. Disque's army was gathered together ostensibly to help the labor situation and thereby permit commercial operations to continue, and soldiers were given by him to different cost-plus contractors and commercial operators for labor in woods and mills.

The most persuasive argument advanced by witnesses for gathering together this large army was that Col. Disque was inordinately ambitious for a star on his shoulder, which was reasonably assured if 30,000 soldiers were placed under his command.

Disque Wanted to Be a Major-General

A reason for the frantic rushing of troops across the continent to Col. Disque at his insistence is disclosed, apparently, on page 1421, where Col. Disque testified: "Had they given me the rank commensurate with my job I would have been a major general." No better evidence of Col. Disque's purpose and his high estimate of his own abilities need be offered.

Col. Kelly, in France, was building mills and getting results and was rewarded with a lieutenant colonelcy; Pendleton, without soldiers or pay or emoluments, other than grateful thanks, was doing wonders in Canada; Capt. Rickenbacker, in second-rate foreign planes, was setting a pace in aviation for American valor with only the modest title when discharged of "captain"; thousands of brave officers and hundreds of thousands of splendid American soldiers were fighting in France without hope of reward or recognition, while Col. Disque, who reached a captaincy after 19 years of Army service, was given a large army in peaceful Oregon and sat in his office thousands of miles from the battle front peeved because he could not have a major generalship (p. 1421).

Director Ryan's promise to Col. Disque of a brigadier generalship and Col. Disque's pompous military surroundings in the Yeon headquarters building at Portland, so dear to a man who had been 19 years in rising to a captaincy, in part explains what was humorously known on the coast as Disque's "Army of the Yeon."

Aircraft Needs of Soldiers Working 72-Hour Shifts

A brief extract from testimony voluntarily offered the committee is here submitted, lest we forget.

Capt. W. O. McKay, of Seattle, a reputable witness, was in the war for two years. He was a member of the Ninety-first Division which with the Thirty-second and Thirty-seventh held the enemy at a standstill and then drove them back in the Argonne Battle during nine days from September 26 to October 4, near the close of the war (p. 1007-13). Capt. McKay was liaison officer of the Third Battalion, One Hundred and Sixty-fourth Infantry, with duties "to see that my particular battalion was connected up with the aeroplane" (p. 1008). Heavy casualties resulted in the Argonne Battle and one company of 134 men lost over half its number (p. 1009). His description of trench fighting is forceful:

Capt. MCKAY. During the Argonne battle . . . the German aeroplanes would come and shoot us up, . . . rake us on one side and then on the other with their machine guns (p. 1008).

Mr. FREAR. How low would they fly when they were using their machine guns?

Capt. MCKAY. They would come down as low as this roof.

Speaking of the effect on the morale, he said:

The sensation is pretty bad at first, but after you go three days with very little to eat, with a can of tomatoes and a little water and you do not get any sleep, but are under shell fire constantly, you do not mind it much.

Mr. MAGEE. You did not have a fighting plane to protect you?

Capt. MCKAY. No; I never saw an American plane go after the Germans (p. 1013).

Soldiers in France were not worrying over generalships, medals, eight-hour shifts, or civilian wages. They only begged for fighting aeroplanes and a chance to fight, eat and sleep.

A letter received by a member of this committee during the war was read into the evidence to Secretary Baker. This letter from a soldier at the front with the Thirty-second Division in part is as follows:

I was never more proud of my country than I have been since I came to this location. I have seen our soldiers going in and out of the hospitals. Their spirit is the most wonderful thing you ever saw in your life. They say the casualties in our division (Thirty-second) are quite large, but the efforts of our soldiers cannot be surpassed.

Just keep on lending them all the assistance possible. No one deserves more. If you will only send us more aeroplanes—and then more and more, it will hasten the finale. The men are coming through fine, but the aeroplanes have disappointed us. We depend upon these so much more than you appreciate (p. 46).

That was the spirit shown by the American soldiers in France. In response to such urgent requests the only American machines ever sent to our fighting soldiers on the front during the 19 months of war were a handful of utterly unsafe observation planes.

(To be continued)

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(Continued from last week)

Disque's Demand for Unlimited Power

Your committee is not concerned with Disque's eight-hour shift army apart from its unwarranted use. The system of peonage exercised by private concerns, and the unauthorized expenditure of public money, aside from the illegal practice, caused the system or lack of system materially to affect the production of spruce, and a brief statement is made of further facts presented to the committee.

Col. Disque's inordinate grasp for power is set forth in a letter written by him to his liaison officer at Washington, Maj. Leadbetter (p. 1938). Therein, asking for unrestrained authority, he says:

The solution and only one is to grant me unlimited authority to carry on this work according to good business methods and allot funds as requested.

This letter written on November 27, 1917, a few weeks after assuming control, was followed by continuous demands for more power until he obtained practically unlimited control of men, money and plans.

Remembering Col. Disque's slight "business experience," his statement is characteristic of men of his type. Ex-Gov. West, of Oregon, became a vigorous supporter of Col. Disque's ambitions and at Washington was an effective aid in interceding with Secretary Baker, the Air Service officials, Senators, and others who might clear the way (p. 1760).

Mr. West was a partner of McCullough, of Portland, who in turn was attorney for the Warren Spruce Corporation that had cost-plus contracts with the Government involving many millions of dollars. Lieut. Kerrigan says of this law partnership (p. 3446-3448):

We will be able to prove that West & McCullough told Gen. Disque that they would give him free rein and unlimited power . . . and they in return were awarded contract for the Warren Construction (Spruce) Co. (p. 3447).

Mr. West and others pulled strings for Col. Disque, who worked every agency, while at Portland, until he finally secured unlimited authority. With the Government's millions at his command; with power to control labor and priorities; with his assumed power to commandeer timber, mills and private business generally, however distantly connected with spruce; with a large army of soldiers and a staff of sycophants surrounding him, the situation was unique in American affairs, though disheartening in its delay of spruce production.

Publicity Paid for By the Government

Col. Disque spent \$47,255 (p. 2858) in organizing and maintaining a four "L" order of which he was head. Three publicity men were employed and paid by the Government, who continually sounded his praises in the press and in publications maintained at Government expense. Compared with Col. Disque's methods, Creel's memorable aeroplane advertising efforts were commonplace (p. 3811). Eighty-one soldiers were detailed to advance this four "L" service, to praise Col. Disque,

and to curtail I. W. W. sentiment (p. 3689). After glowing eulogies of his chief during the war, Disque's publicity expert went to the *Anaconda Standard*.

Mr. DONLAN. Mr. Richard Kilroy, a very clever writer, had charge of publicity.

Mr. STEINBRINK. When he got through he became associated with the *Anaconda Standard*?

Mr. DONLAN. As I understand (p. 3231)..

Col. Disque surrounded himself with kindred spirits. Col. Stearns, formerly with Col. Disque in Texas, when both were lieutenants, without business judgment or experience, was made "chief of staff." Mr. Hitchcock, a lawyer from Cleveland, Ohio, the home of Secretary of War Baker, was brought to Portland, made a major, and given unprecedented powers for building railways and handling contracts in Oregon. Mr. Morley, another Cleveland lawyer, who kept insisting to the committee that he is "a Republican," was made a major overnight with a swivel chair job at Col. Disque's Portland headquarters. Mr. Lenihan, also from Cleveland, became a full-fledged "major" at Portland through a touch of Col. Disque's wand. Mr. Eaman, a Michigan lawyer, who selected Disque for warden when a member of the State board the year before, was also installed in a major's easy chair at Portland headquarters. Twelve hundred other officers of various ranks and degrees were under Col. Disque's command. The "majors" above named all appeared before your committee and were loud in their praise of Disque and his methods. Many others who knew absolutely nothing of spruce or lumbering were selected for his chief advisers and associates during 1918.

Distinguished Service Medals for the Spruce Officials

In September, 1918, just prior to the armistice, within a few days after Col. Disque's promotion to the rank of brigadier general and in return for their unstinted devotion a score of these gallant warriors stationed at the palatial Portland headquarters, including Maj. Eaman, who entered the service and received his commission about six weeks prior to the armistice, were all recommended by Col. Disque, a few days after his own promotion, to the Secretary of War for distinguished service medals (p. 1693). Such medals could be recommended only by a general and the interest in Col. Disque's promotion was evidently of mutual concern. This picture gives a partial understanding of the mutual admiration society in the Spruce Division. The early ending of the war, several weeks after Col. Disque's promotion, presumably prevented the 20 spruce officers, including Maj. Eamon, of six weeks' service, from receiving distinguished service medals. Both Gen. Squier and Gen. Disque, however, were among the 554 American officers awarded such medals.

Gen. Pershing, in his final report, says of the doughboy at the front:

Finally the memory of the unflinching fortitude and heroism of the soldiers of the line fills me with greatest admiration. To them I again pay the supreme tribute. Their devotion, their valor, and their sacrifices will live forever in the hearts of their grateful countrymen.

Out of over 1,000,000 American enlisted soldiers engaged on the fighting front only one enlisted man, a sergeant, received from the Secretary of War a distinguished service medal.

Viewpoint of Other Men Then in Service

Personal charges against Col. Disque and his associates were numerous. The testimony of one witness shows the range of complaints that were made by witnesses from Seattle to Los Angeles.

Capt. Turner, a trained officer, forceful and fearless, said that of 109 soldiers given him by Col. Disque, only 7 were familiar with the woods and 102 were wall painters, polishers, etc. (p. 1197). Capt. Turner had charge of 140 soldiers at Stillwater camp and testified that his men were working for private parties on commercial logging entirely. No spruce timber was in that section; no aeroplane lumber was cut there. Two soldiers while thus working for private interests were killed by falling trees (p. 1214). Deserving men were not considered, he testified, but official favoritism was common.

(To be continued)

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(Continued from last week)

Robert L. Stearns, about 24 years old, a relative of Col. Stearns, "Chief of Staff," was an enlisted man in December, 1917, a second lieutenant in February, 1918, a first lieutenant in April, and a captain in June, with 1,000 men under him (p. 1209). It took Col. Disque 19 years in the Regular Army to get what came to young Stearns in six months. Capt. Turner further testified "the public has been drugged by lying propaganda advertising the work of Gen. Disque and the Spruce Division" (p. 1204).

Capt. Turner was a married man with two children and was a practicing attorney of 11 years' experience. He claimed to have no personal enmity toward Col. Disque or other officers, but wrote to the committee, and also testified, that Col. Disque should be court-martialed for misconduct if still in the service (p. 1204). His credibility was evidenced by a letter dated July 5, 1919, addressed to him and placed in evidence, from which the following extract is taken:

The work performed by you as fixed post representative at Douglas, Ariz., shows ability of high order and has been most effective and commendable. Expressing to you the thanks of the War Department and myself, I am, cordially, yours, Newton D. Baker, Secretary of War (p. 1212).

To the same general effect, as to conditions found under Col. Disque, is the testimony before the committee of Mallery, a married man and high-school superintendent (pp. 1076-1080); Lipps, a lawyer (p. 2424); Gross, a newspaper reporter (p. 2398); French, a master electrician (pp. 1267-1301); Hyde, a lawyer (pp. 563-573), all soldiers in the Spruce Division; Maj. Howes, Intelligence Department (pp. 2436-2446), and Kerrigan, Intelligence Department (pp. 2341-2385).

What the United States Should Have Produced

The production of Washington and Oregon loggers and mills, working largely on one eight-hour shift, appears in Spruce Corporation, as follows (p. 3687):

Production of Lumber by Years in Oregon and Washington

(Millions of Feet)

Year	Fir	Yellow pine	Spruce	Hemlock	Total all species
1916.....	5,118	587	317	337	6,715
1917.....	5,079	686	319	366	6,789
1918.....	5,478	658	492	344	7,313

Two shifts could have doubled the annual output of about 7,000,000,000 feet.

Aeroplane spruce, American mills, 79,366,508 feet.

Aeroplane fir, American mills, 59,906,684 feet.

(A small amount of cedar was also produced) (p. 1567).

The fir and spruce production alone in Oregon and Washington during 1916 and 1917 reached about 5,500,000,000 feet annually, or more than thirty times the amount of aeroplane lumber produced in 1918 under Col. Disque. About 100,000 workmen, in the more than 400 mills upon the coast, were employed in turning out the logging and lumber cut of the Northwest.

This situation existed before Col. Disque ever made a single spruce contract in the West. In other words, enough fir and spruce timber was produced during each of the several years before Col. Disque tried to learn the business to build from 50,000 to 100,000 aeroplanes a year, if facilities on the coast had been co-ordinated as was done in Canada and France. Five per cent of the total lumber production was more than enough to supply aviation needs of all the Allies combined. Col. Disque demonstrated his incapacity by his own record. The production of aeroplane lumber during eight months of 1918 up to the signing of the armistice, according to his own report, was as follows:

American Spruce Production, 1918, by Months

	Feet		Feet
April.....	13,583,165	August.....	18,861,506
May.....	11,864,722	September.....	16,682,639
June.....	9,000,134	October.....	22,145,823
July.....	13,776,251	November.....	7,427,928

(P. 1567)

From this statement of aeroplane production it will be noted that the results under Col. Disque's management were nearly stationary for several months, but somewhat increased during October, 1918. During these same months Pendleton with 10 per cent of Col. Disque's facilities, rafting 175 miles, without soldiers, without cost-plus contracts, and under many handicaps, was enabled to build up Canadian production from zero to 8,000,000 feet in November, or practically 36 per cent of the highest single month's production reached in the United States.

As early as September, 1918, more aeroplane lumber was being produced than could be used and Col. Disque was so notified. Gen. Carmack, representing Great Britain, declared that during the last two months of the war more aeroplane lumber was received than the Allies could use (p. 1653). Col. Disque testified that before the end of the war he had been directed to reduce production 33 per cent from previous calculations (pp. 1394-1395). Undisputed testimony shows that private operators were producing all aeroplane lumber produced on the coast before Col. Disque received word to retard operations.

Official Protests Against Disque's Illegal Contracts

Striking evidence of the lack of business methods pursued by Col. Disque and his associates without regard to law or other restraint is submitted herewith:

On April 30, 1918, the Bureau of Aircraft Production had become so fearful of Disque's unbusiness-like method of procedure that Capt. L. C. Preston, of the Finance Division, wrote Maj. Brown, of the Finance Division of the Bureau of Aircraft Production, as follows:

It has recently developed that Col. Disque has for some time past assumed that he has the right to approve all contracts, according to notice sent to this department by Capt. Crisp in letter of February 11, with the result that all contracts since the latter part of January have been made without being approved by this department or the Chief Signal Officer, the more important contracts which have not been approved being the three cost-plus contracts for rived spruce with Grant Smith-Porter Bros. Co., Warren Spruce Co., and the Airplane Spruce & Lumber Co., estimated at \$13,000,000 each, and the contract with H. S. Mitchell for the management of the cut-up plant. By reason of the agreement entered into in these four contracts, it would seem that it would be desirable to exercise some supervision regarding the terms and legal form of the more important contracts entered into by the Spruce Production Division (p. 2164).

Capt. Preston later became head of the War Credits Board, according to witness Gabrielson (p. 2164).

(To be continued)

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(Continued from last week)

On July 15, 1918, or two and one-half months after the previous notice, Maj. A. C. Downey, head of the Contracts Department, Finance Division, Bureau of Aircraft Production, also wrote Maj. Brown as follows:

The contract section has endeavored to assist and co-operate with the Spruce Production Division and had disapproved of certain contracts in order that their disbursing officer might be protected. They have apparently not relished this method of treatment and have recently taken the matter clear up with the view of forcing the contract section to approve the contracts which had previously been returned unapproved. In view of these facts, it would occasion no grief to the contract section if Mr. Ryan should delegate to Col. Disque full authority to approve all contracts executed by the Spruce Production Division.

However, until such time as this authority is granted the contract section will continue to adhere to its former policy, to wit, in that it will not approve of any contracts which are of such character as to indicate in any way that the interests of the Government of the United States are not being subserved (p. 2164).

Special attention was thus called to three cost-plus contracts made by Disque to Grant Smith-Porter Bros., Warren Spruce Co., and the Airplane Spruce & Lumber Co., amounting to \$13,000,000 each, or a total of \$39,000,000. None of these contracts received the approval of the Chief Signal Officer, nor were they submitted to any official in the East authorized to act in such matters (p. 2165).

Col. Disque had no legal authority to sign or approve any contracts in excess of \$5,000 without the approval of his superiors in authority. This was testified to by spruce production officials (p. 2165).

\$19,000,000 Wasted On Four Cost-plus Contracts

Without authority, Col. Disque gave these three cost-plus contracts for \$39,000,000 to the contractors named early in 1918, only one of whom had any experience in the logging or lumbering business. These contractors furnished about 11,000,000 feet of riving material prior to April, 1918 (p. 1509). No logs or lumber furnished by any of the cost-plus contractors reached the mills during the six or seven months thereafter, although they were continually making preparations. Apart from about 7 per cent of the 1918 airplane lumber produced by riveting methods and received from these cost-plus concerns, all the lumber or cants were produced by independent operators and in September, 1918, more lumber was being furnished by private individuals than all the Allies combined could use.

In settlements made by Col. Disque after the war four cost-plus contractors received payments from the Government of over \$19,000,000, as follows (p. 2857-2858):

Airplane Spruce & Lumber Co.....	\$1,664,576
Grant Smith-Porter Bros.....	3,349,903
Warren Spruce Co.....	5,671,237
Siems-Carey-H. S. Kerbaugh Corporation.....	8,329,652

Total\$19,015,368

Distribution of Soldiers

Col. Disque's farming out of soldiers to the cost-plus contractors is shown by his own statement (p. 1690), which gives distribution as follows:

	Soldiers	Officers
Airplane Spruce & Lumber Co. (Grays Harbor).....	5,251	173
Grant Smith-Porter Bros. (Clatsop district).....	3,252	90
Warren Spruce Co. (Yaquina Bay).....	3,298	72
Siems-Carey-H. S. Kerbaugh (Puget Sound).....	4,736	140
Coos Bay.....	839	31
Portland headquarters (officers and men).....	500	.....
Vancouver cut-up plant (officers and men).....	4,000	.....
Total.....	21,876	506

(The remaining officers and men were at Vancouver Barracks.)

The total Disque army reached about 30,000. Remembering that Col. Kelly was lumbering in France with approximately an equal number of soldiers, it is significant that Kelly had not to exceed 10 officers at headquarters of combined regiments and 12 to 14 enlisted men (p. 2317). Col. Disque testified that he had 500 officers and men at his Portland headquarters, not counting several thousand more at Vancouver Barracks, across the river from Portland.

Soldiers Were Unnecessary

In view of Pendleton's Canadian production in eight months, under manifold difficulties, any competent lumberman, by organizing existing forces of the Northwest, without any soldiers could have produced, if necessary, a half billion feet of spruce and fir for aeroplanes in the year Col. Disque operated, and at a saving of \$19,000,000 in cost-plus contracts. Co-ordination of 100,000 men who produced over 5,000,000,000 feet of fir and spruce lumber in 1917 would have met every requirement several months before orders were received by Col. Disque to retard production.

A mere statement of accomplishments by Col. Kelly and Mr. Pendleton in France and Canada, compared with the enormous resources in existence in this country, carries its own conviction. Sixteen million feet per month, or only about double that produced by Canada in November, 1918, was more than enough aeroplane lumber to supply the Allies, and that was produced by independent operators here in September, 1918, with a novice clogging the work. This shows what might have been accomplished in half the time and at comparatively small expense by a man who knew the business. Testimony of witnesses on this point is superfluous, but is offered to complete the record. (Pendleton, p. 1258; Kelly, p. 2316.) Mr. Chinn, secretary of Puget Sound Loggers' Association, with an annual output of about 1,000,000,000 feet of lumber (p. 943); Lightner, manager Goodyear Logging Co. (p. 888); Chisholm, manager for Merrill & Ring, largest loggers in the country (p. 871); Ayer, a large lumberman of Portland (p. 2275); Butler, connected with many logging and lumbering interests (p. 1054), and Hawkins, Col. Disque's predecessor. These and other witnesses stated that the loggers and lumbermen of the coast easily could have met all demands if given an opportunity to do so. All they needed was authority to go ahead and the combined energy and capacity of the logging industries would have met every requirement in half the time, and without an army of 30,000 inexperienced men then needed in France.

Disastrous Riving Operations

Immediately after Col. Disque's advent on the coast in October, 1917, he started what was known as "riving" operations, which consisted in cutting down selected spruce trees and then splitting off such portions as were deemed suitable for airplane lumber, leaving the rest in the woods to burn or decay. Such operations included building of camps and roads at large expense, all of which were speedily abandoned when it was learned by experience and from practical lumbermen that the method was wasteful and produced comparatively little timber, while the enormous cost was accompanied by great fire hazard due to the timber destroyed and left to rot. Riving was a short-lived experiment that would never have been undertaken by any experienced lumberman.

(To be continued)

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(Continued from last week)

Col. Disque's operations, according to C. E. Dant, the largest operator on the coast, resulted in a loss in 1918 through improper sawing compared with individual operations in 1917. Lieut. Hollande, representing France, told Mr. Dant in the spring of 1918 that not more than 15 per cent of the lumber from the cut-up plant could then be used (p. 2261). Mr. Ayer, one of the largest lumbermen on the coast, said Lieut. Hollande, representing France, and Col. Beckett, representing Great Britain, told Disque what was wanted, but they did not get it (p. 2278).

Gen. Belin wrote or cabled on May 15, 1918, from Versailles, France, to Gen. Bliss, Chief of Staff, United States of America (p. 2263):

Before the United States entered the war, shipments of wood for aeroplanes took place by means of the ordinary mechanism of orders placed with private American firms, either by French manufacturers or, later, by the French Government. After the United States entered the war, control was taken over by the Government, which resulted in substituting a central organization, the only contractor abroad, for private American establishments. These measures did not succeed in entirely stopping shipments ordered of private American firms, although they decreased them to a considerable extent and without replacing them, so far, by regular Government shipments.

Whether this state of affairs is due to a slackening in American production, difficulties in railway transportation, and insufficient number of vessels chartered for the transportation of wood, measures taken by the United States to safeguard her own war supplies, or whether it is due to all these causes together, the fact remains that the first shipments of wood under the control of the American Government (arrivals distributed among the Allies from December, 1917), did not begin until early in March, 1918, and then only in a totally inadequate manner.

Supplies of wood for the Air Service from September, 1917, until March, 1918, were thus entirely due to the remains of private importation. The gaps in the shipments during the last few months have seriously compromised the situation of aviation production and the situation of the Air Service is consequently such that the least thing may make a very serious matter of it.

Seriously Compromising Aviation Production

During six months, from November, 1917, to May, 1918, while Col. Disque was trying to learn the lumber business, he had "seriously compromised the situation of aviation production." In other words, he prevented private producers from dealing directly with the Allies, as in the past, and his 8-hour day, riving operations, closing of mills, and other orders and experiments, had greatly limited the production of aircraft lumber.

Col. Breece, a lumberman from West Virginia, of acknowledged experience and ability, by some unexplained circumstance, became associated with Col. Disque at Portland early in 1918 and discovered that Col. Disque was not getting "5 per cent aeroplane lumber" from logs. Col. Breece put in force changes that increased the lumber product (p. 3346) and with the Canadian output the Allies received more than they could use prior to the end of the war (pp. 1394-1395). Controversy has occurred over the value of the Vancouver cut-up plant, and several reputable witnesses, including Col. Kelly (p. 3213), testified that specification aeroplane spruce could have been

produced with existing equipment. Undoubtedly that is true, but your committee believes that "cut-up" machinery improved the grade of finished lumber. Cut-up machinery, however, if properly installed, should have been placed in a half dozen mills at convenient points, and at a comparatively small cost instead of building new mills and new plants at enormous expense intended for private use after the war by favored interests (p. 100, Ryan's letter). That was worse than wasteful.

Disque Rebuffed Reputable Lumbermen

The burden of complaints from many reputable lumbering interests was that, apart from Col. Disque's lack of knowledge of the business, he ignored and rebuffed many men who had logged or manufactured aeroplane lumber and who desired to aid production. Maj. Hitchcock, Col. Disque's aid, was represented as an arrogant doorkeeper, according to testimony of reputable witnesses, and Lightner, Goodyear, Polson, and other large loggers, according to testimony, were unable to get an audience with the "Commander of the Army of the Yeon."

Mr. Russell Hawkins, one of the largest loggers on the coast, recommended by Col. Kelly for Col. Disque's job, offered to log spruce on a one-tenth of 1 per cent basis, giving any profit he might make to the Red Cross; but this was not accepted (pp. 2291-2293). Mr. Butler, Mr. Chinn and leading business men and loggers of Washington offered early in 1918 to take over cost-plus contracts from the Government direct without profit, but were repulsed until on September 12, 1918, a contract was allowed them by Col. Disque for 12,000,000 feet of aeroplane logs per month on the Blodgett tract at a total profit of "\$20" on a contract involving many millions of dollars (p. 830). Mr. Ayer, a large and highly reputable lumberman, of Portland, who produced aeroplane lumber for the Allies, testified that Col. Disque directed him to adopt an eight-hour day and his scale of wages or to shut down. He shut down (p. 2279). Other witnesses testified to the same arbitrary rulings.

Mr. Storey, a lumberman of 40 years' experience, testified that the inexperience and blundering of Warren Spruce Co. delayed production for six months (p. 1816). Mr. Polson, the largest logger on the coast, a Disque witness, testified that blundering "mismanagement" delayed him four months without progress (p. 2026). Other reputable witnesses offered cumulative testimony on this point.

Frequent charges of self-interest, "sore-headedness," and lack of patriotism were bandied about by Col. Disque, Maj. Hitchcock, Col. Stearns, and others of their type, whereas the fact is that many offers of patriotic public service came to the Government from high-class, reputable business men whose chief offense lay in their protest against a grotesque military despotism on the coast, where general ignorance and petty egotism sat in places of authority. Those who bowed to this strange domination and sought to join hands in production during war, like Griggs (p. 1814), Reed, and Capt. Grant (p. 2362), Capt. Brown (p. 1814), Polson (p. 2026), and other practical business men found their own efforts embarrassed or thwarted by the spirit of narrow intolerance surrounding them.

Whatever limited success was had came about through the sacrificing efforts of big men who yielded their own business interests and judgment, sometimes with great sacrifice, to obtain whatever production was possible.

It has been no part of your committee's work to determine the merits of controversies between Col. Disque and those who were producing aeroplane lumber; but to give facts, found in the testimony, as we believe them to be.

Money Losses in Production Were Divided

An understanding reached by the Aircraft Service at Washington provided that the United States should aid our allies in getting spruce lumber for aircraft and that the total expense should be borne proportionately by the different governments according to their allotments. The proportion of spruce lumber severally allotted was fixed at the following approximate percentages:

	Per Cent
United States	34
Great Britain	31
France	24
Italy	10

(To be continued)

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At the end of the war, salvage was to be similarly apportioned in determining what each should pay (p. 761).

For illustration, the expense of spruce operations in the Northwest reached about \$50,000,000. Early in 1919 England desired to strike a settlement. The spruce accountant at Portland made an estimate of all Government spruce production property then on hand and gave to logging railways, which cost \$9,845,106 (p. 1593), a salvage value of \$750,000, or less than 8 per cent of cost (p. 2859). Property on hand was salvaged at \$3,908,000, according to the schedule, and on that basis it was contended that a large part of the losses would be borne by our allies while any excess in salvage over estimated receipts would go toward reducing our own expenses.

This arrangement will not be completed until all the property has been sold and judging from conditions disclosed to the committee no one can determine when that will be.

Spruce production losses will be large, because of riotous extravagance disclosed on every hand. War brings waste and the committee during the investigation has been more immediately concerned in ascertaining causes for failure to produce spruce promptly. However, certain facts that have come to the committee's attention are briefly presented.

Spruce Cost England \$802.20 Per Thousand Feet

The cost to Great Britain for aeroplane timber furnished under Col. Disque's management has been placed in the record as follows:

On the basis of 10 per cent salvage or the basis they settled with England on, spruce would cost \$802.20 a thousand, fir \$287.20 and cedar \$895.20 (p. 2304).

That would be the cost to all Governments participating on a basis of 10 per cent salvage for spruce property sold. It was contended by spruce officials that 10 per cent is a low estimate. Exact cost cannot be determined until the accounts are closed up, but on a 20 per cent salvage basis, the spruce would cost \$754.50 per thousand; fir, \$271.50; and cedar, \$851.70 (p. 2303). The average actual cost based on final salvage and closing up of business will probably range around the figures quoted.

Over \$30,000,000 Wasted Through Mismanagement

The American Government has advanced over \$30,000,000 of unnecessary expense in the production of 143,000,000 feet of aircraft lumber from October, 1917, to the end of the war according to the committee's expert accountant.

The highest price paid for such lumber furnished by independent contractors to the Allies prior to Col. Disque's control, and the highest price paid by his predecessor in this country was \$110 per thousand for spruce and cedar and \$65 per thousand for fir (p. 2304). Upon the basis of these figures the expert accountant for the committee testified that the excess cost through Col. Disque's mismanagement and abortive attempt to produce aircraft lumber reaches \$35,796,324 on a 10 per cent salvage basis, and \$33,447,837 on a

20 per cent salvage basis. Great Britain's individual loss on her settlement on a 10 per cent salvage was \$11,096,859. Our own loss will be subject to deductions from any payments made by France and Italy (pp. 2303-2304).

In this connection it should be kept clearly in mind that the governmental cost-plus contractors, upon the undisputed evidence, produced only 7.4 per cent of the timber from which was secured the 143,000,000 feet, while the independent contractors, disorganized as they were, produced 92.6 per cent thereof. These figures show conclusively what could have been accomplished by co-operation and concentrated effort of the independent operators under the direction of an expert lumberman.

Disque's Cost-plus Operation

Upon reaching the Northwest, Col. Disque called in Government forestry officials and others for counsel. After receiving their advice he apparently proceeded to do as he pleased. His three illegal cost-plus contracts have been mentioned. One was given to the Airplane Spruce & Lumber Co., of Grays Harbor, of which Alexander Polson was president. He was also a large independent logger at Grays Harbor. Mr. Polson testified in reference to the railroad, which Col. Disque ordered his company to build, as follows:

We would never have built the road ourselves. They delayed the work from June 6 to October 6 (1918), practically making no progress. It hindered our company getting out twenty to thirty million feet of spruce and hindered the Airplane Spruce & Lumber Co., which is the cost-plus company, from getting out from six to ten million feet before the war ended (p. 2026).

Mr. Polson further testified that Col. Disque's methods prevented him from producing in two operations between thirty and forty million feet of logs (p. 2026). No logs under the company's contract ever reached the market, but there was paid the company \$1,664,576 in settlement of the contract.

A second cost-plus contract was given to the Grant Smith-Porter Bros., a company that had no experience in logging or lumbering. Wasteful methods were alleged in testimony, but the most serious criticism is that many months of preparation were taken without getting any logs to market, while their bill, which was paid, reached \$3,349,903.

A third cost-plus contract was given to the Warren Spruce Co., an offshoot of the Warren Construction Co., of Boston, Mass., that builds highways and has an uncertain record that your committee was unable to investigate, although urged to do so. (See Kerrigan report, p. 2384.) The Warren Spruce Co. is the company that Lieut. Kerrigan says was given a cost-plus contract reaching unmeasured millions in exchange for unlimited power to be given Col. Disque (pp. 2351-2354).

Neither the Warren Construction Co. or the newly organized Warren Spruce Co. ever had logged a stick of timber, but Col. Disque gave them a generous contract, and notwithstanding that they spent money lavishly, according to the testimony, no spruce logs ever reached the market under such contract. There was paid to them on this illegal contract \$5,671,237 (p. 2857).

A Broadway Firm's Fat Contract

The Siems-Carey-H. S. Kerbaugh Corporation, of Broadway, New York, a cost-plus contractor, secured a more liberal contract than the others. This corporation owned no timber, was without any logging or lumbering experience, and never produced any logs that reached the mills, after six months' work. This corporation was paid \$8,329,659. More will be said of this company and its contracts, but it is a singular coincidence that the Siems-Carey Canal Co., of New York, of which the Siems-Carey-H. S. Kerbaugh Corporation was an offshoot, was controlled through the ownership of 51 per cent of its stock by the American International Co., of New York. Director of Aircraft Production John D. Ryan was an influential director of the American International Co. when Carey, the leading figure of the Siems-Carey-H. S. Kerbaugh Corporation, received his two cost-plus contracts, one of which—the railroad contract—Mr. Ryan refused to approve, because of his own connection with the Milwaukee Railroad; but the other—the spruce contract—an estimated expenditure of \$23,000,000, for which the railroad was ostensibly built, he did approve.

(To be continued)

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(Continued from last week)

Apart from a small supply of cants from riving operations no timber was ever delivered on any of these four cost-plus contracts. Yet these contractors received \$19,000,000. Independent contractors furnished more than enough logs and lumber to meet all the demands of this country and of our Allies long before these cost-plus contractors learned the job or were ready to produce logs (pp. 1394-1395).

The Vicious Cost-plus System.

Col. Disque's cost-plus spruce contracts were direct invitations to premeditated waste and extravagance because they permitted cost-plus profits on everything from a 100 per cent profiteering mackinaw sale (p. 568) to miscellaneous "welfare work," and soldiers' "accident policies" to protect men from the dangers of forests and mills in Oregon (p. 3809). "Cost plus" on every operation and every article from steam shovels, on the thirteen railways being constructed under Col. Disque, down to dishpans in the cook shanties. The larger the expense the greater was the profit. Civilian pay, illegally given soldiers working for cost-plus sub-contractors on the Lake Crescent Railroad, paid by the Government, thus became subject to an additional 7 per cent rake-off. A part of the civilian pay supposed to have been received by soldiers was never paid to them, according to the testimony of intelligent witnesses like Mallery (pp. 1076-1080) and Lipps (p. 2424). Gross, a newspaper man, testified to the same general effect (p. 2398). Enlisted or drafted for military duty, these men were placed under a system of military peonage in cost-plus operations.

Disque's Unused Spruce Railways

Col. Disque's cost-plus contracts were in keeping with his "spruce" railways, of which thirteen were built at a total cost of \$9,845,106.07 for 139 miles of logging roads (p. 1593).

Maj. Hitchcock, who appears to have been in charge of operations in Oregon under Col. Disque, wrote letters—found on pages 3440 and 3441—without authority of law, directing

the Warren Spruce Co. to build two logging roads costing \$3,639,826; one of 23½ miles and the other of 10.83 miles, with two miles of sidetrack, according to the Spruce Production "Report on possibilities of utilizing properties," where exact status of constructed roads is presented. These two roads, built at a total average cost of approximately \$105,000 per mile for logging roads, not counting sidings, tell their own story. Maj. Hitchcock also directed other roads to be built without authority.

A letter to the committee from J. P. Murphy, "general counsel" for the Spruce Production Corporation (p. 3439), describing the only authority for building these railways by the Warren Spruce Co., says:

ARTICLE 1. In addition to engaging in riving operations, as in said contract provided, the contractor shall also engage in logging and milling operations and other activities incidental thereto covering any kind of timber designated by the contracting officer.

The "general counsel" says, in explanation of the paragraph quoted:

It was under this provision of contract No. S. P. D. 17-155, and general terms of both contracts, that said railways were constructed (p. 3439).

The foregoing illustrates the methods of Col. Disque and his associates better than any comment offered by witnesses who came before the committee.

On page 1593 of the record appears a statement of cost of logging roads as proposed to be constructed. The statement is assumed to correctly state the cost, and apparently represents the proposed mileage of the completed road, which, according to the "Spruce Corporation's report of actually built utilizing properties" (Exhibit No. 1, December 19, 1919), only reached 115.24 miles compared with 139.24 miles of the tabulated statement, which follows:

Cost of Railroads Constructed by Spruce Production Division and United States Spruce Production Corporation

Five Costly Logging Railways

A striking illustration of extravagance in construction appears in the foregoing table when Government logging roads Nos. 1, 3, 4, 11 and 12, built by three cost-plus operators, with an aggregate length of 77.71 miles (Spruce Report on Utilities, Exhibit No. 1, December 19, 1919), cost the Government a total of \$8,325,194, or an average of nearly \$107,000 per mile, while the remaining 37½ miles of Government roads were built at a cost of \$40,000 per mile. This estimate is for main line of these logging roads and includes cost of sidetracks. However, no locomotives, cars or other equipment or terminal buildings, which are included in ordinary railway valuations of cost per mile, were bought or built for these roads. Expensive terminals, tunnels, bridges and other costly construction are common in the case of commercial roads. It will also be noted that, while the rights of way of most of these logging roads were largely donated or only cost a nominal figure, private commercial roads usually pay full value therefor.

(To be continued)

No.	Mileage	Construction cost	Material furnished by Government	Total	Average per mile	
1	Siema, Carey-Clallam Co.	36	\$3,608,088.24	\$358,624.58	\$3,966,712.77	\$110,186.46
	Airplane Spruce & Lumber Co.:					
2	Merrill & Ring.....	6.83	36,099.50	.....	36,099.50	5,247.02
3	Quinalt.....	5.96	445,427.69	29,954.48	475,412.17	79,767.14
4	Elle River.....	3.25	197,525.82	45,719.19	243,245.01	74,844.61
	Grant, Smith-Porter:					
5	North Nemah.....	9.11	388,664.75	46,047.40	434,712.15	47,718.12
6	South Nemah.....	3.90	75,015.91	52,623.85	127,639.76	32,728.14
7	Nosel River.....	2.06	40,492.20	9,368.52	49,860.72	24,204.23
8	Lewis and Clarke Narrow Gauge.....	.....	20,468.50	.....	20,468.50	.....
9	Lewis and Clarke.....	20.36	511,446.80	30,355.26	541,802.06	26,611.10
	Warren Spruce Co.:					
10	Toledo & Siletz.....	8.28	180,471.47	39,552.30	220,023.77	26,572.91
11	Yaquina Northern.....	15.66	1,443,981.29	109,734.04	1,553,665.33	99,212.34
12	Alsea Southern.....	25.99	1,899,632.25	186,528.73	2,086,160.98	80,267.83
13	Portland Lumber Co., Beaver Hill.....	1.79	86,770.08	2,533.27	89,303.35	49,890.13
	Total.....	139.24	8,934,034.50	911,071.57	9,845,106.07	70,706.01

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(Continued from last week)

With this amount quite an ambitious scheme can be arranged. A workshop (always to be found in any locality) I consider to be an absolute necessity. It is useless to make Arcadia the clubhouse, especially on wet days, and a workshop can usually be obtained for about 3s. per week that will comfortably hold a bench, small stove, and a desk, with necessary impedimenta such as chairs. Members should be levied for the shop equipment, or guarantee to supply some such item equivalent in value to levy.

A small bench drilling machine (convertible into a hand brace), handsaw, fretsaw, flat and hollow woodworking chisels, metal-working files (flat and half-round), bench vise, plane (jack and smoothing), bradawls, small screwdriver, soldering apparatus, gluepot, small heating stove (if one is not supplied with workshop), oil lamps, chairs, table and hammer comprise the minimum equipment required. This will probably absorb £10, which could be taken from the entrance fees. The point to be borne in mind is that by charging reasonable entrance fees and subscriptions (those outlined above are well on the low limit) only a useful and energetic style of member is attracted to the club. While fees are kept below the margin necessary to enable useful work to be accomplished, so long will the style of member who is not disposed to over-exert himself be manifest.

And now for some remarks anent the actual running of a club. In the first place, ten members are the minimum, unless a smaller number are prepared to pay a larger fee to obtain the requisite capital.

The secretary should be elected at a meeting and also a treasurer. With clubs of more than fourteen members a committee would be necessary to arrange competitions and multifarious other matters. These should also be nominated.

Having formed the committee, the rules should be drawn up. These should not exceed six in number, and should be framed to settle the day and hour of meeting, etc., and to ensure that the club is a *live* one. Weekly flying of models should be arranged, with monthly competitions. A space should be provided on the card wherein such contests could be enumerated, and the committeemen's names entered on the front of card, with the club's name and secretary's address. The club, too, should become affiliated with the K. M. A. A.; this costs £1 1s. per year. The secretary should arrange lectures on matters relating to aeroplanes, the lecturer in each instance being a member of the club. He should also keep minutes of each meeting, and in collaboration with the treasurer be responsible for a yearly balance sheet and statement of the club's progress. Books should be accurately kept of expenditures, etc.

The one thing I wish to impress is the need for zeal and interest in the movement, and not merely a superficial interest in the "flying stick."

Transcontinental vs. "Logging Roads"

Three of the greatest transcontinental roads in the country run through the home State of Mr. Ryan. They are built around, over and through high mountain ranges, across the Great Divide, through heavy construction of many costly cuts and tunnels, with expensive bridges across the Missouri, the Yellowstone and other rivers, great and small. Probably no railroads in the country average higher construction cost than those in Montana. The laws of that State (sec. 2502) require all roads to be assessed at their full cash value. The commercial road thus valued ordinarily includes the rights of way, stone ballast, heavy rails, telegraph and telephone lines, locomotives, cars and other rolling stock, depots, shops and franchises. These elements are usually absent or extremely small in logging roads.

In Montana the following assessed valuations of the three roads are reported:

	Per Mile
Northern Pacific (main line).....	\$56,000
Great Northern (main line).....	56,000
Milwaukee Railway—electrified (main line).....	55,325
Milwaukee Railway—unelectrified (main line).....	50,728

Five logging roads to haul aeroplane logs in Washington and Oregon built by Col. Disque under Director Ryan averaged a cost to the Government of \$107,000 per mile, or practically double the assessed full cash value of three great transcontinental roads in Mr. Ryan's own State, with one of which roads he was closely connected.

Squandering Money on "Logging Roads"

Government logging roads are valued without equipment because they do not own even a hand car. The transcontinental road valuations include locomotives and other rolling stock equipment estimated by some authorities at 40 per cent of the whole valuation. Deducting 25 per cent, a conservative estimate for equipment, to reach a basis of comparison, leaves net values of the Northern Pacific, Great Northern and Milwaukee Railroads, respectively, of \$42,000 and \$37,500. However, another factor enters into the comparison. Heavier rails, rock ballast, complete telegraph and telephone equipment, expensive terminals and expensive mountain construction undoubtedly make cost of reproduction of transcontinental roads in Montana practically double that of any Government logging road inspected by your committee on the coast.

On a basis of \$37,500 per mile valuation for the Milwaukee road, exclusive of equipment, none of the Government logging roads apparently ought to have cost much over one-half of the above figures. The Carey logging road of thirty-six miles main track, without terminals or equipment, as a matter of fact cost the Government \$4,000,000, or \$110,000 per mile.

Of the thirteen spruce roads only three will be briefly discussed, to wit: Nos. 1, 11 and 12.

No. 11 is a road of 10.8 miles completed length, main line, which cost \$1,553,665, or about \$140,000 per mile, including sidetrack mileage. This road was the occasion of much criticism by many witnesses. The timber in the Siletz district reaches from 10,000,000,000 to 20,000,000,000 feet, according to the testimony of Welch (p. 1870), Hall (p. 1728), Wade (p. 1833), Storey (p. 1809) and Ball (p. 1725). Six witnesses testified that a road 15 to 20 miles long extending north from Toledo located on the Yaquina River would reach 550,000,000 feet of spruce and an unlimited amount of fir. These witnesses were loggers, mill men, or reputable cruisers who were familiar with the region. Several witnesses, including engineers who had made surveys, testified an extension of such road north from Toledo could be made on less than a 1½ per cent grade and at a cost of from \$15,000 to \$20,000 per mile, according to the average price paid in such construction.

(To be continued)

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(Continued from last week)

Mr. Blodgett's timber tract, 23 miles south of Yaquina Bay, contained 250,000,000 feet of spruce and some other timber—in all about 670,000,000 feet (p. 1894), or only a small fraction of spruce and fir compared with the Siletz tract. At Col. Disque's request Mr. Blodgett traveled to Portland, Ore., to see him. Col. Disque there insisted that Mr. Blodgett must dispose of his spruce timber for \$1.50 per thousand. Mr. Blodgett refused to consider the proposition, because of existing destructive "selective" methods of logging, the fire risk and low price.

On May 3, 1918, Mr. Blodgett wrote to Col. Disque that he did not want to sell his tract, but would dispose of it for \$635,000, or less than \$1 a thousand for all stumpage. Later on the same day Maj. Hitchcock wrote to Mr. Blodgett requesting him to call again at headquarters. Mr. Blodgett did so and Maj. Hitchcock then demanded that Mr. Blodgett sell his tract for \$450,000 to a party to be named by Maj. Hitchcock. Upon Mr. Blodgett's refusal, Maj. Hitchcock questioned Mr. Blodgett's motive and patriotism and declared that the timber would be commandeered at the lowest possible price. That closed the interview.

Disque Promises to Commandeer

On May 6 Maj. Stearns (chief of staff) wrote to Mr. Blodgett that Col. Disque was issuing a "commandeer" order on his spruce timber at \$1.50 per thousand. Mr. Blodgett did not reply.

June 10 Col. Disque wrote to Mr. Blodgett saying that he preferred "not to exercise" the Government right to commandeer. Col. Disque again offered \$1.50 per thousand for all spruce taken. At this time Col. Disque had fixed a price of \$7.50 per thousand for other selected spruce, according to statement of Mr. Blodgett.

Mr. Blodgett submitted a letter to the committee, dated June 22, in which he offered to pay Col. Disque "double the price you offer for any tract of like quantity and quality."

August 19 Col. Disque wired Mr. Blodgett offering to pay \$3 per thousand—"a fair price for your spruce." Mr. Blodgett refused, because of the waste of timber caused by "selective" logging and the fire risk.

Four days later, August 23, Col. Disque wired Mr. Blodgett: "I will pay you \$635,000 for your entire Alsea Bay tract as per your letter of May 3."

Mr. Blodgett's attorney replied that he "preferred to keep this property as an investment, and he sells it entirely for the purpose of promoting the war interests of the Government. If peace is as near as it is thought to be by many, he would much prefer to keep the property."

The foregoing record is not entered in the hearings, but is found in correspondence filed as "Exhibit A," committee hearings, December 18, 1919.

The Warren Spruce Co. was given orders by Maj. Hitch-

cock on April 8, 1918, before any negotiations were had with Mr. Blodgett, to build a 23-mile railroad from Yaquina Bay to the Blodgett tract.

Nearly \$3,000,000 Paid for a Useless Railroad and Sawmill

The road had not been completed when the armistice was signed, while the Blodgett deal was not closed until December 2, 1918, or nearly one month after the signing of the armistice. This timber tract, bought by Col. Disque, was to give value to a worthless \$2,000,000 railroad, and it is significant that this railroad has not yet been sold by the Government, although given by the Spruce Production Corporation officials a salvage value of less than 8 per cent. This road also was blocked by slides when examined by your committee in September, 1919.

Charges were made of attempted official graft, based on trying to force Mr. Blodgett to sell for \$450,000. No testimony to that end was presented to the committee.

The Government is out \$2,000,000 on this railroad and has also paid \$635,000 for the Blodgett timber tract.

In keeping with the general extravagance evidenced throughout the spruce production operations, an item of \$821,825 (p. 2857) for a sawmill at Toledo, built by Col. Disque, at governmental expense, is noted. The building of this mill was condemned by the Government logging engineers (Ray report, Forester's letter to Disque) and by nearly every practical millman who testified before the committee. Small mills to saw cants were available and others could have been built at a moderate cost; but the Toledo mill was a "white elephant," equal in character to the Siems-Carey-H. S. Kerbaugh mills—monuments of reckless waste and expenditure of public funds.

Among the 13 "logging roads" built by cost-plus contractors, another deserves brief mention in this report. It is known as the Siems-Carey \$4,000,000 "logging" road with which the name of Director John D. Ryan was first connected by Lieut. Kerrigan and Maj. Howes of the Intelligence Bureau of the Army.

Hearings were begun on the coast on August 20, prior to which time the committee personally inspected the Siems-Carey railroad, the Siems-Carey sawmill at Port Angeles, built by the Government, and also made an examination of conditions at Clallam Bay, Pysht Bay, Pleasant Lake and other points covered by matters in controversy.

Request Made of Former Aircraft Director Ryan to Explain Important Evidence

Interrogation of witnesses during committee hearings and reaching nearly 4,000 printed pages, was undertaken almost entirely by different members of the committee, excepting at the New York hearings, which were conducted by Mr. Steinbrink, the able counsel for the committee, whose advice and aid have been of great value.

In addition to his testimony, Mr. Ryan requested permission of the committee in New York to file an explanation of his own acts in connection with the letting of contracts and building of railroads and mills by the Siems-Carey Corporation. This privilege was granted. Mr. Steinbrink, the committee counsel, then made the following specific request in reference to matters that ought to be explained by Mr. Ryan in justice to himself (p. 3127):

MR. STEINBRINK. Mr. Ryan, may I say to you—and I feel, in view of this discussion I should say it in justice to myself, since the press are here—that I have no interest in this matter, except to develop the fact, and it is wholly immaterial to me whom it helps or hurts. This record was submitted to me prior to my beginning your examination. These facts, to my mind, stand out, and I am going to call your attention to them, Mr. Ryan, that on April 8, 1918, as the record discloses, Col. Disque decided in favor of the Deep Creek, or rather was not impressed with the route as finally built; that on April 12 the first spruce contract was entered into, the so-called Portland or preliminary contract; that about April 24 you came into the Government work; and that on April 26 Judge Lovett's letter was written with respect to this railroad; that on May 12 the spruce contract was entered into, approved some time later, but dated on that date—

MR. RYAN. May 28, approved.

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Mr. STEINBRINK. Approved May 28; May 16 Mr. Fisk testified he was forced out through circumstances that he, using his one phrase, was very much disappointed at; that on May 18 the railroad contract was entered into and the route was left open; that about June 15 Col. Disque determined the route had to go ahead from the Government; that along toward the middle or latter part of July you made a visit to the West and went over the railroad, as well as the general railroad situation; that on November 11 the armistice was signed. Meanwhile it appears on the record, Mr. Ryan, that you had been a director and officially connected with the Anaconda Copper Co.; that the American International Co., with which you were associated and of which you had been a director, was the owner of the Amsinck Co.; that you were a director of the St. Paul Railroad and one time a member of the executive committee; that the St. Paul Railroad owned the land company which owned 79,000 acres throughout the Clallam County district; that Mr. Donlan, who was a superintendent employed—I beg your pardon; that Mr. Donlan, who became superintendent on this logging work, had at one time had business relations with you with respect to some water power; that Mr. Sawyer, an engineer of the St. Paul Railroad, became chief engineer of this other work, with rather great power under the contract, powers of final determination and decision in event of dispute; that after the completion of the work Mr. Sawyer went back to the St. Paul Railroad; that Col. Disque had never had any logging experience and had come from the superintendency of the prison at Jackson to this work, and that subsequently, when he terminates his connections with the Government, through your introduction to the American International, is made president of the Amsinck Co. at a salary of \$30,000 a year; that Mr. Kelley, who was attorney for the Anaconda Co., helped revise and prepare the second spruce contract; that Earling, superintendent of the Milwaukee Railroad, urged the finishing of 14 miles of the road on November 14, three days after the armistice had been signed, in a telegram from Col. Stearns, which is quoted in full in the record; that Mr. Byram, president of the Milwaukee road, was one of those at the conference with Col. Disque at which Col. Disque said he finally made up his mind on the location of this road; that after all these facts are before the committee it appears from the Government record that the cost of railroad construction in this region was \$8,700,000, and that the estimated salvage on that was \$750,000, which you yesterday said, to your mind, was very low—

Mr. RYAN. And said that, of course, it was an estimate, and not the realization.

Mr. STEINBRINK. Now, those are the facts, Mr. Ryan, with which I was confronted; and it seems to me that with those facts standing cut, there was an explanation necessary. Whether or not you have made the explanation is not for me to say.

It is fair to Mr. Ryan to say he claimed to have no interest in any of the Siems-Carey logging or railroad operations, or in the plans of the Milwaukee road. Important testimony is therefore submitted.

A brief review of evidence before the committee regarding the Siems-Carey-Kerbaugh Corporation cost-plus operations, and Director Ryan's relations thereto, is set forth in the hearings. Portions of such review are submitted herewith, giving pages of the record where the evidence can be found (pp. 3159-3164):

Rival Railways Trying to Control Territory

Evidence before the committee concerning the \$4,000,000 "spruce" railroad tended to show that officers of the Port Angeles & Grays Harbor Railroad Co. had secured certain rights of way over what is known as the "Crescent Lake Route" from Port Angeles to the Hoh River, a point about midway between Port Angeles and Grays Harbor. That this new road proposed to connect up with a transcontinental road from Grays Harbor, and between those points it would become a competitor of the Milwaukee Railway. The Milwaukee had built from Port Angeles westward to Deep Creek, about 40 miles, and thence surveyed to Grays Harbor over what is known as the Pysht Creek route. The Milwaukee road over Pysht Pass on the Pysht Route and the P. A. & G. H. Railway through Muellers Pass over the Crescent Lake Route, according to

the testimony, controlled the only two passes over the mountains between these terminals. These two passes were vital to the extension of any road between Port Angeles and Grays Harbor. From twenty to thirty billion feet of growing timber between these terminals promised an abundant freight haul for over 50 years to come to the railroad that secured control.

In hearings at Seattle and subsequent testimony, Mr. Calkins, vice-president of the Milwaukee road, is alleged to have offered to have the Milwaukee Railway take over the rights of the P. A. & G. H. Railway and build it as a part of the Milwaukee system. This offer was refused (pp. 1102, 2865).

The P. A. & G. H. Railway had arranged in 1917 for \$3,500,000 and was to be financed by English capital through F. A. Douty, a Portland lumberman working with the English Government (pp. 2229-2240). Disque, an inexperienced Cavalry captain, was selected for unexplained reasons to take charge of spruce production on the coast and was sent West about October 15, 1917. On December 10 Disque wired Maj. Leadbetter, Washington (p. 2230), opposing the Douty plans, and so prevented financing of the P. A. & G. H. Railway, according to the claims of its promoters.

When the \$23,000,000 Carey spruce contract dated April 12 was signed in Portland, Disque claimed he would not approve it until he had decided where a railway to get out the spruce should be located.

Three Ways to Get Out the Spruce

Three ways were open for getting out the spruce covered by the \$23,000,000 spruce contract. First, by a 15-mile road which would tap the spruce up the Hoko River, thence rafted from Clallam Bay to mills, as in British Columbia spruce operations. This road in ordinary times could be built for \$250,000. This route was strongly urged by the Government logging engineer and other loggers upon Disque, with promise of active logging operations in three months' time if adopted (p. 2895).

A second route to the spruce timber was the Pysht route through an extension of the Milwaukee road, which was approved by the Secretary of War April 24. This route required building about 25 miles of additional railroad, and thereafter logs would be hauled over the Milwaukee Railway.

The third route to the spruce timber, and the one selected, joined the Milwaukee line about 20 miles west of Port Angeles at Joyce, and thence by two tunnels and several deep cuts struck the surveyed line of the P. A. & G. H. Railway, near Lake Crescent, at Muellers Pass, and, according to contentions of railway promoters, it thereafter appropriated their surveys, making a total new extension of 36 miles from Joyce on the Milwaukee road.

In any proposed extension of the Milwaukee Railroad by this last line the distance between Port Angeles and Grays Harbor would be materially shortened, although at higher cost of construction.

The third route was the one decided upon by Col. Disque, and the Siems-Carey-Kerbaugh Corporation constructed the 36 miles of railroad from Joyce to the spruce timber, near Lake Pleasant, over what is known as the "Lake Crescent route."

The Siems-Carey-Kerbaugh Road Cost Ten Times Too Much

Carey's corporation built this 36-mile road over a 1,100-foot divide (p. 93) at a cost to the Government of about \$4,000,000, or \$110,000 per mile, including sidetracks (p. 1593), with a total 80-mile rail haul to water before rafting. According to experienced loggers and reputable witnesses the road was improperly located, did not reach any spruce for 30 miles and cost ten times what a properly located and properly built road to reach the big spruce tract ought to have cost. This Carey logging "road was built through cuts in the solid rock 150 feet in height above the rails." Two tunnels were built to prevent slides along Lake Crescent. Of the bridges Maj. Ray's report says (see VIII, p. 7):

File bridges were constructed almost 100 feet high, the highest unframed pile construction in the United States. One bridge was built almost 200 feet in height.

The Port Angeles & Grays Harbor Railroad, heretofore mentioned, had made careful estimates for building a commercial line around Crescent Lake on the south side with an average cost of \$22,056 per mile (p. 2879) and it passed through the same large spruce section near Lake Pleasant on its way toward Grays Harbor.

A 15-mile railroad from Clallam Bay, up the Hoko River, as stated, would go through 10 miles of spruce timber and then reach the same Lake Pleasant large spruce tract only 14 or 15 miles distant from Clallam Bay. Engineer Frost, a large logger, testified that this 15-mile road could have been built in 1918 for \$21,375 a mile (p. 824). He had estimated it carefully. Engineer Thompson testified that in 1915 this 15-mile road could have been built for \$16,000 per mile (p. 823).

(To be continued)

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

Approximately ten thousand printed pages are covered by the minutes of the hearings of the latest Congressional investigations of the military aircraft expenditures, which totalled to over one billion dollars since 1917. It is not surprising, therefore, that the Congressional Committee find it hard to make an adequate report of the situation in less than two hundred printed pages. AERIAL AGE is likewise limited by the amount of space available and will be forced to publish only a comprehensive digest of the hearings and conclusions of this latest Congressional investigation of aircraft expenditures.

The reports of the Fracar Committee will be printed first, in full. As regards the Manufacturers' Aircraft Association, this Committee found conditions to be identical with the conditions found by the Senate Investigating Committee summarized in AERIAL AGE for February 9th and 16th and by Mr. Hughes in his 1918 investigation.

This investigation does not, however, cover the charges of lobbying and other recent alleged pernicious activities of some misguided individuals who have turned Congress against the Aeronautical Movement by their ill-advised actions.

(Continued from last week)

Engineer Walker estimated logging-road construction, per mile, in that territory, at \$11,000 (p. 826); Engineer Rempt estimated same construction at \$11,610 (p. 829); Lightner, manager of the Goodyear Co. at Clallam Bay, testified that the 15-mile road would only reach a 440-foot elevation, compared with an 1,100-foot divide on the Carey road, and if built to haul a train of 30 cars, the largest operated, it would cost between \$20,000 and \$25,000 a mile. Such road would handle as many logs as the Carey road. This was the highest estimate (p. 879). Scott, whose mills produced a half million feet daily at Port Angeles and vicinity, testified that he had built 18 to 20 miles of road in the same neighborhood for \$14,000 to \$16,000 per mile (p. 910). Pendleton, 100 miles from the mainland in Canada, testified that his roads, built in 1918, to get out Canadian aeroplane logs cost about \$15,000 per mile (p. 1256). Other witnesses testified to the same effect, estimating with 60-pound rails, the largest logging-road rails in use. The highest estimate for the 15-mile Clallam Bay railroad, completed, was \$375,000.

The Siems-Carey-Kerbaugh 36-mile, \$4,000,000, Crescent Lake road was built for commercial purposes to reach the same timber and not for logging purposes primarily, according to many witnesses. It cost the Government ten times what a properly built, properly located, logging road should have cost. The extra freight charges on Carey's 250,000,000 feet fitch contract alone, over the Milwaukee road to Sequim Bay, would reach approximately \$400,000, and would have built the Clallam Bay line and saved \$4,000,000, the cost of the Siems-Carey-Kerbaugh road as built.

Carey Planned An 80-Mile Rail Haul for Logs

A remarkable fact developed by the testimony (p. 2086) is that Carey planned to haul logs cut in the Lake Pleasant tract over this Government-built road a distance of 36 miles to Joyce Junction on the Milwaukee road and thence about 44 miles east over the Milwaukee road, to Sequim Bay—an 80-mile haul (p. 2827). No mills or manufacturing facilities existed at Sequim Bay, from which place the logs were to be rafted by Carey to the 40 mills on Puget Sound that he expected would enter into contracts to saw at his (Carey's) figures. This is specifically noted because a short 14- to 15-mile logging railway from Clallam Bay, as stated, according to abundant testimony, would have reached the same spruce in three months' time and at about 10 per cent of the cost of the Carey road and also as stated without a \$400,000 freight tribute to be exacted by the Milwaukee road. Large expenditures were also in contemplation on the 44 miles of Milwaukee road main line from Joyce Junction to Sequim Bay at governmental expense (p. 2097).

Testimony was submitted by Col. Disque, Maj. Sawyer and Mr. Carey, all of whom knew practically nothing of logging or lumbering, attempting to show that rafting logs from Clallam Bay down the Juan de Fuca Strait, 15 miles

wide, would be impossible for Carey, whereas he intended to conduct the same rafting operations from Sequim Bay on the strait and sound after an 80-mile expensive railway haul. Goodyear, and Merrill & Ring, both large loggers, had been successfully rafting for many years from Clallam Bay and Pysht Bay down the strait, while Pendleton rafted all of his Queen Charlotte Island logs from 100 to 175 miles across the roughest water on the upper Pacific coast and got production results never approached by Col. Disque.

The following from page 3162 of the hearings is specially relevant as to this railway:

Milwaukee Railway Commanded the Situation

It was the contention of the promoters of the Port Angeles & Grays Harbor Railway at Seattle that by his decision of routes Col. Disque had appropriated Muellers Pass and 20 miles of their railway between Lake Crescent and Lake Pleasant; that by connecting with the Milwaukee at Joyce the new line became a feeder of the Milwaukee and destroyed their own line, through the unlimited power of appropriation possessed by the Government alone during the war. Also that thereby the Milwaukee not only retained its Pysht Route over the Pysht Pass, but had destroyed any possibility of competition when the Government appropriated the Muellers Pass Route, which the Milwaukee presumably will eventually possess.

Carey placed Donovan, a Milwaukee Railway engineer, in charge of the Government railway surveying operations and Sawyer, the Milwaukee superintendent, in charge of its construction, while Donlan, mentioned in connection with former Ryan water-power interests and Anaconda Mining Co. logging operations, took charge of Carey's logging.

Mr. Ryan's Inspection Trip

Construction was begun on the Siems-Carey-Kerbaugh railway in June, and in July Director Ryan came out from Washington to Portland and Seattle and went over the Siems-Carey-Kerbaugh railway proposition which he had previously refused to approve and which was being constructed by Supt. Sawyer, of the Milwaukee. Mr. Ryan looked over the Carey railway operation in Clallam County, where several thousand soldiers were engaged with civilians in building the Siems-Carey-Kerbaugh railroad. He then returned to Washington, where he spent a week or so, after which he left for Europe some time in August, remaining abroad until October 13.

The Siems-Carey-Kerbaugh railway is about 250 miles from Portland headquarters, and farther away than any other one of the 12 Government-built railways; it is the only railway tapping the Milwaukee Railway system and is the only railway tapping the Milwaukee timber lands, in this case 2,000,000,000 feet of timber; it was the most costly road built per mile, according to the spruce officials (p. 1593); and it cost the Government several times as much as any logging road should cost if built merely to get out logs. This testimony before the committee was given by various witnesses. Mr. Ryan examined this road, but did not examine any of the 12 remaining roads.

A Quickening Song

In July and August, Director Ryan took his 6,000-mile inspection trip. He traveled across the continent to Seattle and across Puget Sound to where Carey's road was planned. The proposed Carey road, which he then inspected, was more distant and difficult of access than any other "spruce" operation. Coincidentally Director Ryan also inspected many sumptuous banquets arranged by Col. Disque for their mutual enjoyment (p. 3098). One function described by Capt. Cameron Squires (p. 1891), occurred in Portland toward the close of this banqueting trip in honor of Mr. Ryan. At the final feast a choir from among Col. Disque's distinguished officers sang a song designed to touch Director Ryan for a generalship for Col. Disque.

Though pitched in a major general key it only reached a minor brigadiership. However, at the conclusion of the war, Col. Disque, then a general, was installed through the influence of Mr. Ryan as president of the Amsinck Co., a corporation doing an importing and exporting business in New York City, a business of which he knew absolutely nothing (p. 1504), at a salary of \$30,000 a year, or just 900 per cent increase over his captain's income of \$3,000 two years before. To use Col. Disque's comprehensive expression, you must admit "that was going some" (p. 1504). The remarkable method of being warbled into a lofty Army promotion and later into a civil-life job, at twice the salary of the Chief Justice of the United States, is related at this point to show the vigorous vocal powers displayed by Col. Disque's distinguished medal division.

Again quoting from the hearings (p. 3162):

(To be continued)

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

(Continued from last week)

Road Completed After Armistice

On November 14, after the armistice, Col. Stearns wired Col. Disque at Cincinnati that Mr. Sawyer (superintendent) and Mr. Earling (western manager) of the Milwaukee "strongly recommended finishing of 14 miles of track laying and ballasting of Siems-Carey road into Lake Pleasant, basing opinion on increase salvage value of completed road" (p. 2384).

The Siems-Carey-Kerbaugh road was then completed after the armistice at Government expense, and 40 per cent of its track and ballasting was thereafter laid.

A Siems-Carey-Kerbaugh sawmill, built at 7 per cent cost-plus profit, which cost the Government \$2,395,345 (p. 2859), was appraised with the railroad at a salvage value of about 10 per cent of its cost.

Director Ryan said of this mill, in his letter to the Secretary of War (p. 100):

"My own opinion is that it was absolutely necessary. . . the two mills were built on the cost-plus contracts, as stated . . . Carey stated at the beginning of negotiations in which I had part that they did not expect to ever secure any profit from the contract except to the extent that they were able to amortize and reduce the cost of the plant to the Government and take it over on an appraisal that would enable them to engage in the lumber business. That was, I believe, the chief incentive in their making the contract and never disguised, as far as I know."

As the milling capacity on the coast reached 30,000,000 feet daily on an eight-hour shift, and testimony of the United States Forester (Ray report) and others claimed these mills were "clearly unnecessary," the responsibility for authorizing such expenditures is chargeable to those in authority, and Mr. Ryan's immediate knowledge and views are set forth by himself in the testimony submitted.

In other words, the Siems-Carey-Kerbaugh mill, which cost the Government \$2,395,345, and the \$4,000,000 commercial railway built by the same parties aggregated about \$6,400,000 apart from their \$23,000,000 spruce contract. If a railway to Clallam Bay, as recommended by the Government engineer and other reputable men, had been built, it is claimed it would have gotten out timber in less time and at a cost of \$400,000 saving approximately \$6,000,000 to the Government subject to salvage.

Salvage Value of Railways

At the conclusion of business, February 15, 1919, the following statement was filed by the spruce Army officials (p. 2859). Settlement with Great Britain was made on a 10 per cent estimated salvage value. (See Schedule A.)

Exhibit 11

Approximate Balance Sheet of United States Spruce Production Corporation, Portland, Ore., as of February 15, 1919.

ASSETS

	Book value	Estimated salvage value
Cash.....	\$8,946,471.45	\$8,946,471.45
Advances.....	330,688.57	325,000.00
Accounts receivable:		
Airplane lumber—		
British.....	\$4,836,235.68	
French.....	3,228,819.27	
Italian.....	1,122,240.32	
United States accounts.....	2,480,390.84	
	11,667,716.11	
Commercial lumber.....	509,534.08	
General.....	59,310.01	
Cost-plus contractors.....	430,790.01	
	12,667,350.21	12,667,350.21
Lumber inventories:		
Airplane, 4,132,890 feet, at \$18....	74,392.02	
Logs, 48,027,345 feet, at \$10....	480,273.45	
	554,665.47	554,665.47
Property (see Schedule A attached).....	23,285,581.39	3,908,000.00
Due from quartermaster, U. S. Army, construction of cantonment.....	12,667.17	12,667.17
Balance due on debentures.....	3,500,000.00	3,500,000.00
Total assets.....	49,297,424.26	29,914,154.30

SUMMARY

Liabilities.....	\$48,527,871.48
Assets, expected to produce.....	29,914,154.30
Anticipated deficit.....	18,613,717.18

Schedule A

Property Accounts.

	Cost	Estimated salvage	
		Per cent	Value
Land and timber lands.....	\$775,696.68		\$745,500.00
Haulage equipment.....	951,512.77	25	238,000.00
Donkey-engine equipment.....	1,475,783.86	20	295,000.00
Railroad equipment.....	651,933.13	20	130,000.00
Railroad equipment (rails, etc.).....	1,000,000.00		250,000.00
Marine equipment.....	85,191.09	20	17,000.00
Towage and rafting equipment.....	49,825.95	25	12,500.00
Tools and appliances.....	600,146.34	10	60,000.00
Furniture and fixtures.....	354,469.86	20	71,000.00
Railroad construction.....	8,742,100.20		750,000.00
General construction.....	69,449.20		
District construction.....	191,349.78		
Camp construction.....	1,083,932.80		
Construction overhead.....	322,265.66		
Construction, Siems-Carey-H. S. Kerbaugh Corporation sawmill.....	2,395,345.14	10	239,000.00
Construction, Vancouver cut-up plant.....	1,100,073.31		100,000.00
Construction, Toledo mill.....	985,487.73		200,000.00
Construction, Vancouver warehouse.....	21,710.79		
Supplies on hand.....	2,402,790.58	33 1/2	800,000.00
Stumpage rights.....	26,516.64		
Total.....	23,285,581.39		3,908,000.00

Estimated salvage of property that cost \$23,000,000 at about \$4,000,000, including railroads at less than 10 per cent of their cost, is an estimate filed nearly a year ago. The cost of the logging railroads was as a matter of fact practically \$10,000,000 (p. 1593). With a large force of officers and civilians at Portland waiting to get "reproduction" figures, as proposed by Col. Stearns, now in charge, this Government property should be closed out on some basis without further delay.

Carey's \$30,000,000 Cost-plus Contracts

Additional matters give a better understanding of the remarkable Siems-Carey cost-plus contracts. Senator Donlan, of Montana, who was given charge of Carey's logging operations under the \$23,000,000 Carey spruce contract, was strangely brought into the operations. With no previous dealings ever mentioned with any of the parties he was picked up at Missoula, Mont., on their way to the coast, and given a one-sixth interest in the \$23,000,000 contract.

In the hearings Witness Cain, president of the Port Angeles & Grays Harbor Railroad Co., claimed to have been frozen out, first, by Col. Disque's criticism against Douy's English negotiations, and afterward by the commandeering of Muellers Pass for Carey's road in the name of the Government. Mr. Cain also testified that Senator Donlan, Carey's logging superintendent under the spruce contract, told him that "Carey was a partner of Ryan" (p. 2593), referring to John D. Ryan, Director of Aircraft Production, and that he (Donlan) was leaving Carey's logging operations (August, 1918), because "they want me in Montana to run for Senator. . . . Mr. Ryan has big interests over there and would like to have me over there" (p. 2593). Senator Donlan also told Mr. Cain that he "was in the lumber business and also in the water-power business with Mr. Ryan. . . . He appeared to control water powers that Mr. Ryan developed for the Milwaukee Road" (p. 2890).

Mr. Ryan and Senator Donlan both testified before the committee as to former business connections, but claimed that their present relations were somewhat strained. It is generally understood, however, that the Anaconda Copper Co. is politically active in Montana; that Mr. Donlan has been State senator for many years, representing the same town in which Mr. Ryan formerly lived, and that they had been engaged in business together, and that Mr. Donlan formerly had charge of the Anaconda Co.'s logging work. Senator Donlan asked permission of the committee to testify, which right was given. He generously came from Missoula, Mont., to New York and returned, a distance of about 5,000 miles, without receiving or asking any witness or mileage fees.

(To be continued)

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

(Continued from page 656)

A Collection of Coincidents

The connections of Director Ryan, Col. Disque, Mr. Carey and the Milwaukee Railroad with the Carey cost-plus contracts have been briefly stated. The testimony further shows that Mr. Potter, a copper king, was aircraft director from January to May, 1918. Through the United Metals Selling Co., of which Mr. Ryan was president, Mr. Potter's copper dealings were made. Mr. Potter became assistant aircraft director under Mr. Ryan in May, 1918, and remained with him until the end of the war. Their close relationship appears (p. 65) when Mr. Ryan said, "You must consider me and Mr. Potter as one man."

Col. Disque never had been on the Olympic Peninsula (p. 1439), where the \$4,000,000 road was built, before making contract with Carey, while Carey first saw the country several days before that same time. Prior to April, 1918, many responsible parties tried and failed to secure a Clallam County spruce contract from Col. Disque (p. 1447). On April 12, while Mr. Potter was director, Col. Disque suddenly agreed to the \$23,000,000 Carey cost-plus spruce contract at Portland. This occurred after a few hours' talk with Carey, who, with Siems and Kerbaugh, came 3,000 miles from New York City prepared to make the contract. They had never seen Col. Disque before. All were without any knowledge of logging or lumbering. They never had owned any timber nor had done any material business excepting commercial railroad construction.

Mr. Carey had previously secured help to finance the Siems-Carey Canal Co.'s Chinese contracts with the aid of Mr. John D. Ryan (p. 2807). After a few hours' discussion at Portland a spruce contract was executed by Mr. Carey and Col. Disque with Senator Donlan of Missoula, Mont., who held a one-sixth interest, acting as a witness, under which they agreed to produce 300,000,000 feet of spruce flitches in 18 months. In view of their entire lack of knowledge of lumbering or milling experience, or ownership of any timber, or knowledge of timber conditions in Clallam County, or knowledge of each other, apart from a mutual association with the same New York interests, the circumstances surrounding this sudden making of a \$23,000,000 contract by New York railroad contractors is remarkable.

The Milwaukee Railroad, through the Milwaukee Land Co., owned 79,000 acres of timberland on the Peninsula, or about two billion feet out of between twenty and thirty billion feet of timber in Clallam County. The Milwaukee Road was operating in the Peninsula and had bought or constructed a total road mileage of over 100 miles from Port Townsend to Port Angeles and thence west along the Strait of Juan de Fuca to Deep Creek. This railroad company had made surveys to Grays Harbor.

Director Ryan was a director of the Milwaukee Railroad and a member of its executive committee of five. He was president of the Montana Power Co. that had a contract for electrifying the western division of the Milwaukee Road, as mentioned by Senator Donlan to Witness Cain. He was the president of the Anaconda Copper Co. and was also an influential director of the American International Corporation that controlled the Siems-Carey Canal Co.

The First Carey Spruce Contract Submitted by Disque

When Col. Disque made his spruce contract with Carey at Portland, April 12, 1918, he expected to extend the Milwaukee Road's Deep Creek line to aid Carey's lumbering contract. Col. Disque had not submitted to the officials at Washington any of the three cost-plus contracts made by him earlier in the year, aggregating \$39,000,000, but after Carey's contract was signed on April 12 in Portland, Col. Disque closely followed Carey and his associates back to Washington.

Matters were held up in Washington for some weeks, and Mr. Ryan took charge of aircraft matters about April 24, 1918. Mr. C. F. Kelly, a lawyer, now president of the Anaconda Copper Co., was thereafter directed by Mr. Ryan to reform the Carey Portland spruce contract "to protect the Government" (p. 99). Mr. Kelly changed the contract by reducing the requirement of Carey to produce 300,000,000 feet of flitches to 250,000,000 feet. A fixed-price contract was changed to a 7 per cent guaranteed cost-plus contract made optional with Carey, and so prevented any loss to Siems-Carey-Kerbaugh Corporation, while the Government, by advancing to Carey under a new contract \$6,000,000 in

funds for operations, permitted easy-going, and "there shall be no inquiry into the profits" if 300,000,000 feet of flitches, named in the first contract, were produced. A preferential right also was given Carey under the second contract to retain the Government property for his future use upon a fixed appraisal made by a board of three persons, one selected by "the Government," one by the seller, and these were to choose the third (p. 2843). After exactly one month's delay from the signing of the Portland contract, Carey's new \$23,000,000 spruce cost-plus contract was re-executed in Washington on May 12, 1918, and approved by Director Ryan on the part of the Government two weeks later—on May 28—or after six weeks' delay.

Director Ryan wrote the Secretary of War regarding this reformed Carey contract as follows (p. 100):

Carey stated at the beginning of the negotiations in which I had part, that they did not expect to ever secure any profit from the contract except to the extent that they were able to amortize and reduce the cost of the plant to the Government and take it over on an appraisal that would enable them to engage in the lumber business. That was, I believe, the chief incentive in their making the contract and never disguised as far as I know.

Witness Helm, Carey's agent, testified as to this contract (p. 2937):

We thought we had an excellent contract. Mr. Carey, and Mr. Siems, and Mr. Kerbaugh said they thought it was the best contract that had ever been made by the Government, as far as the contractor was concerned.

Of this remarkable contract Gen. McIntyre, in reviewing the Ray report, stated to the Director of the Air Service:

The Siems-Carey-Kerbaugh contract was a most profitable one for his corporation and guaranteed a minimum profit of 7 per cent to the contractor on all expenditures, except the overhead cost of the New York office. This clause is unusually liberal inasmuch as the corporation was being financed by the Government and had the contract been carried to completion it would have meant a profit of about \$1,400,000 on a project which involved no financial risk on the part of the Siems-Carey-Kerbaugh Corporation and covered a period of 18 months.

There is nothing in these papers to show that any of the principal members of this firm had previous experience in this line of work, but that contract was negotiated and obtained through the efforts of Mr. Pliny Fisk, of Harvey Fisk & Sons (p. 838).

Carey's \$4,000,000 Logging Railway

Although railroads were being constructed in Oregon, under Maj. Hitchcock's orders, without contracts (p. 3440), a special 7 per cent cost-plus railroad contract was given Siems-Carey-Kerbaugh to construct a railroad for the carrying out of the Siems-Carey spruce contract in Clallam County, Wash.

Director Ryan in Washington refused to approve the Carey contract because, according to his letter to the Secretary of War, "As I was a director and member of the executive committee of the Milwaukee Railway I could not act in any capacity, even advisory" (p. 99). Thereupon the contract was referred to Mr. Stettinius, Assistant Secretary of War, who negotiated it.

Assistant Secretary of War Stettinius gave Carey his 7 per cent cost-plus railway contract to build "from a point hereafter designated on the Milwaukee" to the large spruce tract, thereby ignoring the more expeditious 15-mile route to Clallam Bay recommended by the Government logging engineers and other men. This railroad contract, as stated, was dated May 18, six days after signing of the spruce contract previously drawn by Mr. Ryan's attorney, Mr. Kelly. Director Ryan then knew that a railroad to bring out the Carey spruce was to connect with the Milwaukee road, and that was the reason given by him for refusing to have anything to do with the Carey 7 per cent cost-plus railway contract.

Col. Disque hurriedly returned to Portland and called in several advisers, including Mr. Erling, western manager of the Milwaukee road, Supt. Sawyer, and other Milwaukee officials. Col. Disque says that all unanimously agreed to change the Deep Creek extension of the Milwaukee Railroad to the Crescent Lake route from Joyce Junction, although Col. Disque had previously furnished strong arguments why the Crescent Lake route was objectionable (p. 836), and although the Secretary of War had approved the Deep Creek route (p. 836), Col. Disque, on his return from Washington, suddenly announced his change to the Crescent Lake route.

(To be continued)

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

(Continued from page 714)

Disque's Unexplained Change of Routes

The Lake Crescent 36-mile route connected with the Milwaukee road at Joyce and then took a southerly course through two tunnels, deep cuts of 150 feet depth through solid rock, and over the Olympic Mountains, striking spruce 30 miles distant, near the east edge of the Lake Pleasant spruce-timber tract. The Deep Creek route, previously determined upon by Col. Disque, would have struck spruce within 5 miles from Deep Creek and would have reached Lake Pleasant spruce tract by an extension of 25 miles. The Lake Crescent route, by expensive construction, however, shortened the direct line from Port Angeles to Grays Harbor a few miles. It also took over Muellers Pass, the only available pass over the mountains not owned by the Milwaukee, and prevented threatened competition by the Port Angeles & Grays Harbor Railway or any other competitor. It gave absolute control of future freight hauls, if taken over by the Milwaukee road, of 20,000,000,000 feet of timber for many years to come, including 2,000,000,000 feet belonging to that company. Col. Disque decided on the Lake Crescent route. Mal. Sawyer, a superintendent of the Milwaukee road, was placed in absolute charge, as stated, and a Milwaukee engineer conducted the surveying for the new road, while Senator Donlan, of Missoula, Mont., took charge of proposed logging operations.

Director Ryan's trip of 6,000 miles across the continent and back in July and August looking over Carey's railroad and the Carey mill construction work has been mentioned. He left for Europe without visiting the \$1,553,000 Yaquina road, or the 23-mile \$2,000,000 Blodgett road, or any other important spruce-production work. He did not question Carey's spruce mills or railway operations when he made his inspection trip.

At the time the armistice was signed Carey's 36-mile road lacked 14 miles, or 40 per cent of its length, of track laying and ballasting. This Mr. Carey completed, at Government expense, on orders of Gen. Disque, who was advised to do so by Erling and Sawyer of the Milwaukee road.

Supt. Sawyer returned to the Milwaukee road after the war ended. Mr. Carey returned to New York and Col. Disque also left Portland and went to New York City, where he was made president of the Amsinck Importing Co., through the influence of John D. Ryan, at \$30,000 a year, in charge of a business of which he knew absolutely nothing. As previously stated, all of the stock of the Amsinck Co. and 51 per cent of the Siems-Carey Canal Co. were owned by the American International Co., of New York, of which Mr. Ryan was a director.

A Trivial Proposed Two-Million-Dollar Gift

Throughout the proceedings it was urged that notwithstanding a cost-plus profit of upward of \$3,000,000 was assured Carey under his \$23,000,000 contract if completed, with a minimum profit of \$1,400,000, Carey's motive in making the contract was to continue the lumbering business after the war. Mr. Ryan, in his letter, says he knew this to be so when the contract was redrawn for Carey (p. 100). Mr. Donovan, a millman and Col. Disque's close adviser, opposed Carey's new mill (p. 955). Mr. Mark Reed, a logger, and another Disque adviser, did the same (p. 1174). All practical lumbering men were of the same opinion. Milling facilities on Puget Sound, according to the testimony of several witnesses, reached about 40 mills with a sawing capacity of 6,000,000 feet daily on an eight-hour shift, or 12,000,000 feet daily on two shifts. This was eight times the largest production proposed in Carey's contract and yet, after evidence that Carey intended to haul logs 80 miles and raft them from Sequim Bay to private mills, the important fact appears that Carey's mill at Port Angeles was built with full knowledge and approval of Director Ryan, who inspected Carey's operations in July. The mill cost \$2,395,345.14 (p. 2859). This was paid for by the Government and built apparently to help Carey's lumbering interests after the war.

The Siems-Carey Corporation received over \$8,000,000 from the Government without ever producing a single foot of spruce flitches. In fact, Mr. Carey testified that six weeks before the close of the war, in September, 1918, he began to "retard things" (p. 2741). It required no effort for him to do what was chronic with all of Col. Disque's cost-plus operations, none of which ever produced. The serious part

of it all is that while the country was sacrificing and making every effort to win the war \$19,000,000 were thrown away on these spruce cost-plus contracts by men representing the Government who had no experience, for the benefit of other men who equally had no experience. The Howes telegram in November, 1918, with Gund's telegram and the Ray report, apparently frightened those who were expecting to "amortize" the Government property, according to Mr. Ryan's letter to Secretary Baker (p. 100), and men who were to finance these operations afterward dropped out, and the junk remains as a reminder of how money was wasted.

Senator Donlan's \$15,000,000 Scheme

Specific evidence on this point is found in the testimony of Senator Donlan, formerly interested with Mr. Ryan in business. He testified:

I said to Carey, . . . I have raised a pack pot of seven and a half millions in cash and they will underwrite to put in seven and a half million more. . . . I got a wire (from Carey) on the 29th day of January (1919). A letter the next day gave me his reasons—that this investigation—there were charges made which were along the line that was made last summer.

Mr. FREAR. The time of which you speak was six months or more before a congressional investigation had been considered?

Mr. DONLAN. Yes; but there were some charges filed, Mr. Chairman, by somebody at Grays Harbor (p. 3221).

Senator Donlan's scheme fell through, although it was Carey's plan to "amortize" the Government properties, when he made his spruce contract in which Donlan had a one-sixth interest.

Senator Donlan formerly had charge of Anaconda Mining Co.'s logging operations (p. 2102). In 1916 the Anaconda Mining Co. reported timber holdings valued at \$5,500,000. Based on the value of the Blodgett timber purchased by Col. Disque, this amount would indicate that holdings by the Anaconda Co. would produce several billion feet of lumber, or double the holdings of the Milwaukee road in Clallam County.

No discussion is offered regarding many significant matters, including the cold-blooded elimination of Cain, Aston, Lindsay and others connected with the Port Angeles & Grays Harbor line by freezing them out of their railway properties and proposed spruce contracts, and the quick exit of Pliny Fisk and his New York associates, who were suddenly dropped out, while Carey, Siems and Kerbaugh received guaranteed cost-plus contracts aggregating \$27,000,000 or, including the mill contract, nearly \$30,000,000—all awarded to New York City railway contractors who knew nothing about logging or lumbering, who owned no timber, but intended to continue in the lumbering business after the war with a railroad and mills built at Government expense in the manner stated.

Official Responsibility for Failures

Your committee has been commissioned neither to exaggerate conditions nor to cover them up, but to get the facts. This we have tried to do without conscious prejudice, political or personal. In describing conditions during times of war that invited condemnation of acts of officials charged with responsibility, justice must be done the public that has been injured, but injustice should not be visited on those whose conduct has invited criticism. We have been in the spruce forests of Washington and Oregon; we have observed the methods of operation there in the attempt to produce spruce lumber; we have inspected the railroads, mills and other governmental property there; we have seen and heard testify many of the officials in charge of such operations, and we have tried to give an impartial and correct picture of the situation that existed there under the military régime of Col. Disque.

The record of Col. Deeds, who was directly responsible for aircraft production until relieved about January 1, 1918, has been set forth in the Hughes report (pp. 3706-3806). In the judgment of your committee, during his connection with American aircraft his acts are deserving the severest condemnation. His efforts to place large valuable governmental contracts with his business associates in Dayton; his own questionable connection with the purchase and location of the aviation fields; his evidence of self-interest are fully disclosed in the Hughes hearings.

(To be continued)

REPORT OF LATEST CONGRESSIONAL INVESTIGATION OF BILLION DOLLAR AIRCRAFT EXPENDITURES

(Continued from page 752)

Director John D. Ryan

Mr. Ryan has been given space in this report commensurate with his responsibilities as aircraft director. He was appointed by Secretary Baker as director and in addition there-to an Assistant Secretary of War just prior to his European trip. His business associate and co-worker in private life, Mr. Potter, was Mr. Ryan's predecessor in office and later his assistant director. Both were copper magnates, without aircraft knowledge, given vast responsibilities at a time when the country imperatively needed wide knowledge and large experience in public service.

Successful in promoting private ends, Mr. Ryan was expected to unlearn singleness of personal interest and to direct his future energies toward a carefully considered aircraft program. With public honors unexpectedly thrust upon him; an unfortunate victim of numerous banquets and other official functions; selected as the companion of his immediate superior, Mr. Baker, for a lengthy European trip at a time when imperative duties commanded his attention here; hurriedly basing all prospects of American aircraft success during his presence, or absence, upon the production of an awkward and dangerous type of aeroplane, Mr. Ryan did not rise above his advisers who had conspicuously failed to meet the situation.

In a remarkable chain of circumstances surrounding the location and building of the Siems-Carey \$4,000,000 "logging" road, and in connection with the \$23,000,000 spruce contract, Mr. Ryan's activities have been disclosed. His disclaimer of any purpose to advance his own interests or those of Mr. Carey, one of his business friends, or of the Milwaukee road, of which he was a high official, have been presented to your committee. If Mr. Ryan's statement of disinterestedness is true, he has been most unfortunate in handling a public matter that, in the judgment of your committee, covered a flimsy effort to promote large private business interests and was accompanied by blundering explanations from beginning to end.

We have not assumed to determine motives, but have presented facts developed at the hearings in connection with the actions of responsible public officials, and these facts are offered without further comment.

The Milwaukee Road

Officials of the Milwaukee road testified before our committee as to their disinterestedness in the Siems-Carey operations. It is hard to understand why the road was not deeply concerned over matters herein described, excepting where operations were useless as well as wasteful. It is, however, possible that an apparent effort to shape the policy of the road was not approved by the responsible officials. With due allowance for the high standing and evident fairness of the officials mentioned, the hearings present many matters that we believe fully justify the conclusion reached. That this conclusion is unavoidable appears from the conservative findings of Gen. Frank McIntyre, based on the limited information carried in the Ray report. Gen. McIntyre pointedly says to Secretary Baker:

A possible congressional investigation with reference to the location of this railroad might prove embarrassing to the War Department, as the plain insinuation would be that the decision was influenced by the large financial interests concerned.

Secretary of War Baker

Secretary Baker is properly chargeable with any success or failure of America's aircraft program. His selection at a critical time for the important department of governmental war activities by President Wilson, promised official capacity.

Whether Mr. Baker was equal to the demands of war must be determined from the record. Men accepting public obli-

gations are measured by that standard, and your committee has presented a brief review of aircraft activities.

Prior to our entry into the war the world had been on fire for two and one-half years. Aircraft had become a recognized important arm of the military service. It was a time when any responsible official, primarily charged with public safety and with war preparation, should have provided the country with the best available war equipment, or should have placed definite plans before Congress to that end. It was a time when a man of capacity and force should have been selected and placed in charge of aircraft, prepared for any reasonable war emergency.

As a Government we were permitted to drift without rudder or sail in our aircraft program from the time Secretary Baker assumed charge of the War Department down to end of the war.

Mr. Baker's appointment of Gen. Squier, in charge of aviation, and his agreement with the foolhardy April, 1917, aviation program (p. 23); his appointment of Col. Deeds and unprecedented act in preventing Deeds' court-martial, which was recommended by Judge Hughes (p. 2655); his appointment of Mr. Potter as aircraft director, a man without knowledge of aviation (p. 65) and interested in enormous copper contracts with the Government; his appointment of Mr. Ryan as aircraft director, also without knowledge of aviation (p. 66) and president of the Anaconda Copper Co. that, through the United Metals Selling Co., controlled all copper contracts made with the Government; his appointment of Col. Disque, who was equally without knowledge of the business, and his directions to limit to eight hours per day all work, civilian or military, in Oregon and Washington during times of war and to pay the soldiers the prevailing civilian wages; his approval before the Thomas Senate committee of Mr. Ryan's determination to continue all efforts in the production of the extremely dangerous DH-4 (p. 42); his extended European trip in company with Aircraft Director Ryan in the midst of America's aircraft failure and during the most critical hours of national defense activities—these were matters presented to your committee in the hearings and speak for themselves.

Wasteful Methods

We feel that it is our duty to call the attention of the House and the country to the large amount of spruce going to waste in Washington and Oregon as a result of the riving and cutting operations of the Spruce Production Corporation in the forests of those States. Newspaper publishers throughout the United States are so hard pressed to get sufficient newsprint paper to meet their requirements that some steps should be taken to utilize this available spruce. Trees have been cut from 6 to 8 feet and more above the surface of the ground. The reason given was that the butt of the tree was not straight grained and unsuitable for aircraft lumber. When we consider that the trees averaged several feet in diameter, it becomes apparent how great the wastage has been. Evidence taken at the hearings shows that the spruce trees cut in France for aircraft purposes were cut as near to the surface of the ground as the saw could be operated. The trees thus cut were planted by the thrifty French several centuries ago. Besides, riving operations were extremely wasteful of the spruce timber. In this connection we do not speak in any spirit of criticism, but because we feel that enough spruce is going to waste in those forests to furnish sufficient newsprint paper to meet the requirements of American newspapers for some time to come.

It will be apparent to any fair-minded person who will carefully read the evidence that the stake being played for, in the abortive attempt to produce spruce lumber in Washington and Oregon, was for the control of the lumber interests in the Northwest after the war. In exposing this scheme the patriotic loggers and lumbermen on the coast and the Providence Journal have rendered a great public service.

It should be a perpetual warning to men holding high official positions that they must not use their official power, particularly in time of war, to advance commercial interests at governmental expense.

(To be continued)