MAJORITY AND MINORITY

REPORTS

OF THE

UNITED STATES BITUMINOUS COAL COMMISSION

TO

THE PRESIDENT

FROM

HENRY M. ROBINSON
Chairman

AND

JOHN P. WHITE and REMBRANDT PEALE
Commissioners

1920

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THE MAJORITY REPORT

OF THE

United States Bituminous Coal Commission

TO

THE PRESIDENT

FROM

HENRY M. ROBINSON, Chairman
REMBRANDT PEALE, Commissioner

United States Bituminous Coal Commission,
Washington, March 10, 1920.

The President,
The White House.

My Dear Mr. President: In transmitting the majority report of the Bituminous Coal Commission, may we call your attention to certain salient points:

The increase in wages to the miners amounts approximately to 27 per cent: that is, the 14 per cent average increase granted by the Fuel Administrator when the strike was threatened has been eliminated and a 27 per cent average increase substituted.

Figured in dollars the increase is approximately $96,000,000 in excess of the advance allowed by Dr. Garfield. This means a total increase in wage cost of $200,000,000 as compared with the cost on October 31, 1919.

Every effort was made to ascertain the actual increase in the cost of living to the miners. Many different figures and opinions were presented. Our award, as the result of careful scrutiny of all the evidence submitted by the parties in interest and otherwise obtained, grants the miners an advance in wages larger than the percentage of increase in the cost of living submitted by their representatives.

Tonnage workers will have received, under this award, an average increase in wages since 1913 of 88 per cent, and day men, part of whose previous advance was based on existing inequalities in compensation rather than on increased living costs, will have received an average advance of 111 per cent.

The other main point of the United Mine Workers' contention—a reduction in the working hours from eight to six hours a day, and five days a week—is not granted, for the reasons we state in the report. We are convinced that a curtailment of productive energy would react not only against the whole population but against the miners themselves.

It is essential that the miners shall have living wages. It it likewise essential in the public interest that there shall be no let down in production.

We express the opinion that had we shortened the day by one hour, it would be equivalent to an additional cost of over $100,000,000.

We have sought and believe that we have found some of the principal reasons for the weakness in this uncertain and troubled industry, and we offer a method for remedying the most important of these conditions.

The time has come for the people of the country, of which labor constitutes a large part, to look beyond temporary wage settlements and consider the general welfare, first, of the general public itself, then, of the employees and employers.

A wage settlement for the moment is not a correct or adequate answer to the problem. The coal industry has been on an unsound basis for years, because of its seasonal character and the resulting car shortages and car-service intermittencies. The heavy movement of bituminous coal comes in the fall and winter. Inevitably, with the buying and movement limited to one season, there is a great car shortage which limits production. When the market drops in the spring and summer there are idle men, idle mines, and idle cars. From the standpoint of employers and employees, the industry has yielded a hazardous return.

The solution of the problem is to bring about evenness of production and distribution. This can be done by the cooperation of the railroads, public utilities, and steel companies as consumers on the one side and of the operators, the Interstate Commerce Commission, the banks, and the Federal Reserve System on the other side.

We believe that the Federal reserve banks will view favorably the eligibility of commercial paper based upon coal purchased and stored by the railroads and public utilities in the dull seasons. Some of the leading railroads have given assurances of their cooperation. Others approached have not.

If virtually complete cooperation is assured, it will result in time in a substantially even production, continuous employment, and even distribution throughout the year. The small consumer will then not have to compete with the large consumer in the winter, and will not be at the mercy of the practice of commandeering on the grounds of priority. Until this is done, wage costs must of necessity be high, but when this is accomplished prices should be more reasonable, employment more continuous, and the industry better stabilized. The present inexcusable and extravagant waste would then be eliminated.

The mine workers themselves, we feel sure, recognize that no other remedy will be adequate. A shortening of the working day would seriously affect production, add additional workers to the industry, and increase the present unsettled condition. This decreased production would in turn add still further to the cost of living, hitting the workmen in other industries, and continue the folly of such pyramiding.

In transmitting this report to you, we wish to say that both the mine workers and the operators have given every assistance possible in the work of the commission, and we wish to add that Mr. White has worked diligently and long on the problems which confronted the commission. It is our sincere regret that Mr. White did not see fit to join us and make the findings and awards of the commission unanimous.

Very respectfully, yours,

HENRY M. ROBINSON, *Chairman.*
REMBRANDT PEALE, *Commissioner.*

MAJORITY REPORT OF THE UNITED STATES BITUMINOUS COAL COMMISSION.

THE PRESIDENT.
The White House.

The undersigned, the majority of the commission appointed by you December 19, 1919, to investigate and consider questions of wages and working conditions that have arisen between the coal miners and operators, herewith submit the report asked for in your letter of appointment.

ORGANIZATION.

Your commissioners, Henry M. Robinson, John P. White, and Rembrandt Peale, met on Monday, December 29, in Washington; elected Henry M. Robinson chairman, and created the following executive staff:

Executive secretary: Herbert N. Shenton.

Technical advisers: Samuel A. Taylor, E. A. Goldenweiser, Percy Tetlow, Charles O'Neill, Ethelbert Stewart.

Assistant to the chairman: D. M. Reynolds.

Disbursing officer: E. K. Ellsworth.

Counsel: Alexander C. King.

Assistant secretary: R. R. Reeder, jr.

Recorder: Mrs. Mary Burk East.

Director of information: K. C. Adams.

The commission gave due and official notice of its intention to begin its hearings, and the first hearing was set for and held on January 12, 1920, in the assembly room of the American Red Cross Building Washington, D. C.

THE AUTHORITY OF THE COMMISSION.

Your letter appointing the undersigned as members of the commission, together with the statement of December 6, and the memorandum referred to in the letter, which constitute the authority under which the commission operated, are as follows:

THE WHITE HOUSE,
Washington, December 19, 1919.

MY DEAR MR. ROBINSON: On October 6, 1917, with the official approval and sanction of the United States Fuel Administration, an agreement (since known as the "Washington wage agreement") was entered into between the operators and the union miners and mine workers of the so-called Central Competitive Bituminous Coal Fields, composed of western Pennsylvania, Ohio, Indiana, and Illinois, which provided for an increase in the production of bituminous coal and an increase in wages to the miners and mine workers from the then existing scale of compensation. The agreement contained the following clause:

"Subject to the next biennial convention of the United Mine Workers of America, the mine workers' representatives agree that the present contract be extended during the continuation of the war and not to exceed two years from April 1, 1918."

Subsequently, on January 19, 1918, this agreement was approved by the convention of the International Union, United Mine Workers of America.

At the fourth biennial convention of the International Union, United Mine Workers of America, held in Cleveland, Ohio, from September 9 to September 23, 1919, the so-called scale committee submitted a report recommending, among other things, that the convention demand a 60 per cent increase applicable to all classifications of day labor and to all tonnage, yardage, and dead-work rates throughout the Central Competitive Field; that all new wage agreements replacing existing agreements should be based on a six-hour work day from bank to bank, five days per week; the abolition of all automatic penalty clauses; that all contracts in the bituminous field should be declared to expire on November 1, 1919; and that in the event a satisfactory wage agreement is not secured for the Central Competitive Field before November 1, 1919, to replace the one now in effect, the international officers be authorized to and are hereby instructed to call a general strike of all bituminous miners and mine workers throughout the United States, the same to become effective November 1, 1919.

Subsequently conferences were held between representatives of the operators and of the miners, at which the miners' demands were submitted and declined on the part of the operators. The officers of the International Union, United Mine Workers of America then issued so-called strike orders to all of their local unions and members, requiring them to cease work in the mining of bituminous coal at midnight on Friday, October 31.

On October 15, 1919, the Secretary of Labor called a conference between the operators and miners of the bituminous mines in the central competitive field, which conference also resulted in failure to reach an agreement. In a letter to Secretary Wilson, which was submitted to the conference, I said:

"If for any reason the miners and operators fail to come to mutual understanding, the interests of the public are of such vital importance in connection with the production of coal that it is incumbent upon them to refer the matters in dispute to a board of arbitration for determination and to continue the operation of the mines pending the decision of the board."

Subsequently, on October 25, 1919, I issued a statement in which I said that a strike in the circumstances therein described "is not only unjustifiable, it is unlawful," and added:

"I express no opinion on the merits of the controversy. I have already suggested a plan by which a settlement may be reached, and I hold myself in readiness, at the request of either or both sides, to appoint at once a tribunal to investigate all the facts with a view to aiding in the earliest possible orderly settlement of the questions at issue between the coal operators and the coal miners, to the end that the just rights not only of those interests but also of the general public may be fully protected."

Despite my earnest appeals that the men remain at work, the officers of the United Mine Workers of America rejected all the proposals for a peaceful and orderly adjustment and declared that the strike would go on. Accordingly, at my direction, the Attorney General filed a bill in equity in the United States district court at Indianapolis praying for an injunction to restrain the officers of the United Mine Workers of America from doing any act in furtherance of the strike. A restraining order was issued by the court, followed by a writ of temporary injunction on November 8, 1919, in which the defendants were commanded to cancel and revoke the strike orders theretofore issued. These strike orders were accordingly revoked in a form approved by the court, but the men did not return to work in sufficiently large number to bring about a production of coal anywhere approaching normal.

On December 6, 1919, I issued a statement in which I restated the Government's position, appealed to the miners to return to work, and renewed my suggestion that upon the general resumption of mining operations a suitable tribunal would be erected for the purpose of investigating and adjusting the matters in controversy between the operators and the miners. This statement was submitted to a meeting of the officers of the International Union, United Mine Workers of America, having authority to take action, which meeting adopted as its act a memorandum prepared by the Attorney General and approved by me, embodying the suggestions contained in my statement of December 6. I am informed also that the operators have generally agreed to the plan therein outlined. I inclosed for your information copy of my statement of December 6, 1919, and the memorandum just referred to.

There has now been a general resumption of operation in all parts of the bituminous coal fields sufficient to warrant the appointment of a commission such as is referred to in the memorandum of the Attorney General, and I have accordingly appointed you, Mr. Rembrandt Peale, a mine owner and operator in active business; and Mr. John P. White, a practical miner, as a commission with the powers and duties as set forth in the memorandum agreed to and adopted by the miners and operators, who conducted all the prior negotiations. If a readjustment of the prices of coal shall be found necessary, I shall be pleased to transfer to the commission, subject to its unanimous action, the powers heretofore vested in the Fuel Administrator for that purpose.

I am sure it is not necessary for me to call your attention to the tremendous importance of the work of this commission or the great opportunity which it presents for lasting service to the coal industry and to the country. If the facts covering all the phases of the coal industry necessary to a proper adjustment of the matters submitted to you shall be investigated and reported to the public, I am sure that your report, in addition to being accepted as the basis for a new wage agreement for the bituminous coal miners, will promote the public welfare and make for a settled condition in the industry. No settlement can be had in this matter, permanent and lasting in its benefits, as affecting either the miners, the coal operators, or the general public, unless the findings of this body are comprehensive in their character and embrace and guard at every point the public interest. To this end, I deem it important that your conclusion should be reached by unanimous action. Upon your acceptance of this appointment, I shall be pleased to call an early meeting of the commission at Washington, so that you may promptly lay out plans for your work.

Sincerely, yours,

Woodrow Wilson.

Mr. Henry M. Robinson, *Ravenna, Ohio.*

(Similar letters to John P. White and Rembrandt Peale.)

The following is the statement of December 6, referred to above:

December 6, 1919.

I have watched with deep concern the development in the bituminous coal strike and am convinced that there is much confusion in the minds of the people generally and possibly of both parties to this unfortunate controversy as to the attitude and purposes of the Government in its handling of the situation.

The mine owners offered a wage increase of 20 per cent conditioned, however, upon the price of coal being raised to an amount sufficient to cover this proposed increase of wages, which would have added at least $150,000,000 to the annual coal bill of the people. The Fuel Administrator in the light of present information has taken the position, and I think with entire justification, that the public is now paying as high prices for coal as it ought to be required to pay and that any wage increase made at this time ought to come out of the profits of the coal operators.

In reaching this conclusion, the Fuel Administrator expressed the personal opinion that a 14 per cent increase in all mine wages is reasonable because it would equalize the miners' wages on the average with the cost of living, but he made it perfectly clear that the operators and miners are at liberty to agree upon a larger increase, provided the operators will pay it out of their profits so that the price of coal would remain the same.

The Secretary of Labor, in an effort at conciliation between the parties, expressed his personal opinion in favor of a larger increase. His efforts at conciliation failed, however, because the coal operators were unwilling to pay the scale he proposed unless the Government would advance the price of coal to the public and this the Government was unwilling to do.

The Fuel Administrator has also suggested that a tribunal be created in which the miners and operators would be equally represented to consider future questions of wages and working conditions, as well as profits of operators and proper prices for coal. I shall, of course, be glad to aid in the formation of such a tribunal.

I understand the operators have generally agreed to absorb an increase of 14 per cent in wages, so that the public would pay not to exceed the present price fixed by the Fuel Administrator, and thus a way is opened to secure the coal of which the people stand in need, if the miners will resume work on these terms pending a thorough investigation by an impartial commission, which may readjust both wages and prices.

By the acceptance of such a plan, the miners are assured immediate steady employment at a substantial increase in wages and are further assured prompt investigation and action upon questions which are not now settled to their satisfaction. I must believe that with a clear understanding of these points they will promptly return to work. If, nevertheless, they persist in remaining on strike, they will put themselves in an attitude of striking in order to force the Government to increase the price of coal to the public, so as to give a still further increase in wages at this time rather than allow the question of a further increase in wages to be dealt with in an orderly manner by a fairly constituted tribunal representing all parties in interest.

No group of our people can justify such a position, and the miners owe it to themselves, their families, their fellow workmen in other industries, and to their country to return to work.

Immediately upon a general resumption of mining I shall be glad to aid in the prompt formation of such a tribunal as I have indicated to make further inquiries into this whole matter, and to review not only the reasonableness of the wages at which the miners start to work but also the reasonableness of the Government prices for coal. Such a tribunal should within 60 days make its report, which could be used as a basis for negotiation of a wage agreement. I must make it clear, however, that the Government can not give its aid to any such further investigation until there is a general resumption of work.

I ask every individual miner to give his personal thought to what I say. I hope he understands fully that he will be hurting his own interest and the interest of his family and will be throwing countless other laboring men out of employment if he shall continue the present strike, and further, that he will create an unnecessary and unfortunate prejudice against organized labor which will be injurious to the best interests of workingmen everywhere.

WOODROW WILSON.

The memorandum referred to above is as follows:

In accordance with the request of the President, as contained in his statement of December 6, the miners will immediately return to work with the 14 per cent increase in wages, which is already in effect. Immediately upon a general resumption of operations, which shall be in all districts, except as to wages upon the basis which obtained on October 31, 1919, the President will appoint a commission of three persons, one of whom shall be a mine owner or operator in active business, which commission will consider further questions of wages and working conditions as well as profits of operators and proper prices for coal, readjusting both wages and prices if it shall so decide, including differentials and internal conditions within and between districts. Its report will be made within 60 days, if possible, and will be accepted as the basis of a new wage agreement, the effective date and duration of which shall also be determined by the commission.

In addition you issued the following Executive order, in order to permit this commission to obtain necessary aid and information from the various governmental departments:

In order that the commission consisting of Henry M. Robinson, Rembrandt Peale, and John P. White, appointed by me on December 19, 1919, to consider questions of wages, working conditions, and other matters in the bituminous coal fields, may avail itself of data and information in the possession of the several executive departments, independent Government establishments, boards, commissions, or other agencies of the Government, it is hereby ordered that such data and information as may be asked for by the commission shall be furnished.

WOODROW WILSON.

THE WHITE HOUSE,
January, 8, 1920.

PROCEDURE.

The commission determined that it should first hear the statements and demands of the mine workers in the central competitive field, consisting of the States of Illinois, Indiana, Ohio, and western Pennsylvania, and then the statements and demands of the operators in the same field, as this field has for many years been used as the basis for arriving at wage scales and agreements in other districts. Subsequent to the hearings of the central competitive field the commission heard the cases of the miners and operators in the outlying districts.

Following this the commission determined to hear the statements of consumers generally, particularly those whose problems might best show the actual conditions existing throughout the country, especially in regard to stability and distribution of the coal supply.

THE POSITION OF THE MINERS.

Acting President John L. Lewis of the United Mine Workers of America, presented the principal demands of the mine workers, as follows:

1. That there be a 60 per cent increase upon all classifications by day labor, tonnage, yardage, and day work in the central competitive field. That, of course, carries with it that the basis of understanding reached in the central competitive field on the part of the mine workers would be satisfactory in all outlying coal-producing districts.
2. That a six-hour day, five days per week, be established.
3. That the day labor be paid time and a half for overtime and double time for Sundays and holidays.
4. That pay days shall be upon a weekly basis.
5. That the double shift of work on coal for commercial tonnage be abolished.
6. That the automatic penalty clause be abolished.
7. That the internal differences not covered by interstate joint agreement shall be referred back to the respective districts for adjustment.
8. That any contract negotiated be effective from and after November 1, 1919, to run for a period of two years from that date.

The position of the miners was presented by the following delegates:

CENTRAL COMPETITIVE FIELD.

National representatives appearing in conjunction with scale committee of the central competitive field:

Lewis, John L.[1]	Green, William.[1]	Bittner, Van. A.[1]

Western Pennsylvania, District No. 5.

Murray, Philip.[1]	Leithold, Frank.	Teare, William.
Gibbons, Robert R.	Kavanaugh, William.	Vogel, John.
Hargest, William.	Flood, James.	Crawley, Harry.
O'Leary, John.	Hughes, Thomas.	Fasson, Andy.
Ragan, Patrick.	Gulick, Fred.	Hagan, Michael.
McWee, John.	Haynes, William.	Jordan, Clyde.

Ohio, District No. 6.

Moore, John.[1]	Robinnet, William.	Saxton, John.
Hall, Lee.	Cecil, George.	Roy, William.
Savage, G. W.[1]	Price, Thomas J.	Thompson, Will C.

Indiana, District No. 11.

Stewart, Edward.[1]	Hessler, John.	Sutch, Harry.
Raney, W. H.	Fettinger, Charles.	Lentz, Harry.
Mitch, William.[1]	Hall, U. G.	

Illinois, District No. 12.

Farrington, Frank.[1]	Nesbit, Walter.	Grace, Charles.
Fishwick, Harry.	Sneed, William J.[1]	McAllister, Robert T.
William, Ben.	Yearsley, Joseph.	

MICHIGAN, DISTRICT NO. 24.

Stevenson, William.[1]	Muir, William W.[1]

IOWA, DISTRICT NO. 13.

Lewis, J. G.[1]	McCully, Thomas.	Yancey, D. C.
Morris, J. M.	Elsberry, W. T.	Crook, Neal.
Gay, John.[1]	Romesburg, F. T.	White, Tom.
Ballantyne, Samuel.	Simmons, J. R.	Jones, C. E.
Agnossen, J. P.	Gibbons, W. H.	
Watkins, D. H.	Morgan, E. J.	

SOUTHWESTERN INTERSTATE FIELD.

Oklahoma, Arkansas, and Texas, District No. 21.

Wilkinson, John.[1]	Doyle, James.	Dalrimple, W. M.

[1] Speaker at the hearings.

MISSOURI, DISTRICT NO. 25.

Frampton, D. A.[1]	Hepple, George.

KANSAS, DISTRICT NO. 14.

Peck, G. L.[1]	Cunningham, Thomas.

MONTANA, DISTRICT NO. 27.

Drennan, Henry.[1]	Ely, Stephen.

WASHINGTON, DISTRICT NO. 10.

Harlin, Robert H.[1]	Farrimond, Ben.	Caddy, Samuel.

WYOMING, DISTRICT NO. 22.

Cahill, Martin.	McLeod, Hugh.	Morgan, James D.[1]
Young, George.		

COLORADO, DISTRICT NO. 15.

President Lewis[1] presented report prepared by O. F. Nigro, president District No. 15.

WESTERN KENTUCKY, DISTRICT NO. 23.

Duncan, W. D.[1]	Jackson, Lonnie.[1]

ALABAMA, DISTRICT NO. 20.

Kennamer, J. R.	Harrison, W. L.[1]

TENNESSEE AND EASTERN KENTUCKY, DISTRICT NO. 19.

Keller, S. A.[1]	Dees, George H.	Goins, J. L.
Brooks, J. W.	Henderson, J. J.	Rogers, George.
Walters, Frank.	Branam, George.	Cope, R. B.

WEST VIRGINIA, KANAWHA FIELD, DISTRICT NO. 17.

Keeney, Frank C.[1]	Peters, A. T.	Scott, Brant.
Mooney, Fred.		

CENTRAL PENNSYLVANIA, DISTRICT NO. 2.

Brophy, John.[1]	Feely, James.	James, H. M.
Marks, James.[1]	Swartzenthruver, Ed.[1]	Nunemaker, Sam.
Gilbert, Richard.	Jones, A. W.	Panvera, Joseph.
Duffy, P. J.	Guyer, Adolph.	Hudzinski, Stanley.
Welsh, William.	Ghovvent, John.	Chamber, Sam.
Crago, Harry.	Carletti, Herman.	McMullen, Alex.
Bunzer, John.	Ferrara, Peter.	Kane, William.

MARYLAND, DISTRICT NO. 16.

Drum, Francis.[1]

[1] Speaker at the hearings.

THE POSITION OF THE OPERATORS.

The operators primarily adopted a defensive attitude, presenting their counterclaims to the miners' demands as incidental to their defense, but these counterclaims may be summarized as follows as to the central competitive field. The operators asked:

1. That the present system of collecting dues and initiation fees for the mine workers and enforcing the payments thereof by deductions from their earnings through the officers of the operators be abolished.

2. That the commission fix an equitable method for dealing with house rent charged mine workers and the price charged the miners for domestic coal.

3. That the commission recommend to the Congress of the United States the enactment of legislation requiring associations of employees, which make contracts of employment with employers, to take such action as will make them legally responsible for the fulfillment of the contracts so entered into.

4. That the national officers of the United Mine Workers of America and the national organization being parties to the making of the contract be required to assume responsibility for enforcing the terms of such contracts in the various districts, notwithstanding the present limitations in the constitution of the United Mine Workers of America.

5. That the contract shall provide that time clocks or time devices may be installed at mines and that the miners and inside day men be required to register when they enter or leave the mines and that the outside day force be required to register when they arrive at or leave the mines. All men refusing to comply with such requirements to be subject to discharge.

6. That the commission in its award provide for the introduction of devices or machinery which may serve to reduce the cost of coal and consequently the cost to the public for which there is no scale of wages in the then existing contract.

7. That whatever contract the commission works out or recommends should expire on the 31st of March, 1922; that contracts should expire in the spring and should stand for a two-year period.

The position of the operators was presented by the following delegates:

CENTRAL COMPETITIVE FIELD.

Crews, Ralph,[1] counsel for operators.

The following men presented exhibits for the Central Competitive Field:

Honnold, Dr. F. C.[1]	Lesher, C. E.[1]	Muller, Jean Paul[1]

PENNSYLVANIA.

Armstrong, J. M.	Guthrie, T. W.[1]	Robison, W. L.
Donaldson, J. A.	Henderson, W. M.	Rose, Don[1]
Field, W. K.	Mahoney, John	Pollock, A. R.
Fear, Thomas.	Calverley, W. R.	

[1] Speaker at the hearings.

Ohio.

Augustus, A. A.
Haskins, W. H.
Maurer, C. E.[1]
Gallagher, Michel
Jones, George M.
Pursglove, Joseph
Robbins, S. H.
Weitzel, C. A.

Indiana.

Freeman, W. J.
Ingle, David
Logsden, E. D.
Gould, M. L.
Kolsem, J. C.
Ogle, Alfred M.
Penna, P. H.[1]
Shirkie, Hugh

Illinois.

Adams, N. C.
Buchanan, D. W.
Miller, Rice
Brewster, T. T.[1]
Harrington, Geo. B.
Perry, Herman C.
Searls, E. C.
Spencer, William J.

MICHIGAN.

Diamond, William[1]
Randall, R. M.
Coryell, Charles
Coryell, John A.

IOWA.

Cushing, D. F.[1]
Pfahler, F. S.
Ryan, J. B.[1]
Norwood, J.
Heaps, Geo.
McClure, Sam
Hunter, Robert

SOUTHWESTERN INTERSTATE FIELD.

Oklahoma, Arkansas, Missouri, Kansas, and Texas.

Wilson, J. B.[1]
Aston, W. H.[1]
Johnson, W. L. A.[1]
Malloy, P. W.
Gower, Gomer[1]
Hawkins, W. P.
Cameron, James
Taylor, H. N.[1]
Clemens, Ira[1]

MONTANA.

Whyte, F. W. C.[1]
Brophy, J. F.[1]
Needhan, James B.
Kopka, H. S.

WASHINGTON.

Buckingham, D. C.[1]
Johnson, B. H.
Anderson, C. C.
Moore, N. D.[1]
Foster, C. A.
Grombs, J. B.
Ryzek, John.
Needing, F.
Barnum, W. M.[1]

WYOMING.

Addison, Herbert[1]
Quealy, P. J.[1]
Whyte, F. W. C.
Brown, George A.
Pape, D. H.

COLORADO.

Bartlett, G W.[1]

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[1] Speaker at the hearings.

WESTERN KENTUCKY.

Western Kentucky Coal Operators' Association.

Norman, J. V.[1]	Tucker, H. L.	Rash, F. D.
Brown, R. L.	Duncan, W. G.	

Operators' Association.

Berry, P. D.	Lanier, S. S.	Ceil, H. H.

WEST VIRGINIA AND KANAWHA FIELD.

Kanawha Coal Operators' Association.

Morton, Quin.	Robinson, Carl.	Stayton, W. H., jr.[1]
Duma, B. C.	Kennedy, D. C.[1]	

Cabin Creek Operators.

Puckett, W. M.	Cabell, C. A.	Laing, John.

Big Coal River Operators' Association.

Webb, Louis M.	Hornickel, G. H.	Morton, D. H.

Fairmount Field.

Fleming, Brooks.	Beeson, A. C.	Spraker, J. D.
Lyon, Frank.	Jenkins, C. H.	Brennan, E.

Separate Companies.

Gross, B. B.	Snyder, P. M.	Evans, W. M.

CENTRAL PENNSYLVANIA.

Clark, B. M.[1]	Bracken, M. J.	Sommerville, J. S.
Forsythe, J. C.[1]	Scott, H. B.	Sommerville, B. H.
Boulton, Harry.	Caseley, J. N.	Jones, W. A.[1]
Watkins, T. H.	Kelley, Thos. F.	Maxwell, G. B.
Shillingford, G. Webb.	Wetter, J. Wm.	

THE ACCEPTANCE OF THE DECISION.

In the opening hearing, January 12, 1920, Mr. John L. Lewis, acting president of the United Mine Workers of America, recorded an agreement to abide by the findings and award of the commission. His statement follows:

> I am advised, Mr. Chairman, that the United Mine Workers are here to assist the Bituminous Coal Commission in every proper and practical way to arrive at their conclusions, and to cooperate in every manner, and to submit our interests to the commission, without reservation, and shall abide by the judgment of the commission.

The operators in all districts, with the exception of—

Southern Appalachian Coal Operators' Association, representing eastern Kentucky and Tennessee,

[1] Speaker at the hearings.

Alabama Coal Operators' Association,
Colorado Fuel & Iron Co.,
Operators' Association of Western Kentucky (represented by Mr. V. G. Moore),
New River Field of West Virginia,
Georges Creek Coal Operators' Association of Maryland,

also appeared before the commission and agreed to submit the matters in controversy to the commission and abide by its findings and awards, only pointing out their legal inability to agree to fixed prices.

NOTE.—The Colorado Fuel & Iron Co. notified the commission that the company does not operate under contract with the United Mine Workers of America, but forwarded a detailed statement of working time for the month of October, 1919, of all employees at six of its mines "in the hope that it will be helpful to the commission in its determination of wage rates to apply to Colorado coal operations."

Mr. V. G. Moore, representing the Operators' Association of Western Kentucky, stated that the operators of the association which he represented (operating in Hopkins County and associated mines) would not undertake to defend their position before the commission. The reason for this, Mr. Moore stated, was that the operators in his association were already acting under a contract with the United Mine Workers of America, and that the said contract had not expired. In reply to a question by Commissioner White, Mr. Moore stated that the contract of his association with the United Mine Workers of America carries a stipulation that "in the event the wage recited in the contract between the United Mine Workers of America and the Western Kentucky Coal Operators' Association is altered by contract, then the wage scale recited in our contract shall be increased or decreased proportionately."

Mr. Moore further stated:

> If the award of the commission should later become the basis of a contract between the United Mine Workers of America and the Western Kentucky Coal Operators' Association, then our wage scale would have to be increased or decreased proportionately under that contract.

The representative of the New River Coal Operators' Association of West Virginia, Mr. T. L. Lewis, stated that his association was not a party to the decision of the commission because of the fact that in the New River field a new contract had been established "by order of the Department of Justice as of February 1." Mr. Lewis stated that he did not consider that the operators he represented were "bound by the decisions of the commission outside of that contract itself."

The Georges Creek Coal Operators' Association of Maryland, through its president, John S. Brophy, informed the commission by letter that—

> There is now in full force and effect an agreement betwen individual coal operators of the Maryland and upper Potomac coal fields and their respective employees * * * This agreement is dated May 6, 1918, and signed by the representatives of the operators and their employees and approved by the United States Fuel Administrator on May 15, 1918, continuing for a period of at least two years and thereafter subject to revision upon 90 days' notice.
>
> This agreement was made necessary, so as to be consistent with President Wilson's order to the Fuel Administrator, under date of October 27, 1917, and Dr. Garfield's order of October 29, 1917, providing methods for the adjustment of disputes between the employers and employees of the nonunion coal fields, of which Maryland and the upper Potomac districts are a part. The umpire appointed under the agreement is adjudicating all claims appealed to him, including the question of the 14 per cent.

Mr. Brophy stated that in view of the facts above presented he did not see how he could advise the members of his association to present their positions before the commission.

ACKNOWLEDGMENTS.

The figures submitted by the miners and the operators were not sufficiently exhaustive to form the complete basis for the commission's decision, and for that reason the commission obtained much additional information which was of great value in determining the findings on which its awards and recommendations are based.

The commission, therefore, desires to make full acknowledgment not only to the miners and the operators for the character and quantity of the additional and specific information furnished at its request, but also to the various departments of the Government that under the authority of the Executive order previously quoted cooperated with this commission.

In this connection the commission desires to call special attention to information and assistance furnished it by the Bureau of Labor Statistics, the Bureau of Internal Revenue, the Geological Survey, the Bureau of Mines, the Federal Reserve Board, the Federal Trade Commission, the United States Council of National Defense, the United States Railroad Administration, the Department of Justice, the Interstate Commerce Commission, and the Library of Congress.

The commission furthermore wishes to make acknowledgment for aid and information furnished it by the Bureau of Applied Economics, the Bureau of Railway Economics, the American Institute of Mining and Metallurgical Engineers, and those insurance companies having data on the industrial hazard of coal mining.

In addition, and before taking up the general discussion of the relations existing between the miners and the operators, we wish to call attention to the fact that not all the criticism which the general public has directed against the miners and operators is justified, because in some instances we have found abuses on the part of both wholesalers and retailers, who have added excessive charges and passed the blame for their practices on to the two producing groups.

HISTORY OF THE CONTROVERSY.

In considering the various claims of the miners and operators, we made an examination of the conditions which led up to the strike and found that the scale agreement of the central competitive field, effective from April 1, 1914, to April 1, 1916, was merely a reaffirmation of the wage-scale agreement adopted April 1, 1912.

The 1916 new wage agreement was the result of a joint conference which opened at Mobile, Ala., February 8, 1916, and reconvened in New York City February 24, 1916. The agreement was concluded March 9, 1916, effective April 1, 1916, and provided for the ending of the agreement on March 31, 1918. This agreement provided for an advance of three cents per ton at the basing points, plus elimination of the differential between the Pittsburgh thin vein and the rate then existing in eastern Ohio. It also provided for a universal adoption of the mine-run system of pay in the central competitive field and for a 5 per cent increase over existing prices on day labor, dead work, yardage, and room turning.

Following the adoption of this agreement, the full effect of the war, which had been raging in Europe since August, 1914, began to be felt in this country through increased cost of living resulting from purchases of supplies by the allied nations.

As a result of these increases in living costs and the sudden rise in the selling price of coal—due to the abnormal demand—the miners became dissatisfied with their wage rates, particularly in the eastern section of the United States. The labor situation also became acute by reason of the fact that immigration had been cut off and the abnormal demand for all kinds of production had caused a shortage of men, with the result that industries began bidding against each other for men by increasing wage rates or by paying bonuses.

This condition made itself felt in the mining industry in central Pennsylvania and certain of the West Virginia fields in the fall of 1916 and almost immediately spread throughout the country. The result of this was that in some sections, where bonuses were not offered, the miners resorted to strikes to force their employers to meet the situation developed at the neighboring mine where a bonus had been voluntarily granted.

So serious did this situation become that in several large mining districts it threatened to wreck the entire joint relationship in contracts then existing between the operators' association and the United Mine Workers of America.

To meet this situation an informal joint conference of coal operators and coal miners of western Pennsylvania, Ohio, Indiana, and Illinois (the central competitive field) met in Indianapolis, Ind., April 5 and 6, 1917. This informal conference resulted in the holding of a formal interstate joint conference of the central competitive field at the McAlpin Hotel, New York City, April 12 to 17, 1917. This conference concluded an agreement bearing date of April 17, 1917, effective April 16, 1917, to continue until March 31, 1918, and providing for an advance of 10 cents per ton on pick and machine mining rates, and, on all day labor, an increase of 60 cents per day, including monthly men—no advance on dead work or yardage.

Following this agreement, with the continued demands of the warring nations for the products of the United States, the situation in the coal-mining industry, particularly as to selling prices and labor, kept growing more unsatisfactory, inasmuch as other industries kept bidding for labor—and the living costs continued to increase, with the effect of both miners and operators forgetting their contract obligations—individual operators raising wage rates or paying bonuses to attract labor from competing mines and the miners in other mines striking to force their employers to pay increased wage rates or bonuses.

In the meantime the country became alarmed over the situation, and an attempt was made, through Franklin K. Lane, Secretary of the Interior, to bring about a stable situation with respect to selling prices of coal, which resulted in the formation of a coal committee as part of the Council of National Defense, with Mr. F. S. Peabody, of Chicago, as chairman. This committee called a meeting of coal operators from all parts of the United States to convene in Washington early in June, 1917. As a result of this meeting there was promulgated by the committee a set of prices for bituminous coal throughout the United States, which was agreed to by the coal operators.

This agreement is known as the Peabody-Lane agreement. The price agreed upon was effective July 1, 1917.

In July, the President, under the Lever law, fixed the prices at $2 per ton f. o. b. mines, effective August 20, 1917.

A Fuel Administrator was appointed August 21, 1917. This, of course, eliminated the production committee and Dr. H. A. Garfield took full charge of the coal industry of the United States.

The situation had at that time again become acute, with the result that a joint conference of coal operators and coal miners of the central competitive field was held in Washington, D. C., September 25, 1917, which resulted in an agreement bearing date of October 6, 1917, providing for an advance of 10 cents per ton on pick and machine mining rates, and an advance of $1.40 per day to all day labor and monthly men, with a 15 per cent advance on yardage, dead work, and room turning. This agreement provided for an automatic penalty clause which was an extension of a practice in effect in several large districts and was subject to the following conditions:

> This agreement is subject to and will become effective only on the condition that the selling price of coal shall be advanced by the United States Government sufficient to cover the increased cost in the different districts affected and will take effect on the first day of the pay period following the order advancing such price.

It also provided, subject to the next biennial convention of the United Mine Workers of America, that the mine workers' representatives agree that the then contract be extended during the continuation of the war, but not to exceed two years from April 1, 1918. Following the adoption of this agreement, on or about October 27, 1917, the United States Fuel Administrator issued an order increasing the selling price of bituminous coal 45 cents per ton, effective November 1, 1917, to cover the increase in wages provided in the aforesaid agreement.

In January, 1918, the biennial convention of the United Mine Workers of America met at Indianapolis, at which meeting the Washington wage agreement was adopted by the convention. During August, 1918, the United Mine Workers of America again made appeal to the United States Fuel Administrator for a further increase in wages, due to the increased cost of living.

Dr. Garfield denied this request.

In February, 1919, Frank J. Hays, then president of mine workers, called a meeting of the international executive board, presidents of the different districts, and other representatives at Indianapolis, which meeting was termed a meeting of the policy committee. This policy committee adopted a report, embodying the following demands:

1. A substantial increase in wages.
2. A six-hour day.
3. Nationalization of coal mines.

The next important step was the interpretations placed upon the policy committee's report by representative leaders of the United Mine Workers in different parts of the United States, which interpretations resulted in the formulation of demands of the United Mine Workers by the convention held at Cleveland, September 22, 1919.

A joint conference of coal miners and operators of the central competitive field was called at Buffalo, September 23, 1919. The miners submitted the demands of the Cleveland convention in writing to the operators. The joint conference of the miners and operators recessed at Buffalo on October 2 and reconvened at Philadelphia on October 9, 1919, to continue negotiations, but adjourned, sine die and without agreement, on October 11, 1919.

On October 15 Acting President John L. Lewis, of the United Mine Workers of America, sent out a strike order to the members of his organization, calling for cessation of mining operations on midnight of October 31.

On October 17, W. B. Wilson, Secretary of Labor, invited a conference of the scale committee of operators and miners to meet at his office Tuesday, October 21. The scale committee of the operators and miners met in Secretary Wilson's office for four days, but on October 24 Secretary Wilson stated that he had been unsuccessful in his efforts and that a further conference would be useless.

On November 1, 1919, the strike began. About 400,000 union miners walked out. About 200,000 nonunion miners remained at work.

In the meantime, on October 21, the Attorney General filed a bill in equity in the United States district court of Indianapolis praying for an injunction restraining the miners from striking. Such an order was issued by Judge A. B. Anderson, and was followed by a writ of temporary injunction dated November 8, under which the union officers were ordered to cancel and revoke the strike order, which order was accordingly revoked in a form approved by the court, but the men did not return to work and in effect the strike still continued.

President Wilson asked Fuel Administrator Garfield to resume his duties on October 30. The Fuel Administrator at once put into effect an order restoring war-time prices and distribution of both anthracite and bituminous coal.

Government maximum prices, which had been in effect during the war, had been suspended by an order of the Fuel Administrator dated January 18, 1919, effective February 1, 1919. (It must be remembered that from February 1 until October 30, 1919, no restrictions were in effect either as to prices or distribution of bituminous or anthracite coal.)

Following the strike order more and more coal was seized by the Fuel Administrator and distributed by the Railroad Administration as the country began to feel the pinch of the strike.

All that time the miners took the stand that their contract with the operators had expired because the war, to all practical purposes, was ended, while the operators claimed that the miners had broken their contract, because they had agreed to work until April 1, 1920, or until peace was promulgated.

On November 18 Secretary of Labor W. B. Wilson issued an invitation to coal miners and operators from all the bituminous coal producing fields of the United States to meet at Washington, and a conference was held at which the Secretary of Labor made several suggestions: First, that a general joint conference of all the fields of the United States be held. Second, that the central competitive field hold its joint conference and the other producing districts hold their joint conference concurrently with the central competitive field. Third, that the central competitive field take up and begin negotiations again. The third of these propositions was accepted and the joint conference was again convened.

On November 20 the operators made a proposition giving an advance of 15 cents per ton on pick and machine mining and 20 per cent on day work, conditioned upon the Fuel Administrator granting an increase in selling prices. This offer was rejected by the miners, who reiterated their original demands. These were modified the next day, November 21, by a demand for a 40 per cent increase, which was immediately voted down by the operators. Following this Secretary Wilson ended the meeting by submitting a proposition providing for an increase of 31.61 per cent to the wages of the miners.

On November 24, 1919, Dr. Garfield appeared before the joint committee and enunciated the following principles:

> (1) The public must not be asked to pay more than it is now paying for coal unless it is necessary to do so in order to provide reasonable wages to the mine workers and a reasonable profit to the operators.
>
> (2) The arrangement entered into between the operators, the mine workers, and the Fuel Administrator, with the sanction of the President of the United States in October, 1917, was intended to equalize the wages of all classes of mine workers and to be sufficient to cover the period of the war, but not beyond March 31, 1920; hence the only increase in cost of living which can now be considered is the increase above that provided for by the average increase in 1917; that is to say, the average total increase in pay over the 1913 base, which was the base considered in 1917, should not exceed the present average increase in the cost of living over the same base. It is also to be considered that the cost of living will fall rather than rise during the next few years.
>
> (3) The maximum prices fixed by the Government on coal were calculated to increase production of coal for war purposes. Coal was basic and the increase imperative. The public ought not be asked to pay and will not now pay the increase over normal profits then allowed for the purpose of stimulating production.
>
> (4) Any increases in wages now arrived at on the basis of the foregoing principles should be borne by the operators or the public or both, as may be determined by the application of

these principles, and should take effect as of the date when the men returned to work.

(5) The needs of the United States are not alone to be considered; Europe is in desperate need of coal and should have all that we can spare.

On Wednesday, November 26, Dr. Garfield stated his conclusions as follows:

> Dr. GARFIELD. Having previously laid before you the line of action to be pursued by the Fuel Administration, and later the principles which were governing us, I bring you to-night the conclusions. On the 24th instant I announced that the public must not be asked to pay more than it is now paying for coal unless it is necessary to do so in order to provide reasonable wages to the mine workers and a reasonable profit to the operators. Careful investigation forces me to the conclusion that, in accordance with this and other principles set forth in the statement of November 24, the public must not be required to pay any increase in coal prices at this time.
>
> * * * * * * *
>
> Applying the principles set forth in paragraph 2 of the statement of November 24, when the average increases in wages since 1913 for the various classes of mine workers are deducted from the increase in the cost of living since that time, we arrive at the amount of additional increase in wages justifiable at the present time. I have taken the figures of the Bureau of Labor Statistics for both cost of living and for the weighted averages of wage increase. According to these figures the cost of living has risen 79.8 per cent since 1913, and the amount necessary to bring the average wages of mine workers up to this point at the present time is 14 per cent.

The miners rejected this proposition, but were willing to accept the Wilson proposition. The operators immediately issued a statement accepting the proposition of Dr. Garfield.

The strike still continued, and on December 3 Dr. Garfield issued an order restricting the use of coal to essential purposes.

In the meantime the leaders of the United Mine Workers were summoned to appear before Judge Anderson on December 9 to answer charges of contempt of court in not obeying the court's orders to stop the strike.

On December 6 an understanding was reached for the settlement of the strike controversy which was accepted by the miners in their conference at Indianapolis, December 10.

Work was resumed as soon thereafter as possible.

Dr. Garfield then resigned as Fuel Administrator and on December 20 the President created this commission, with powers and duties as previously outlined herein.

AMOUNT OF 14 PER CENT INCREASE PAID BY CONSUMING PUBLIC.

It was developed in the hearings before the commission that the major portion of the tonnage shipped since the 14 per cent increase was shipped under contracts which carried what is generally known as a standard wage clause and which provided for an increase in the cost to the purchaser equivalent to the increase in cost resulting from an increased wage scale. The commission inquired into this subject at some length; and while the information submitted is incomplete, we believe it is fair for us to report that in the neighborhood of 80 per cent of the total tonnage that has moved since October 31, 1919, has moved under such contracts, and the consumer has paid, or will pay, an amount equal to the increase in the labor cost on the tonnage stated.

This statement is made in order that there may be no misunderstanding on the part of the public and the public rate-making authorities.

INTERMITTENCY IN WORKING DAYS.

Irregularity of mining operations is the primary cause of the unsatisfactory condition of the industry and results in high prices of coal and dissatisfaction among the miners.

The principal causes of this irregularity are the seasonal character of the market and the inadequacy and irregularity of car supply. In order to stabilize the industry and alleviate the irregularity of the market, we feel that the purchasing and consuming public on the one hand, and the carriers on the other hand, have certain specific duties to perform.

It is evidently the public's duty to aid in the stabilization of the coal market by purchasing and arranging to store as much coal as possible during the spring and summer. It is the carriers' duty to furnish as much equipment as possible for the movement of coal, and, above all, to see that there is no discrimination in the distribution of the equipment which is now at their disposal.

In considering these facts, we had in mind the two basic principles:

(1) That a seasonal demand develops a seasonal price, which is a double charge against the consumer, since this price must be high enough to carry the expenses of the dull period and also high enough to carry the extra expenses of additional equipment needed to handle the business in rush periods.

(2) That seasonal idleness breeds unrest in any group of men and in any industry.

The coal industry is a part-time industry, the number of idle days, out of a possible 308 working-days, being 63 in 1918 and 115 in 1919. On the average for the past 30 years, the number of possible working days, when the mines were not in operation, was 93. This loss of time may be analyzed by causes for the last two years as follows:

Cause of idle time.	1918	1919
	Per cent.	*Per cent.*
Car shortage	49	17
Labor shortage and strikes	23	25
Mine disability	14	6
No market	8	50
Other causes	6	2

It will be seen that in 1918, when the demand for coal was at its maximum, the principal cause of the lost time was car shortage, and, in 1919, when the war demand had ceased, "no market" accounted for one-half of the idle days. Labor shortage and strikes accounted for about one-fourth of the lost time, and mine disability was responsible for 14 per cent in 1918 and for 6 per cent in 1919.

While coal production increases in accord with national development on an average of approximately 10 per cent per year, yet coal production in normal times varies from year to year with general industrial conditions. Periods of prosperity and great activity are marked by a large production of coal, since fuel is the foundation of all industrial enterprises, while years of depression are also low-ebb years in coal mining.

In only a few instances, however, does the industry show a loss of time below 78 working-days in a year, so that it is a fair interpretation of the facts that many days of idleness occur in the industry regardless of the general level of industrial prosperity.. This amount of lost time may be ascribed to two main causes: (1) Overdevelopment of the industry, and (2) irregular distribution of the demand for coal through the year. This results in periods of no market, when mines and railroad cars are idle because of a shortage in demand for coal, followed by periods of great demand, when mines would be worked to capacity were it not for the lack of coal cars for the transportation of the product. At the present time America requires less than 500,000.000 tons of bituminous coal a year, while the capacity of the mines in operation is over 700,000,000 tons.

Under the stimulus of war demand many new mines were opened and many old ones expanded in order to secure sufficient coal to meet the exceptional and urgent national requirements. As a result, the coal industry, which was speculatively overdeveloped before the war, is still more overdeveloped now and employs more capital and more labor than is necessary to supply the present needs of the country.

It is not to be expected that exports of coal will increase sufficiently to absorb a perceptible proportion of the gap between the demand for coal and the capacity of mines, as our shipping-terminal facilities are such that not more than 25,000,000 tons of coal a year can at present be exported.

Full-time employment in the coal mines can not, therefore, be expected until the industry is put on such a basis that only those mines remain in operation whose output is required to supply the annual needs of the country.

Even if the overexpansion in the industry were remedied there would still be a considerable amount of irregularity in operating time so long as the demand for the bulk of the coal remains concentrated in certain months, with idleness of cars during the slack months and shortage of cars during the peak months.

We believe that steps in the direction of standardizing the demand for coal should be taken by the principal consumers, and are in possession of evidence that many of the largest consumers of coal delay purchase and delivery until the late months of the year and that outside of that part of the central competitive field having Great Lakes shipments, the smallest movement of coal to consuming terminals is in the spring and early summer, at which time some mines are closed down while others operate irregularly with resulting loss of time to the men, idleness to capital invested in mines, and railroad cars, and increased cost of coal to the public.

The seasonal nature of the demand for coal makes it necessary for the mining companies to maintain a capacity sufficient to meet the maximum demand in a comparatively short period of time. This excessive capacity involves the employment of a large labor reserve and is one of the main causes of the labor unrest prevailing in the industry. Nor does this fluctuation in production affect only the mine and the miners themselves, but spreads to the railroads and through the railroads to the entire productive machinery of the Nation.

For many years the railroads, and especially the coal-carrying railroads, have to a great extent depended on a practice that has grown up of protecting themselves in the winter months by commandeering coal consigned to other consumers. In some degree the public utilities have counted on this form of a priority. The railroads are consumers of about 30 per cent of the total coal production of the country, and we have presented to certain of the executives of the larger systems a request that the railroads accept the principle that it is their duty to the public to move coal in the months that normally are months of low movements to consumption terminals, such movement to be in excess of their then needs, thereby gradually accumulating a three months' supply before the winter, the railroads to come out at the end of the winter with possibly 20 or 30 days' supply on hand. This movement would be more economical than the movement in the winter, and, from the standpoint of the coal railroads at least, the lower cost of movement would, to a great degree, offset any cost of storage.

The acceptance of this principle by the railroad executive heads has been general. The Pennsylvania Railroad and the New York Central lines expressed their acceptance in an especially liberal spirit. We wish again to state that this is a duty of the railroads and that some method should be devised under which they will provide such storage.

In the case of the public utilities we believe that they, too, have a duty to perform to the public and should not rely on any form of priority when the pressure comes in the winter, and to this end they should be called upon to move and store coal in the summer months in excess of their needs, going into the winter months with 60 days' supply in storage. We feel that these two groups owe this as a duty, and that in both cases, if there is an increased cost, it will be recognized by the rate-making authorities. In the case of the public utilities it was in effect stated by a representative that he believed this plan or principle was sound.

The next largest group of coal consumers is the steel industry. We have presented the problem to certain of the heads of important steel concerns, including the United States Steel Corporation, and they express an intention of increasing storage of coal and movement of the same in the months of low movement along the lines of the plan here suggested.

It is believed that the Federal Reserve Board and the several Federal reserve banks will favor considering as eligible for rediscount paper drawn against coal in storage.

In addition to these groups, we recommend strongly that all Government institutions, national, State, municipal, and local, purchase, receive, and store coal during the spring and summer months in anticipation of the winter's requirements.

We believe that if the various groups mentioned carry out the plan of storing from two to three months' requirements, beginning the winter with this supply on hand, the result will be a decided stabilization of the coal industry, a considerable measure of relief to the carriers, and a general economic saving to the public and the Nation, and, further, that the practice would result in the minimizing of the commandeering and confiscation of coal on the theory of priority. We feel, too, that unless some plan of this kind is adopted, we are bound to have recurring conditions of coal shortage in the winter months as in the past three years, and that no need for such a situation exists.

In this connection, the question of the practicability of storing bituminous coal arises. We are fully aware of the difficulties involved, but feel, on the basis of expert opinion, that these difficulties are not insurmountable. In support of this position we quote Mr. Van H. Manning, Director of the Bureau of Mines:

> All types of bituminous coal have been successfully stored, but it can also be said that spontaneous combustion has occurred with all types of bituminous coal. Practical experience with certain coals has shown their tendency to spontaneous heating. Chemical analysis does not furnish an explanation of the cause. While the inherent qualities of bituminous coal doubtless have a bearing on the tendency to spontaneous combustion, overemphasis of this fact has diverted attention from the more important facts of proper-handling and storing methods.

The heating of coal is due to the oxidation of the surface of the coal substance itself. This oxidation is relatively rapid with freshly broken surfaces. The rate of oxidation is also more rapid as the temperature increases. These are important factors in the storage of coal.

The larger part of exposed coal surface is contained in the fine or slack coal. The removal of this fine coal from the mass removes the greater cause of spontaneous heating. With the fine coal removed, nut and lump coal, if not broken in the process of handling, can be stored without danger of spontaneous combustion.

If the method of putting coal into storage is one which produces freshly broken surfaces of coal, the chance of spontaneous combustion is greatly increased, since the rate of oxidation of fresh coal surfaces is much greater than that of older surfaces. Coal breakage is to be avoided for three distinct reasons:

1. The degradation in size makes it less acceptable for all hand-fired operations.

2. There is an increased oxidizable surface to generate heat.

3. The surface, being freshly broken, generates an added amount of heat.

If it is necessary to store fine coal or run-of-the-mine coal, the pile should be so constructed that there is no segregation of sizes in the building of the pile. Coal can continue to generate heat only by the continued access of air to the pile. The air within the pile will have to be renewed from 30 to 40 times in order to supply a sufficient amount of oxygen to raise the pile to a dangerous temperature. If the air movement through a pile can be sufficiently restricted, the temperature will not reach a dangerous point. Complete protection from the air, as can be had in subaqueous storage, is a sure preventive of spontaneous combustion. A pile compactly built with the fine and coarse material distributed throughout the whole pile may keep the air movement through the pile at a point low enough to insure protection against heating. If, however, there is a graduated segregation from fine to coarse, there is likely to be some place within the pile presenting the most favorable condition of moderate air supply to produce dangerous temperature.

Very thorough ventilation of a coal pile, such as ventilating openings from top to bottom of the pile every 16 inches, has succeeded in preventing undue heating in coal piles in northern climates. Any less extensive method of ventilation through fine coal is of doubtful value and is not to be recommended.

The presence of sulphur in coal is thought by many to be the cause of spontaneous combustion, but occurs in coals of both high and low sulphur content. The oxidation of some forms of sulphur in coal breaks the coal and increases the coal surface. The form in which sulphur occurs in the coal, rather than its absolute amount, seems to be the point of interest in this matter.

Storing wet coal or the alternate wetting and drying of coal is believed by many to be favorable to spontaneous combustion. It is probable that the result is largely mechanical in that with wet fine coal a nearly impervious blanket is placed over a portion of coal, so that normal ventilating currents fail to carry off the heat generated.

Since the oxidation of coal is greater at increased temperatures, extraneous sources of heat must be kept from coal in storage. A very common cause of spontaneous combustion is piling coal against a hot boiler setting or around a hot steam pipe, or over a warm ventilating drain.

The heating of small piles of coal (under 20 tons), such as stored by the domestic consumer, is so extremely rare as to be negligible. In larger piles, such as stored by apartment houses, schools, and small factorie, care should be taken in storing coal, the pile inspected each day to detect evidences of heating .

Where coal is put into storage by means of a chute, the fine coal accumulates under the chute, and if heating occurs it is apt to be at this point. If rods driven into the pile at this point appear warm to the hand when withdrawn, trenches in the pile should be made through the warm coal, so as to allow it to cool. The storage of large amounts of coal can be undertaken if due care is exercised in the selection and handling of the coal; the details have already been well illustrated in publications of the Bureau of Mines and the University of Illinois.

A further item to be considered is the cost of handling coal from storage. Breakage in rehandling must also be taken into account and arrangements must be made for providing necessary facilities and space for stored stocks. In spite of the additional costs involved, it is believed that storage of coal by the consumer at the point of ultimate consumption offers the best solution for the problem, since this would provide for the storing of smaller lots than if storage should be undertaken as an intermediate step.

It must be remembered that in large operations, such as the steel and the coal industries, the cost and facility of transportation is vital in keeping down the cost of the product, while to the ultimate consumer the costs which are added by the retailer and the middlemen are even greater factors.

The Nation's total freight-car supply was inadequate even before the war, and many mines were shut down for longer or shorter periods, even without regard to seasonal movement, simply as a result of car shortage.

We believe that it is urgently necessary for the railroad companies to construct an additional number of all types of freight cars, in order that they may be in a position to use the open-top cars exclusively for the purposes for which they were intended.

The carriers of the country own nearly a million open-top cars and depend upon coal transportation for about 30 per cent of the total railroad traffic. On certain roads fuel transportation amounts to more than 50 per cent of the freight moved. The idleness of coal cars during the summer months, coupled with the excessive activity during the fall months, forces the railroads themselves to employ a large number of men and to provide for a surplus amount of rolling stock for winter months and an excessive amount of storage yards during the summer period when the cars are not in use. This in turn is an added burden upon the people of the United States through a general increase in traffic charges, as well as in the increased cost of coal.

The recommendation is made that the Interstate Commerce Commission make the necessary provision, within its jurisdiction, to enable the railroads to provide a sufficient amount of rolling stock, motive power, and other facilities to meet the demands of industry. We feel that even if this additional construction should be reflected in rates it would be ultimately to the advantage of the consumer, as all industries suffer from intermittency in distribution, and the public bears the cost of this intermittency in the higher price of all commodities, particularly coal.

This condition can only be rectified by the construction of sufficient freight cars of all types and of a sufficient number of locomotives to handle them.

Conditions in this respect have become considerably worse during the last three years. Prior to the war freight-car construction of all types averaged about 125,000 cars per year. During the war period and since the armistice, although the need for cars increased, the total freight-car construction of all types has been but 250,000 cars. This means an average annual production during the past three years of only about two-thirds of the previous yearly car output.

During the war the existing car equipment was more strenuously utilized and repairs were consequently delayed, so that car mortality has been very heavy. This has been aggravated by the fact that cars allocated to foreign lines have received even worse treatment and have suffered still greater deterioration.

The additional expansion of the coal industry during the war, by increasing the number of mines to be served by the railroads, has also aggravated the situation and has rendered the car equipment still more inadequate for the purpose of an effective coal distribution.

The consequence is a serious shortage of all freight cars, resulting in many instances in the diversion of open-top cars to the movement of commodities of higher classification and rate—commodities which under ordinary conditions would move in box cars. The coal industry suffers from this diversion, as it diminishes still further the number of cars available for the transportation of coal.

At the same time it is realized that the carriers can not be expected to provide a sufficient number of coal cars to take care of the peak of the business during the months requiring maximum delivery, and to carry and store the extra equipment during the slack months.

It is our belief that a more even distribution of the demand for coal throughout the year will be an important factor in overcoming this difficulty.

The following suggestions have been made to the commission as to methods of overcoming car shortage, car irregularity, and seasonal operation:

1. A difference in railway freight rates on coal to be graduated through the summer months in districts other than those moving coal to the Great Lakes. This question, however, is properly within the province of the Interstate Commerce Commission to decide, and the commission has recommended that this subject be given due and careful consideration.

2. A difference between summer and winter prices of coal, such difference to be fixed by the operators, but, in view of the fact that there are in the neighborhood of 7,000 operators in the

bituminous coal industry, the commission believes, without passing upon the legality of an agreement to reduce prices for the summer months, that this plan would be impracticable.

Railroads have depended for a great many years and to a large extent on their accepted right to divert coal to their own use in case of shortage. This practice, by protecting the railroads against actual disaster, has resulted in a great injury to the coal industry and to the individual consumer of coal.

In its investigation the commission requested of and received from the United States Railroad Administration a statement covering, in outline, the former and present rules with respect to the assignment of cars to mines.

In transmitting this statement the Railroad Administration points out that prewar rules covering car assignments, which tended to irregularity in our distribution, while not universally relied upon by carriers, were quite generally prevalent in the East, and were based upon a line of decisions of the Interstate Commerce Commission, of which the leading case is that of Traer *v.* Chicago & Alton Railroad Co. et al. (13 100, p. 451); decision confirmed in the Supreme court of the United States (Citation 215 U. S. 452, p. 479). The statement follows:

> The common understanding of the prewar rule was this: If a carrier on contract purchased the entire output of a mine, it was entitled preferentially to assign cars to that mine for loading that coal day by day.
>
> If the carrier purchased only a part of the output of a mine, it was entitled preferentially to place cars for the protection of that loading at such a mine. In the working of this portion of the rule, if the number of cars of railroad fuel contracted for was in excess of the number of cars furnished that mine that day on the regular commercial distribution of coal cars, the mine was entitled to an arbitrary and preferential assignment of enough additional cars to enable it to load all the railroad fuel obligated to be shipped under the contract.
>
> If, on the other hand, the number of empty cars accruing to the mine on the regular commercial distribution was in excess of the number required to be shipped with the railroad fuel coal, then the mine was entitled to use the excess of empties above those necessary to load the railroad contract for the loading and shipment of commercial coal.

During the investigations we found that the evils growing out of the preferential assignment of coal cars were fully recognized during the war and, as a result of a conference between the President, the Director General of Railroads, and the Fuel Administrator, the preferential assignment of cars was abolished.

On May 24, 1918, the Fuel Administrator issued an order reducing the price of coal 10 cents per ton, in the following language (eliminating the usual preambles reciting the Fuel Administrator's authority):

> Hereby orders and directs that all prices for bituminous coal f. o. b. mines in the coal-producing districts throughout the United States fixed by the said Executive order of the President, dated 21 August, 1917, and subsequent order of the United States Fuel Administrator and in effect

at 7 a. m. on the 25th day of May, 1918, shall be and the same hereby are reduced as to all shipments made after 7 a. m. on the 25th day of May, 1918, by the sum of 10 cents for each net ton of 2,000 pounds.

This order shall in no way affect the increase contained in the Executive order of the President, dated 27 October, 1917, adding the sum of 45 cents to the price fixed for bituminous coal under the terms and provisions set forth in said last-mentioned order.

On May 25, 1918, the effective date of the 10-cent reduction order, the following ruling construing the order was issued:

The effect of the order making a reduction of 10 cents per net ton from the mine price on all bituminous coal shipped after 7 a. m., May 25, 1918, is that no one shall ask, demand, or receive, more than the applicable Govment mine price thus reduced, for any coal shipped after 7 a. m., May 25, 1918, unless the same was shipped pursuant to a bona fide contract enforcible at law entered into prior to August 21, 1917. Contracts made between August 21, 1917, and December 29, 1917, do not authorize any exception to the above. Contracts made after December 29, 1917, must, under the provisions of the order dated December 24, 1917, contained in Publication No. 16, provide that all shipments thereunder shall be at the applicable Government mine price at date of shipment.

The reason for the issuance of the above orders was that the railroads, by the employment of assigned cars, had been frequently able to negotiate their fuel purchases at more favorable prices than the commercial trade, and because of relinquishing their right to assigned cars, the carriers faced the problem of having their fuel cost increased.

As a concession to the railroads and in recognition of the loss that the deprivation of assigned cars entailed, Dr. Garfield issued his order of May 24, 1918. The principle of even car distribution was not effective, however, until approximately July 1, 1918. The delay was occasioned by the necessity for providing the necessary machinery by which the railroads' fuel needs could be complemented when the car supply was insufficient to give them their full orders, and this was done by the Fuel Administrator's requisitioning coal in quantities needed by the railroads.

The statement of the Railroad Administration to this commission also states that:

When the first uniform mine rating and car distribution rules were published September 10, 1918, the new rule abolishing the preferential assignment of cars for railroad fuel loading was carried in the uniform mine rating and car distribution rules by a provision that no such assignment for railroad fuel loading could be had except upon authority of the car-service section. This authority has never been granted since. The reason for this provision in the rule was to take care of emergencies if no other way of caring for the emergency could be found, whether to protect railroad fuel loading or other essential loading, the point kept in mind being particularly United States Navy coal.

It should be borne in mind that private cars—that is, cars other than railroad owned, have been handled upon a somewhat similar rule as that which, under the prewar practice governed the placing of assigned cars for railroad fuel loading. That is to say: The private cars were arbitrarily placed for the owner's loading. If on any day the number of private cars so placed did not equal the number of empty cars to which the mine was entitled under the commercial distribution, the mine was entitled to additional railroad cars, to make up the deficiency.

It is understood that paragraph 402 of the Cummins-Esch bill, approved February 28, 1920, places control of coal car distribution and assignment within the jurisdiction of the Interstate Commerce Commission in the following language:

> The term "car service" in this act shall include the use, control, supply, movement, distribution, exchange, interchange, and return of locomotives, cars, and other vehicles used in the transportation of property, including special types of equipment, and the supply of trains, by any carrier by railroad subject to this act.
>
> It shall be the duty of every carrier by railroad subject to this act to furnish safe and adequate car service and to establish, observe, and enforce just and reasonable rules, regulations, and practices with respect to car service; and every unjust and unreasonable rule, regulation, and practice with respect to car service is prohibited and declared to be unlawful.
>
> It shall also be the duty of every carrier by railroad to make just and reasonable distribution of cars for transportation of coal among the coal mines served by it, whether located upon its line or lines or customarily dependent upon it for car supply. During any period when the supply of cars available for such service does not equal the requirements of such mines it shall be the duty of the carrier to maintain and apply just and reasonable ratings of such mines and to count each and every car furnished to or used by any such mine for transportation of coal against the mine. Failure or refusal so to do shall be unlawful, and in respect of each car not so counted shall be deemed a separate offense, and the carrier, receiver, or operating trustee so failing or refusing shall forfeit to the United States the sum of $100 for each offense, which may be recovered in a civil action brought by the United States.

On March 4, 1920, the Interstate Commerce Commission issued a recommendation to the carriers that they continue in effect the uniform rules of car supply established by the Railroad Administration.

The issuance of such a recommendation by the Interstate Commerce Commission raises an inferential question as to whether the maintenance of even car distribution is obligatory through the provisions in the Cummins-Esch bill, since the comment of the Interstate Commerce Commission is a recommendation only.

Whether the Interstate Commerce Commission can make such a recommendation a mandate is a matter not within the province of the Bituminous Coal Commission to decide.

It is, however, recommended to the Interstate Commerce Commission and to State railway commissions within their several jurisdictions that, wherever lawful, rules and regulations be issued governing and controlling car distribution between mines, to the end that no particular mine or mines may be permitted to obtain preferential car service through the use, by railway purchasing agents, of their power to obtain railway fuel at reduced prices through the guaranteeing of car supply to favored mines or to operators with whom the railway may have fuel contracts.

We make this recommendation because we find that the practice and abuse of car guarantees has militated against the interests of the general public by contributing to the irregularity of operation of mines not having such preferential contracts. At the same time, it has resulted in an unfair competitive advantage to those mines that secured such contracts.

The commission also believes that railroad coal should be furnished by the various mines in proportion to their productive capacity with due regard to the quality of the coal. In furnishing to the railroads by the various mines, their quota of coal, it is recommended that the railroads be not required to place at each mine each day a sufficient number of cars for its proportionate amount of railway fuel, but that a plan be worked out permitting the railroads to place at each mine a number of cars sufficient to keep the mine in operation all day. This practice would reduce the cost of assembling railway fuel.

In supplying to the railroads their quota of fuel the mines should avoid, except in emergencies, the use for that purpose of coal the properties of which make it more valuable for other uses.

AGREEMENTS.

We recognize that joint agreements resulting from conferences should be carried out fully and frankly by both parties, and that every proper assurance to this end should be given, since it is obvious that all attempts at amicable settlements of controversies will now and forever be futile unless the principle is once and for all established that agreements entered between employers and employees are binding upon both parties and are not to be considered as mere scraps of paper. For that reason we believe that the fulfillment of joint agreements entered into in any given district should also be guaranteed by the national officers of the United Mine Workers of America, and that it should be the duty of the officers of the national organization, as well as that of the officers of the district, to see that all such agreements are carried out both in letter and in spirit—this particularly because we recognize that strikes in the coal industry are of serious moment to the whole people.

The loss in the recent strike to the men, to the operators, and to the public can not be determined, as stoppage in production struck close to the roots of all industry and the welfare of the people. The loss to the men and to the public was an actual and complete loss; the loss to the operators may in part at least be passed on to the public.

We understand thoroughly that the constructive work of the joint wage conference has been carried on for 30 years, and we assume that in the future as in the past most of the points of difference between the miners and operators will be adjusted by this body, but, we believe that as the last resort some additional method should be devised under which strikes could not be called unless and until questions in controversy have been submitted to some form of tribunal, board, or commission in case the parties to the controversy and the joint wage conference have finally failed to settle the questions at issue. Such tribunal, board, or commission should immediately undertake the investigation of the questions involved and should publish within 60 days its finding of facts, if not unanimous, then in separate reports; and pending such report, no general strike should be called; provided, however, that if no report is published within the designated period, the retarding of the strike shall end.

The President's industrial conference has recommended the setting up of machinery which will, if established, be available to handle such questions, and the plan outlined by this conference provides for the filing of agreements.

Therefore, our conclusion is:

That if and when, during the life of the agreement to be drawn by the joint wage conference, and to be predicated upon this report, such boards and tribunals as may be recommended by the President's industrial conference are set up, they should be employed in connection with the investigation of questions of controversy between miners and operators, and, in the event that no such machinery is created, that a board of inquiry and adjustment for the bituminous coal industry should be created and maintained under the joint agreement—this board to consist of a chairman and two other representatives of the public appointed by the President, two representatives of the mine workers selected by the mine workers, and two representatives of the mine owners selected by the mine owners, and that matters of controversy between the bituminous coal miners and operators be submitted thereto, the expenses of such board to be borne by the operators and the miners equally.

WAGES.

We have decided to award as a substitute for the 14 per cent increase authorized by Dr. Garfield a wage increase that is considerably higher. In arriving at the present wage award, we were guided by the principle that every industry must support its workers in accordance with the American standard of living.

With this principle in mind, we have considered the fact that the cost of living has advanced greatly from the prewar level. Estimates of this advance in the evidence before the commission have ranged from the 80 per cent, submitted by the operators, through the last official report of the Bureau of Labor Statistics, which was 83 per cent for October, 1919, and the 86 per cent claimed by the miners in their brief with which they stated they would be satisfied as a basis of the award, to an even higher figure provisionally estimated by the Bureau of Labor Statistics for December, 1919, on the basis of returns which are as yet incomplete.

In addition, we have taken into consideration increases in wages received by workers in other industries, as well as other factors herein set forth, including the consideration that every cent added to the tonnage rate on the annual production means an increase of five million dollars in the cost of producing coal, while each per cent of increase equals between seven and eight million dollars.

We hope that there will be a decline in the cost of living in the next two years, but we realize that the miners have borne an increase above their advance of wages and consider the possible future decline in living costs as an offset for these losses.

On the basis of $1,300,000,000 as the annual value of bituminous coal, the labor cost, which constitutes about 57 per cent of the total realization by the operators, is about $741,000,000. Twenty-seven per cent of this amount is approximately $200,000,000, which is the additional sum that will be paid to the miners, as the result of our award, above what they were receiving on October 31, 1919. For it must be borne in mind that our award is based on the status prior to the application of Dr. Garfield's 14 per cent. The 14 per cent itself involved a cost of over $104,000,000 to which our award adds approximately another $96,000,000.

Wage advances granted to miners in the central competitive district between 1913 and October 31, 1919, average 43 per cent for tonnage workers and 76 per cent for day men. The derivation of these percentages is shown in detail in the table below.

This table gives the coal tonnage of each of the four States constituting the central competitive field, and the percentage that the tonnage of each State is of the total. The table further shows, for machine workers, pick miners, and day men separately, the rates in 1913, the rates in 1919, and the percentage of increase in rates between these two dates. In arriving at the average increase for the four States, the increase for each is averaged, but in computing this average the States are weighted in proportion to their tonnage. For instance, Illinois produces nearly twice as much coal as Ohio; therefore, nearly twice as many tons of coal are paid for at the Illinois rate as at the Ohio rate, and in computing the average for the district, Illinois rates are given about twice as much weight as Ohio rates. The weights used for the four States are as follows:

Western Pennsylvania	19.8
Ohio	22.2
Indiana	14.5
Illinois	43.5

As the result of this calculation, it has been determined that the average rate for machine work in 1913 was 48.56 cents and in 1919, before the application of the 14 per cent, 72.03 cents, while the average rate for pick mining was 63.19 cents in 1913 and 85.53

cents in 1919. In averaging the rates for pick and machine mining a further weighting was necessary. Of the total coal produced in the central competitive field 66 per cent is mined by machines, and 34 per cent by hand; therefore, the machine-mining rate was given a weight of 66 and the pick-mining rate a weight of 34, resulting in an average rate for tonnage workers, pick and machine, in 1913 of 53.53 cents and in 1919 of 76.62 cents. The increase between these two dates for tonnage workers was thus 23.09 cents, or 43.1 per cent, while for day men it was 76.1 per cent.

Central competitive field.

State.	Per cent of tonnage.	Rates, 1913.	Rates, 1919.	Per cent increase over 1913.
MACHINE.				
Western Pennsylvania	19.8	44.61	70.00	56.9
Ohio	22.2	47.00	70.00	48.9
Indiana	14.5	49.00	72.00	46.9
Illinois	43.5	51.00	74.00	45.1
Total	100.0	48.56	72.03	48.3
PICK.				
Western Pennsylvania	19.8	64.64	87.64	35.6
Ohio	22.2	67.60	87.64	29.6
Indiana	14.5	61.00	84.00	37.7
Illinois	43.5	61.00	84.00	37.7
Total	100.0	63.19	85.53	35.4
Average tonnage rate		53.53	76.62	43.1
DAY MEN.				
Western Pennsylvania	19.8	2.84	5.00	76.1
Ohio	22.2	2.84	5.00	76.1
Indiana	14.5	2.84	5.00	76.1
Illinois	43.5	2.84	5.00	76.1
Total	100.0	2.84	5.00	76.1

Tonnage in millions: Western Pennsylvania, 41; Ohio, 46; Indiana, 30; Illinois, 90; total, 207.

The average wage advance awarded by us amounts to an increase over rates prevailing before October 31, 1919, of 27 per cent.

We direct that this increase be apportioned between the different groups of workers and classes of work along the following lines: That tonnage rates, pick and machine, be increased by 24 cents; that rates for all yardage, dead work, narrow work, and room turning be advanced 20 per cent; and that the compensation of day men also be advanced 20 per cent. All these advances to apply to the rates prevailing on October 31, 1919.

On the basis of this adjustment tonnage workers will receive an average increase over 1919 of 31 per cent, while day men whose wages were advanced disproportionately under the Washington agreement will receive an average increase of 20 per cent. It will be noted that the increase to the day men of 20 per cent amounts to a total increase since 1913 of 111 per cent. This figure is much in excess of the highest estimates of the advance in living costs. It should be understood that at the time the advance was given to the mine workers under date of October 6, 1917, the advance given to the day labor was at a rate considerably in excess of the advance given to the tonnage workers. In fixing this difference one of the principal factors considered was the claim that day labor had prior thereto not been paid at a rate proportionate to that received by tonnage workers. We, therefore, considered that a part of the advance allowed day labor in 1917 should not be considered in computing advances in wages based on increased living costs. It has been difficult to determine just what part of the excess advance to day labor in 1917 was due to the inequality as between tonnage and day workers and what part was due to efforts to induce this type of men to remain in the industry at a time when the war emergency was offering higher inducements in other industries. We feel, however, that, in allowing the day men an advance which brings their total increase since 1913 to 111 per cent, as against 88 per cent for tonnage workers, the method we have used is fair.

Whether all or any part of this amount will be passed on by the operators to the public depends on competitive conditions, but we estimate that the carrying out of other provisions of our findings will save the general public more than the cost of the additional wages.

It is to be expected that when all Government regulations are withdrawn and a competitive market for coal is reestablished, the overexpansion of the industry will not permit the operators to add to the price of coal all the increased compensation granted to the miners.

A table is shown below based on the returns made by coal operators to the Bureau of Internal Revenue for the year 1918. In this table are included returns from 1,551 operators, representing about one-third of the coal tonnage produced in 1918. We have the assurance of the United States Geological Survey that the relative figures would not be greatly different if all the operators were included in the returns. Of the 1,551 companies 337, or 22 per cent, reported net losses in 1918, and 168 companies, or 11 per cent, reported net incomes of less than 5 per cent on invested capital. Two charts illustrating this table are also presented.

It is to be expected that companies which were not able to operate profitably in 1918, when the demand for coal was unlimited, will be unable to remain in business in normal times, and that many of the companies making net returns of only 5 per cent during that banner year will also decide to discontinue operations under competitive conditions.

The two groups of companies reporting net losses and incomes of less than 5 per cent constitute about one-third of those for which returns are available, but represent only about one-seventh of the total invested capital and about one-ninth of the total tonnage. It is believed that the Nation's coal requirements can ordinarily be met by the operation of those collieries alone which have advantages resulting in lower production costs and consequent larger returns on invested capital.

The figures show that 36 per cent of the operators represented, having about 62 per cent of the total invested capital and producing about 48 per cent of the total tonnage, made net incomes of between 5 and 25 per cent on their investment, while other companies, still more fortunately situated, made even higher returns. The companies, however, that showed net incomes of over 25 per cent represent in the aggregate less than one-fourth of the total investment and two-fifths of the tonnage, while the companies making returns of 100 per cent or more represent a total investment of only about $4,000,000 and a total tonnage of about six millions.

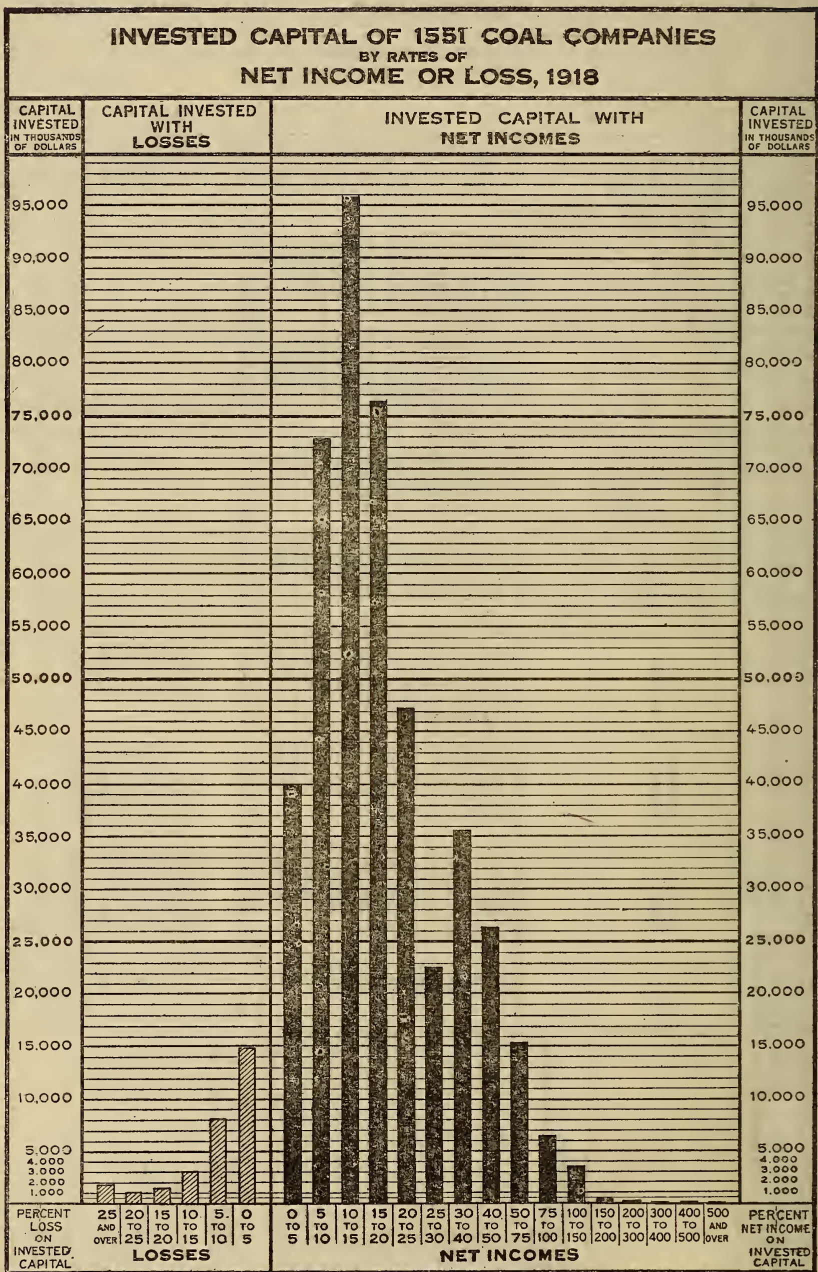
The average returns of all the reporting companies were 18.86 per cent on the investment before payment of the income and excess profits taxes and 9.72 per cent after deducting the taxes.

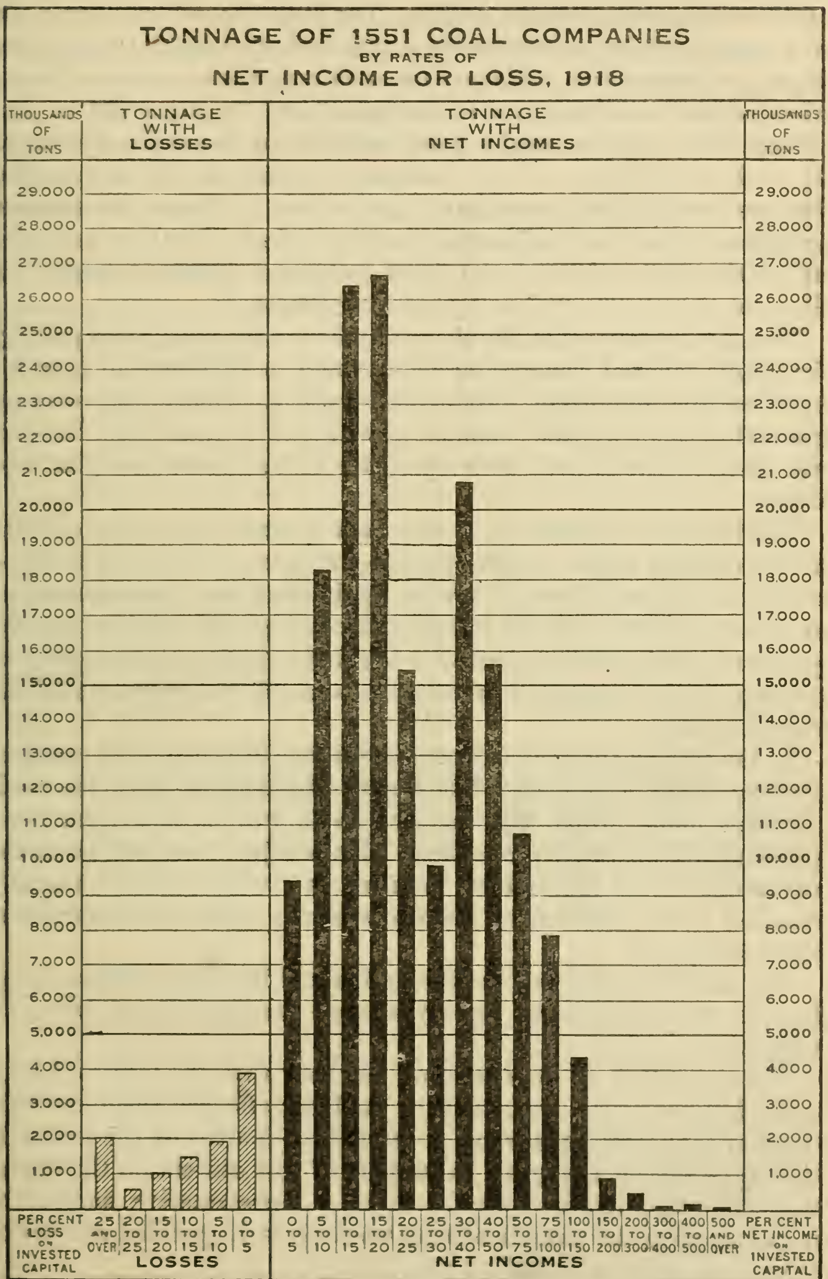
The companies reporting very high rates of return upon investment are all small concerns with investments of only a few thousand dollars, whose net income represents to a large extent the earnings of the owners for their own labor and management.

Table prepared from 1,551 returns of net income filed by bituminous coal-mining concerns for 1918, distributed according to the ratio of net income or net loss to invested capital, showing the number of returns, the aggregate amount of capital stock, invested capital, net income, income tax, war profits and excess profits tax, total tax, and the net income after deducting tax; also for those returns reporting loss and net aggregate loss. (Also total tonnage for 1918, supplied by the Geological Survey.)

	Number.	Capital stock.	Invested capital.	Net income.	Tax.			Net income after deducting tax.	Average per cent of net income to invested capital before deducting tax.	Average per cent of net income to invested capital after deducting tax.	Tonnage.
					Income tax.	War profits and excess profits tax.	Total tax.				
A Returns reporting income:											
Ratio of net income to invested capital (per cent)—											
Less than 5	168	$28,582,464	$41,932,284	$897,407	$81,675	$1,492	$83,167	$814,240	2.14	1.94	9,452,285
5 to 9.99	159	51,082,688	73,668,946	5,819,355	641,328	70,249	711,577	5,107,778	7.90	6.93	18,292,627
10 to 14.99	158	61,005,338	94,881,665	10,798,316	1,150,697	1,084,054	2,234,751	8,563,565	11.38	9.03	26,433,974
15 to 19.99	134	39,062,476	76,089,233	12,925,742	1,037,659	3,661,204	4,898,863	8,026,879	16.99	10.55	26,750,835
20 to 24.99	103	16,742,404	47,264,900	10,886,366	806,626	3,796,539	4,603,165	6,283,201	23.03	13.29	15,443,012
25 to 29.99	66	11,085,063	22,811,827	6,184,866	377,769	2,839,684	3,216,953	2,967,913	27.08	12.99	9,965,090
30 to 39.99	125	17,955,923	34,512,152	12,232,299	662,260	6,400,444	7,062,704	5,169,595	35.44	14.98	20,837,882
40 to 49.99	74	14,150,490	26,238,024	11,336,439	557,200	6,471,382	7,028,582	4,307,857	43.20	16.42	15,693,759
50 to 74.99	97	6,266,100	15,216,439	8,930,410	430,340	5,146,941	5,577,281	3,353,129	58.69	22.04	11,806,639
75 to 99.99	65	2,598,851	6,667,509	5,735,847	247,899	3,514,584	3,762,483	1,973,364	86.03	29.60	7,987,053
100 to 149.99	39	2,077,885	3,588,619	4,296,253	178,907	2,778,866	2,957,773	1,338,480	119.72	37.30	4,373,005
150 to 199.99	12	249,572	424,511	756,770	33,080	456,420	489,500	267,270	178.26	62.96	910,734
200 to 299.99	8	115,700	137,597	351,451	13,205	224,930	238,135	113,316	255.42	82.35	498,365
300 to 399.99	2	4,300	11,772	39,366	2,532	14,265	16,797	22,569	334.40	191.72	144,656
400 to 499.99	2	18,000	33,244	138,072	5,102	91,546	96,648	41,424	415.33	124.61	166,181
500 and over	2	5,300	11,824	125,248	7,389	59,669	67,058	58,190	1,059.27	492.13	137,254
Total reporting net income	1,214	251,002,554	443,520,546	91,454,207	6,233,168	36,812,269	43,045,437	48,408,770	20.62	10.91	168,893,351
B. Returns reporting loss:											
Ratio of loss to invested capital (per cent)—											
Less than 5	106	9,593,808	14,468,873	[1] 340,894					[1] 2.36		3,901,970
5 to 9.99	58	3,935,362	5,129,012	[1] 359,162					[1] 7.00		1,991,389
10 to 14.99	32	3,146,905	3,034,632	[1] 390,149					[1] 12.86		1,488,947
15 to 19.99	29	1,471,750	1,602,321	[1] 278,449					[1] 17.38		1,001,002
20 to 24.99	20	1,105,860	1,267,789	[1] 287,823					[1] 22.70		606,234
25 and over	92	1,679,154	1,942,604	[1] 963,255					[1] 49.59		2,019,994
Total reporting loss	337	20,932,839	27,445,231	[1] 2,619,732				[1] 2,619,732	[1] 9.55		11,009,536
Total A and B	1,551	271,935,393	470,955,777	88,834,475	6,233,168	36,812,269	43,045,437	45,789,038	18.86	9.72	179,902,887

[1] Loss.


INVESTED CAPITAL OF 1551 COAL COMPANIES
BY RATES OF
NET INCOME OR LOSS, 1918
CAPITAL INVESTED IN THOUSANDS OF DOLLARS
CAPITAL INVESTED WITH LOSSES
INVESTED CAPITAL WITH NET INCOMES
95,000
90,000
85,000
80,000
75,000
70,000
65,000
60,000
55,000
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
4,000
3,000
2,000
1,000
PERCENT LOSS ON INVESTED CAPITAL
25 AND OVER
20 TO 25
15 TO 20
10 TO 15
5 TO 10
0 TO 5
LOSSES
0 TO 5
5 TO 10
10 TO 15
15 TO 20
20 TO 25
25 TO 30
30 TO 40
40 TO 50
50 TO 75
75 TO 100
100 TO 150
150 TO 200
200 TO 300
300 TO 400
400 TO 500
500 AND OVER
NET INCOMES
PERCENT NET INCOME ON INVESTED CAPITAL


TONNAGE OF 1551 COAL COMPANIES
BY RATES OF
NET INCOME OR LOSS, 1918
THOUSANDS OF TONS
TONNAGE WITH LOSSES
TONNAGE WITH NET INCOMES
THOUSANDS OF TONS
29.000
28.000
27.000
26.000
25.000
24.000
23.000
22.000
21.000
20.000
19.000
18.000
17.000
16.000
15.000
14.000
13.000
12.000
11.000
10.000
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
PER CENT LOSS ON INVESTED CAPITAL
25 AND OVER
20 TO 25
15 TO 20
10 TO 15
5 TO 10
0 TO 5
LOSSES
0 TO 5
5 TO 10
10 TO 15
15 TO 20
20 TO 25
25 TO 30
30 TO 40
40 TO 50
50 TO 75
75 TO 100
100 TO 150
150 TO 200
200 TO 300
300 TO 400
400 TO 500
500 AND OVER
NET INCOMES
PER CENT NET INCOME ON INVESTED CAPITAL

We believe that the law of supply and demand will result in a competition for markets and will not permit the operators to shift all the wage advance to the public. The bulk line, which during the war was placed by governmental authority high enough to stimulate maximum production, will move lower in response to economic forces when normal conditions are reestablished and the price will be prevented from rising beyond a point sufficient to assure the Nation of its coal requirements. This forecast is based on the assumption that no combination to maintain prices can be formed among the operators. Such a combination besides being illegal seems quite impracticable in view of the 7,000 companies involved located as they are in some 26 or 27 coal-producing States.

We have evidence that the share of labor in the total price paid by the public for coal was greater in 1916 and in 1917 than in 1918 for most of the important producing districts. Hence the advance granted to labor by this commission will tend to reestablish the prewar distribution of each dollar paid for coal as between capital and labor.

The increase will thus in no way be a further step in the circular ladder of more wages—higher prices—increase in the cost of living—still more wages. Even if it were established that this sequence of events obtains throughout industry, including coal mining, yet the question would remain whether it is fair to single out one group of workers as the victims of an attempt to check the operation of the vicious circle.

In the case of the coal industry conditions are such, as a result of overexpansion, that higher labor costs will tend to force the readjustment under which the national needs will be met from more economically operated properties. This readjustment will be to the advantage of the coal-mining industry as a whole, and is urgently required in the interests of national economy under the present circumstances.

It is the true method of stabilizing the coal industry and providing for the more continuous employment of the capital and labor involved.

The contention of the operators has been that the miners do not make full use of the opportunities for labor afforded them and that those of the miners who work at least three-fourths of the available time earn sufficient wages. In support of this contention the operators submitted figures collected from a representative number of mines showing the number of men working each specified number of days, with their daily and monthly wages.

We realize that a certain proportion of time is lost by the miners voluntarily. At the same time, we find that the figures submitted by the operators do not afford a measure of the amount of time so lost by the miners, for the reason that these figures make no allowance for the turnover. In these tabulations every man who worked at a mine at any time during the month is counted on the same basis as one who was on the roll every day the mine was in operation, regardless of the fact that many miners may have obtained employment on the last day of the month or been discharged at the end of the first day or moved to another mine in the middle of the month or died some time during the period.

A man who worked 13 days out of a possible 26 at 1 mine and 13 at another would be counted in these figures as 2 men with an aggregate voluntary absenteeism of 26 days, or 50 per cent of the 52 working-days for the 2 mines.

A further defect in these figures is that the number of days that a mine is in operation is not necessarily the number of days that all the miners on the pay roll have an opportunity of employment. Parts of the mine may have been in bad condition or closed for repairs, or the coal in the working places may not have been loaded out, making it impossible to mine more coal until the place is cleared, or the places may not have been undercut, making it impossible to load coal until this was done. Loss of time caused by these conditions is properly chargeable to the industry rather than to the miners.

But even after allowance has been made for all the factors entering into the problem a margin remains between the number of days that the miners actually work and the number when they have an opportunity to work. A fair interpretation of this margin is that an irregular industry breeds irregular habits among the workers. When the men are not accustomed to going to work regularly every morning the incentive for regularity becomes less potent and a certain amount of absenteeism inevitably results. This is the psychological factor of irregularity, and it may be expected that it will disappear in large measure as the industry becomes more stable.

THE SIX-HOUR DAY AND THE FIVE-DAY WEEK.

We have gone fully into the mine workers' demand for a six-hour day and a five-day week, equivalent to a reduction of working hours from 48 to 30 per week.

In considering this demand, we were influenced in arriving at our decision by the fact that steady work on the part of all workers is urgently required by the entire world during the period of reconstruction and reorganization when the enormous destruction and disorganization wrought by the World War in all countries and affecting all industries must be counteracted by unusual industry and perseverance. To make any restriction affecting the output would be an economic crime.

It is claimed by the miners on the basis of experience after previous reductions of hours of labor and of the effects of reduction of hours in other countries, that curtailment of working time would not reduce the output in anything like a corresponding proportion. It is our view that arguments based on the effects of a reduction from 10 to 8 hours can hardly apply to a reduction from 8 to 6 hours, or from 8 to 7 hours. Production in countries where there has been a reduction in hours is less than before the hours were reduced. We feel that our responsibility to the Nation will not permit us to make an award that would curtail appreciably the productivity of the workers in a basic industry.

Each coal company endeavors to have enough men on its rolls to carry it over the peak of the rush season; the operators want coal mined while there is a demand, each company realizing that, if it is unable to satisfy its customers, they will turn to other producers and the sale will be permanently lost. A labor supply, sufficient for the needs of the rush season, is excessive during the rest of the year, part-time employment results, and the Nation will ultimately have to pay in its fuel bills the cost of maintaining this larger army of only partially employed workers.

We are convinced that a reduction in hours of labor would only make a bad situation worse, that the miners' demand on this point is clearly uneconomic, and that to grant it would be detrimental to their own interests.

Another result that would flow from a reduction in hours, with the wages that it is proposed should be paid, will be to increase the number of men who will seek employment at the mines on account of the shorter hours and the full pay, and this, in turn, will result later in further demands for the shortening of hours in order to give employment to the men who would thus be added to an industry that is already overmanned. We can not, in view of our responsibilities, agree to a demand that would lead to such disastrous results. At the same time, we hope to accomplish something in the direction of the stabilization of the industry by means of constructive proposals discussed elsewhere in this report.

While we are in full sympathy with the miners in their aspiration for a fuller life, we can not help but feel that eight hours a day is not too much to work under present circumstances.

The contention that the extra hazardous nature of the mining industry makes it desirable to reduce the risks run by the miners by reducing the time during which they are exposed to this risk is inconsistent with the claim that the miners wish to work the same number of hours per year as they are working now, provided the hours are more evenly distributed through the year, for if they work as many hours they will be exposed to the same risks. We also have considered the fact that contractual hours of labor apply only to day workers, and that more than 60 per cent of the miners work on a tonnage basis. To reduce the number of earning hours during the year, particularly when one of the chief complaints of the miners is that they do not have sufficient hours of work and consequently can not earn adequate wages, would clearly not be consistent with the commission's conception of its duty.

Therefore, our conclusion is that, under all the conditions, the eight-hour day should be maintained.

CAMPS AND HOUSING.

We believe that generally there has been marked progress in the larger mining centers of the country toward improving living conditions and community life. Yet, on the other hand, in isolated mining camps where many miners are employed this has not taken place. We wish to commend the mining companies that have recognized the advantages accruing through the establishment of better homes and such social conditions as will enable the miner to acquire a home of his own. If there is to be full cooperation and a proper relation between employer and employee, it can only be brought about if the operator takes an enlightened and humane attitude.

We therefore recommend to the operators that they endeavor to plan their operations in such a way that this ideal may be realized, giving due consideration to the physical conditions involved. Where miners' homes are owned by the operators and rented to the miners there is even greater need for wise foresight on the operator's part; and while it is felt that there has been considerable improvement in the type constructed in late years for miners' homes—and this is true whether they are owned by the mine workers or by the operators and rented to the miners—we also recognize that there are operations where the old type of construction still obtains and where the conditions are not satisfactory or sanitary.

We believe the mine workers are entitled to homes of a modern type, with good sanitation, and that this is essential to maintain the proper standard of American living. We recognize that the operators have in many instances been limited in the type of home they could construct, sometimes by the length of the expected life of the operation and at other times by the joint-agreement limitation on the rentals to be paid. We therefore recommend that when houses are to be constructed by operators houses of a modern type, with good sanitation, shall be built, the type of house to be based on the probable life of the mine; that rentals shall be based on the actual investment in houses and land; that the return should include no profit to the operator; and that the rentals should be only sufficient to maintain the structures in good condition, provide for the amortization of the investment cost and proper insurance, and return not to exceed 6 per cent on the invested capital while such sum is invested.

Where the expected life of the operation exceeds 25 years the period of amortization shall be 25 years, but in no other event shall the amortization period be less than the expected life of the property.

INTRODUCTION OF LABOR-SAVING DEVICES AND MACHINERY.

The United Mine Workers, through their president, have stated their position on the introduction of machinery and other mechanical devices that tend to increase production and efficiency in the mining industry. The statement fully accepts in principle the desirability of the introduction of such machinery and devices.

The statistics before the commission show that 57 per cent of the country's total production of bituminous coal is machine mined. It is recognized by the commission that the introduction of machinery and devices can be prevented by the mine workers by failure to agree upon the rates, terms, and conditions under which the machinery and devices are to be used. We recommend that the good offices of the miners' international organization be exercised to maintain the principle that has been so fully presented in behalf of the mine workers.

Pending the joint district agreement between the miners and operators covering a fair schedule of rates for piecework or tonnage operation of any new device or machinery, the right of the operator to introduce and operate any such new device or machinery shall not be questioned, and his selection of such men as he may desire to conduct tests with or operate such device or machinery shall not be in any way interfered with or obstructed by the miners or their representatives, provided the wages offered are at least equal to the established scale rates for similar labor.

The operator shall be privileged to pay in excess of the established scale rates of pay without such excess pay being considered as establishing a permanent condition for the operation of said device or machine.

After the device or machine shall have passed the experimental stage and is in shape to be introduced as a regular component part of the production of coal, then for the purpose of determining a permanent scale of rates (such rates to continue until the joint scale conference above referred to fixes a scale) for operating such device or machine the mine workers may have a representative present for a reasonable time to witness its operation, after which a schedule of rates shall be determined by mutual agreement, which scale shall be concluded within 60 days after a fair test has been made.

The test will disclose the labor-saving in the cost of producing coal, out of which labor-saving the mine worker shall receive the equivalent of the contract rates for the class of work displaced, plus a fair proportion of the labor-savings effected.

In like manner new or untried systems of mining, for instance, long wall, retreating long wall, or the panel system, may be introduced by the operator for the purpose of conservation, increasing production, the lessening of cost, or, in the interest of safety, without his right to make such change being abridged; provided, however, that for this class of work the mine worker shall in the same manner receive the equivalent of the contract rates for the class of work displaced, plus a fair proportion of the labor-savings effected.

DISCOUNTING EMPLOYEES' WAGES.

The mine workers presented to the commission statements showing that a serious evil exists in the industry in certain localities, where the operators exact discounts upon advances of pay made between pay days.

We recommend that the making of advances be discouraged in every way; and if for any good reason an advance is asked and made, it shall be done without discount, either directly or indirectly.

APPLICATION OF THE 14 PER CENT WAGE INCREASE.

We believe that while in certain districts the application of the 14 per cent has been made in such a manner that the miners have not received the equivalent of the 11 cents flat rate as applied in the central competitive field, yet, in view of the application made in this award of the rates, we feel that any injury done the miners who failed to receive the 11 cents between November 1 and April 1 will be equalized under the application herein made of the new rates set up.

POWDER.

We are of the opinion that there should be no attempt on the part of the employer to profit by the handling of any explosives sold to his employees, and believe that the future policy should be that explosives be furnished the miner at cost, including the cost of handling, transportation, and insurance.

PRICE OF HOUSE COAL TO THE EMPLOYEES AT THE MINE.

It is our belief that the companies should not make any profit on the coal supplied to the miners. On the other hand, we feel that the miners do not expect coal at less than cost, a large part of which is their own wages, and that an increase in the price of coal commensurate with the increase in the miners' compensation will be cheerfully met by the men.

For the term of the contract, the price at which house coal shall be furnished the mine workers at the tipple shall be determined by adding to the price to the miners in effect on October 31, 1919, the average percentage allowed as an increase on the wage scale, to wit, 27 per cent. When coal is delivered to the miners' houses by the operator, the actual cost of delivery shall be added.

CAR PUSHING.

We find that pushing of cars, loaded or empty, by the mine workers is natural to the industry and is an integral part of the day's work. Through the negotiations of 30 years this work, where practiced, has been paid for in general in the tonnage rates.

The principle of car pushing, we believe, is not the burning question, but rather the abuse that has grown up is the subject of the miners' demand for relief. We are unable to take a complete view of the car-pushing question, covering as it does, the industry in all mining fields. We believe, however, that the abolition of car pushing would ruin financially several great coal-producing sections.

We recognize the tendency to increase the size and the weight of cars and equipment, especially in the thick seams of coal, so that it becomes an abuse, and we feel that the complaint is not without foundation. We appreciate, however, the difficulty of fixing a definite limit of weight on cars pushed because of the varying conditions in mining in the different fields and because of the highly competitive relations between the thick and thin seam producing districts. We, therefore, earnestly recommend to operators that the alleviation of abuses in car pushing, where they exist, be the subject of careful consideration by them in order that ameliorating practices may be introduced.

BLACKSMITHING.

We are of the opinion that in some instances the miners have been charged excessive prices for blacksmithing, and we find that for the purpose of the new agreement the price charged the miners shall be on the basis of existing contracts; provided, however, that the maximum charge shall not exceed three-fourths of 1 per cent of the miners' gross earnings.

SPECIAL CASES.

The testimony before this commission having shown conclusively that there exist in certain sections of this country problems that should be given consideration outside of the province of this commission, we make special awards in regard to the central competitive field, northern Illinois, Assumption and Decatur, Ill., and Washington; also special recommendations in regard to Kanawha, Paint Creek, and Cabin Creek, in West Virginia, and in regard to Alabama, Tennessee, eastern Kentucky, and Maryland.

CENTRAL COMPETITIVE FIELD.

The mine workers made a demand for changes in several differentials, such as the differential between machine and pick mining, thick and thin seam, and other forms of differentials. Inasmuch as the questions submitted are technical and complex in their nature, their determination may be expected to affect materially competitive relations as between operators, and the relative earnings as between mine workers. As the commission's time and staff were limited, we believe that it would be manifestly unfair to undertake a determination of these questions, since they will require months of careful study by experienced technical experts. We therefore provide for the setting up of a commission with a proper staff of technically trained men, to make a complete study of the questions involved, the award of such commission to become part of the wage agreements in the districts affected, as hereinafter provided.

We also deem it desirable that said commission investigate the advisability of discontinuing the check-off system of collecting dues for the United Mine Workers of America.

We therefore direct that a commission be selected by the scale committees of miners and operators, respectively, in the central competitive field, which shall study the differentials hereinafter set forth as to working conditions, wage earnings, production costs, and competitive relations, as well as the check-off system of collecting dues for the United Mine Workers of America.

The commission shall consider:

1. The differential between pick and machine mining rates in Indiana.
2. The thick and thin vein differential in the Pittsburgh district.
3. The seven-cent machine differential in Illinois.
4. The differential in tonnage rates in southern Illinois.
5. The discontinuance of the check-off system of collecting dues for the United Mine Workers of America.

We furthermore recommend that this commission shall be composed of eight members, one mine worker and one operator from each district in the central competitive field; also that the expense of this commission shall be borne by the mine workers and operators affected, each paying one-half; and that the commission so constituted shall make a report to the regular joint conference of the central competitive field, to be held at the expiration of the agreements based upon this award.

NORTHERN ILLINOIS.

We direct that the mine workers of district No. 12, Illinois, and the Illinois Coal Producers' Association, respectively, shall each select two members of a joint commission to study the situation in northern Illinois, Assumption, Ill., and Decatur, Ill., as to wage rates, earnings, working conditions, production costs, and competitive relations, which commission shall report its findings to the joint conference of the Illinois mine workers and operators, following the expiration of the agreement for which this award constitutes a basis.

The expenses of this commission shall be borne by the mine workers and operators affected, each paying one-half.

WASHINGTON.

We direct that the United Mine Workers of District No. 10, Washington, and the Washington Coal Producers' Association, respectively, shall each select two members of a commission and the four members so selected shall appoint an experienced mining engineer, who shall also be a member of the commission. This commission shall within 30 days from appointment investigate and report to the joint conference of mine workers and operators of the State of Washington the effect of the application of the awards herein set forth to the agreements and wage schedules in that State. In the meantime the awards herein shall not apply in Washington.

The expenses of this commission shall be borne by the mine workers and operators affected, each paying one-half.

KANAWHA, PAINT CREEK, AND CABIN CREEK, W. VA.

The miners and operators, having agreed in joint conference to the establishment of a joint commission for the purpose of making an investigation within the Kanawha, Paint Creek, and Cabin Creek fields for the possible correction of inequalities and to bring about a more uniform condition, have not had an opportunity to present their report to the joint conference. As both the operators and the miners have asked that the findings of this commission be written into the new joint agreement, which is to be predicated on this report, we recommend that the mine workers and operators compose their differences in harmony with the report of the joint commission referred to, and that the findings of that commission be written into the agreement.

ALABAMA, TENNESSEE, EASTERN KENTUCKY, AND MARYLAND.

The representatives of the miners from Alabama, Tennessee, eastern Kentucky, and Maryland filed briefs citing the wages and conditions of employment, but, as the records show, none of the operators from these districts appeared before the commission, but they filed letters with the commission to the effect that they have no joint relations with the mine workers of their districts.

In each of these districts during the war certain wage increases were adopted and put into effect by the United States Fuel Administration and tribunals were set up for the adjustment of the usual complaints common to mining. These tribunals included a permanent umpire in each district, and in order that justice may be done to all and the mine workers be given the right to enjoy the corresponding advantages that the award given the mine workers elsewhere may reflect we would recommend that the operators arrange to meet with representatives of the miners of these districts and to put into effect the award herein, to the end that industrial peace and tranquillity may prevail.

THE AWARD.

We hereby award that all the terms, conditions, and provisions, mining rates, and wage schedules in effect on October 31, 1919, in what is known as the Washington agreement, dated October 6, 1917, and the agreements preceding the Washington agreement, to which the Washington agreement is supplemental and upon which it is predicated, applying to the central competitive field and the outlying districts, shall be written into the agreement for which these findings constitute a basis, except as the same may be modified by the awards and recommendations hereinafter set forth.

As a modification of the terms of the agreements above recited, we award:

A. That the following specific awards shall constitute the basis upon which wage agreements in all districts shall be predicated. They are not subject to negotiations, but shall be written into all agreements and schedules of wages.

B. That the 14 per cent average increase in wages fixed by the United States Fuel Administration shall be eliminated on March 31, 1920, and in lieu thereof the wage scale of the Washington agreement, referred to, shall be increased as set forth herein.

C. That the agreement for which this award constitutes a basis shall take effect April 1, 1920, and continue in effect up to and including March 31, 1922.

D. That the mining prices for mining mine-run coal, pick and machine, shall be advanced 24 cents per ton.

E. That in the block-coal field of Indiana, and in other localities that are still on the screened-coal base, the usual methods of applying the tonnage rates shall continue. This also has its application to districts that have a joint understanding in applying wage increases to low coal.

F. That all day labor and monthly men (the advance to monthly men to be based on an average of the usual number of days he is required to work in a month), except trappers and other boys, be advanced $1 per day. Trappers and boys receiving less than men's wages to be advanced 53 cents per day.

G. That all yardage, dead work, and room turning be advanced 20 per cent: *Provided*, *however*, That nothing shall prevent the representatives of the miners and operators in any district, in joint conference, from taking the flat equivalent of the 20 per cent and applying it to yardage, dead work, and room turning, if by so doing they will make for uniformity and maintain the differentials. Failing, however, to agree to such application, then the 20 per cent shall be applied on the existing rates, effective October 31, 1919.

H. That the decisions, which hereinbefore appear in the body of this report and which are hereinafter summarized, are to be incorporated, according to the letter and spirit of the said decisions, in the agreements to be drawn between the miners and operators; and that the said decisions shall constitute the basis upon which the wage agreements in all districts shall be predicated. They are not subject to negotiations, but shall be written into all agreements and schedules of wages. However, the several joint-scale committees may, by mutual agreement, make such proper adjustment of local conditions as may come within the terms and scope of this award, and of the Washington agreement, dated October 6, 1917, and of the agreements preceding the Washington agreement, to which the Washington agreement is supplemental, as more fully set forth in clause No. 6 of the joint agreement of the central competitive field, dated March 9, 1916. These decisions are summarized as follows:

1. That the fulfillment of the agreement to be entered into shall be guaranteed by the international union, and the fulfillment of joint agreements entered into in any district shall also be guaranteed by the officers of the international organization, as well as by the officers of the district, and it shall be their duty to see that all such agreements are carried out both in the letter and in the spirit.

2. That the eight-hour day in effect on October 31, 1919, in what is known as the Washington agreement, dated October 6, 1917, and the agreements preceding the Washington agreement, to which the Washington agreement is supplemental, applying in the central competitive field and outlying districts, shall be

written into the agreements for which these findings constitute a basis.

3. That the pushing of cars, loaded or empty, by the mine workers is natural to the industry and is an integral part of the day's work, and that through the negotiations of 30 years this work, where practiced, has been paid for in general in the tonnage rates.

4. That pending the joint district agreement between the miners and operators covering a fair schedule of rates for piecework or tonnage operation of any new device or machinery, the right of the operator to introduce and operate any such new device or machinery shall not be questioned, and his selection of such men as he may desire to conduct tests with or operate such device or machinery shall not be in any way interfered with or obstructed by the miners or their representatives, provided the wages offered are at least equal to the established scale rates for similar labor.

The operator shall be privileged to pay in excess of the established scale rates of pay without such excess pay being considered as establishing a permanent condition for the operation of said device or machine.

After the device or machine shall have passed the experimental stage and is in shape to be introduced as a regular component part of the production of coal, then for the purpose of determining a permanent scale of rates (such rates to continue until the joint scale conference above referred to fixes a scale) for operating such device or machine the mine workers may have a representative present for a reasonable time to witness its operation, after which a schedule of rates shall be determined by mutual agreement, which scale shall be concluded within 60 days after a fair test has been made.

The test will disclose the labor-saving in the cost of producing coal, out of which labor-saving the mine worker shall receive the equivalent of the contract rates for the class of work displaced, plus a fair proportion of the labor-saving effected.

In like manner new or untired systems of mining; for instance, long wall, retreating long wall, or the panel system may be introduced by the operator for the purpose of conservation, increasing production, the lessening of cost, or in the interest of safety without his right to make such change being abridged: *Provided, however*, That for this class of work the mine worker shall in the same manner receive the equivalent of the contract rates for the class of work displaced, plus a fair proportion of the labor-saving effected.

5. That a commission be selected by the scale committee of miners and operators in the central competitive field, respectively, which shall study the differentials hereinafter set forth as to working conditions, wage earnings, production costs, and competitive relations, as well as the check-off system of collecting dues for the United Mine Workers of America, the award of such comission to become part of the wage agreements in the districts affected.

The commission shall consider:

a. The differential between pick and machine mining rates in Indiana.

b. The thick and thin vein differential in the Pittsburgh district.

c. The seven-cent machine differential in Illinois.

d. The differential in tonnage rates in southern Illinois.

e. The discontinuance of the check-off system of collecting dues for the United Mine Workers of America.

We furthermore recommend that this commission shall be composed of eight members, one mine worker and one operator from each district in the central competitive field; also that the expense of this commission shall be borne by the mine workers and operators affected, each paying one-half; and that the commission so constituted shall make a report to the regular joint conference of the central competitive field, to be held at the expiration of the agreements based upon this award.

6. That if and when, during the life of the agreement to be drawn by the joint wage conference (which agreement is to be predicated upon this report), such boards and tribunals as recommended by the President's industrial conference are set up, they shall be employed in connection with the investigation of questions of controversy between miners and operators: *Provided, however*, That in the event that no such machinery is created, that a board of inquiry and adjustment for the bituminous coal industry shall be created and maintained under the said joint agreement—this board to consist of a chairman and two other representatives appointed by the President; two representatives of the mine workers selected by the mine workers; and two representatives of the mine operators selected by the mine operators—and that matters in controversy between the bituminous coal miners and operators be submitted thereto; that the expense of such board be borne by the mine workers and operators equally; and that such tribunal, board, or commission shall immediately undertake the investigation of the questions in controversy, and shall publish within 60 days its findings of fact, and if not unanimous, then in separate reports, and that pending such report no general strike shall be called: *Provided, however*, That if no report is published within the designated period, then a retarding of the strike shall end.

7. That the price at which house coal shall be furnished the mine workers at the tipple shall be determined by adding to the price in effect on October 31, 1919, the average percentage allowed as an increase on the wage scale, to wit, 27 per cent, and that when the coal is delivered to the miners' houses by the operator the actual cost of delivery shall be added.

8. That for the purpose of the new agreement the prices charged the miners for blacksmithing shall be on the basis of existing contracts; providing, however, that the maximum charge shall not exceed three-fourths of 1 per cent of the miners' gross earnings.

9. That explosives shall be furnished the miners at cost, which is to include handling, transportation, and insurance.

10. That since the miners and operators have agreed in joint conference to the establishment of a joint commission for the purpose of making an investigation within the Kanawha, Paint Creek, and Cabin Creek fields for the possible correction of inequalities in order to bring about a more uniform condition, but have had no opportunity to present their report to the joint conference, and as both the operators and miners have asked that the findings of this commission be written into the new joint agreement, which is to be predicated on this report, we direct that the mine workers and operators compose their differences in harmony with the report of the joint commission referred to, and that the findings of that commission be written into the agreement.

11. That the mine workers of district No. 12, Illinois, and the Illinois Coal Producers' Association, respectively, shall each select two members of a joint commission to study the situation in northern Illinois, Assumption, Ill., and Decatur, Ill., as to wage earnings, working conditions, production costs, and competitive relations, which commission shall report its findings to the next regular joint conference of the Illinois mine workers and operators following the expiration of the agreement for which this award constitutes a basis. The expense of this commission shall be borne by the mine workers and operators affected, each paying one-half.

12. That the United Mine Workers of District No. 10, Washington, and the Washington Coal Producers' Association, respectively, shall each select two members of a commission and the four members so selected shall appoint an experienced mining engineer, who shall also be a member of the commission. This commission shall, within 30 days from appointment, investigate and report to the joint conference of mine workers and operators of the State of Washington, the effect of the application of the awards herein set forth to the agreements and wage schedules in that State. In the meantime, the awards herein shall not apply in Washington. The expenses of this commission shall be borne by the mine workers and operators affected, each paying one-half.

I. That the above summary shall in no way modify the decisions and awards set out in this report.

RECOMMENDATIONS.

In addition to the above summary of the awards the following specific recommendations are made:

(1) That an executive order be issued instructing all Federal departments and other Federal agencies to purchase, transport, and store at the point of consumption, where such action may be practicable, an estimated three months' winter supply of bituminous coal before July 1 of each year.

(2) That the Council of National Defense assume the duty of obtaining the support of the general public, particularly

the large consumers, in the stabilization of the coal industry through the purchase, transportation, and storage at the point of ultimate consumption of its winter supply of coal--this to be done during the spring and summer months.

(3) That an executive memorandum be issued to the Interstate Commerce Commission transmitting to that body a copy of this report with the findings, awards, and recommendations, to the end that the Interstate Commerce Commission may aid in the solution of the problems herein outlined, and in the hope that the Interstate Commerce Commission will give particular attention to the questions of seasonal freight rates, car supply, and car distribution, as well as the problem of railway coal purchase for storage.

(4) That executive authority be issued permitting the transmission to the governors of the various States, to county and municipal authorities, and to the various State railway and public utility commissions copies of this report and of the specific recommendations made therein; and that the State railway and public utility commissions make use of their influence with the various public utility corporations looking toward the early purchase and storage of coal by these corporations reflecting, if necessary, the excess cost of such storage in authorized rates, and also to the end that instructions may issue from State, county, and municipal authorities directing the purchase and storage of three months' supply of coal on or before July 1, of each year, by and for the use of the States, counties, and municipalities, particularly on public works and in public buildings.

(5) That the Interstate Commerce Commission consider the possible effect of a graduated seasonal freight rate that is lowest in the spring and a monthly graduated increase in rates until the late fall.

(6) That copies of this report with its findings, awards, and recommendations be transmitted to the carriers to the end that they may be enabled to cooperate, particularly in regard to car construction and distribution, coal storage, and the elimination of the practice of commandeering.

(7) That a copy of this report be transmitted to the Federal Reserve Board to the end that Federal reserve banks be asked to favor as eligible for rediscount paper drawn against coal in storage.

(8) That the Interstate Commerce Commission, State railroad and public utility commissions, within their jurisdictions, issue, where lawful, rules controlling car distribution among mines, to the end that no particular mine or mines may be permitted to obtain through a practice of car assignment and guarantees, preferential car service.

(9) That carriers, and, if necessary, the Interstate Commerce Commission and the various State railway commissions, within their jurisdictions, issue the instructions necessary to abolish the practice whereby purchasing agents of carriers use the com-

pany's control over car supply to force down the price of railway fuel.

(10) That the operators in supplying their quota of fuel to the railroads avoid, except in emergencies, the use for that purpose of coal whose properties make it more valuable for other uses.

(11) That all data relating to the mining, distribution, and consumption of bituminous coal be coordinated and correlated periodically and regularly by some one Federal agency such as the Interdepartmental Board of the Council of National Defense, in order that it may be available for any committee or commission hereafter called upon to investigate controversies between operators and miners in the bituminous coal industry.

(12) That operators endeavor to plan their operations in such a way that improvement may be made in camps and housing adequate for the maintenance of the American standard of living, giving due consideration to the physical conditions involved, and recommend that when houses are to be constructed by operators that they shall be of modern type, based upon the probable life of the mine, with good sanitation; that rentals shall be based on the actual investment in houses and land; that the return should include no profit to the operators; that rentals be only sufficient to maintain the structures in good condition, provide for the amortization of the investment cost and proper insurance, and return not to exceed 6 per cent on the invested capital while such sum is invested, and that where the expected life of the operation exceeds 25 years, the period of amortization should be 25 years, but in no other event should the amortization period be less than the expected life of the property.

(13) We recommend that the good offices of the miners' international organization be exercised to maintain the principle that has been stated by the mine workers who appeared before us covering their approval of the introduction of labor-saving devices and machinery.

(14) That the making of advances on miners' pay be discouraged in every way, and, if for any good reason an advance is asked and made, it shall be made without discount, either directly or indirectly.

(15) That the operators give careful consideration to the alleviation of abuses in car pushing where they exist, in order that ameliorating practices may be introduced.

(16) That representatives of the miners and operators in Alabama, Tennessee, eastern Kentucky, and Maryland arrange to put into effect the award herein set out, to the end that industrial peace and tranquillity may prevail.

(17) That your commission be discharged from its duties upon the signing of the agreement specified, and that all files, records, and property of this commission be then transferred to the custody of the Council of National Defense, whose disbursing officer has acted as disbursing officer of this commission, and any and all obligations incurred by it be liquidated by the

said council from the funds appropriated by Congress for the expenses of this commission, upon vouchers approved by the Director of the Council of National Defense, and, therefore, that the unexpended balance of the appropriation for this commission be transferred to the said council, and that on June 30, 1920, the files and records of this commission be consolidated with the files of the Fuel Administration.

In submitting this report particular attention is called to the fact that herein every effort has been made for the protection of the public, not only for the period under which this protection can be guaranteed by the Executive under the powers granted him by the Lever Act, but it has been our effort to go into the underlying causes for high costs and to offer some remedy therefor—this, in order that in the future, when the Government relaxes its control over prices, there may be a continuing force at work in the public interest.

We believe it is obvious that unless some changes can be made toward the end of reducing costs in coal production and distribution, no act of Congress, no order of the Executive, nor any other regulation by constituted authority can in the end provide against the continuing high costs.

It is for this reason that we believe that this industry should be placed upon the proper basis for more continuous and thus more economical production and distribution, with the result that the cost of coal to the people will be reduced.

All of which is respectfully submitted this 10th day of March, 1920.

HENRY M. ROBINSON, *Chairman.*
REMBRANDT PEALE, *Commissioner.*

Attest:

HERBERT N. SHENTON,
Executive Secretary.
SAML. A. TAYLOR.
D. M. REYNOLDS.
E. A. GOLDENWEISER.
CHARLES O'NEILL.
RUDOLPH R. REEDER, jr.

THE MINORITY REPORT

OF THE

United States Bituminous Coal Commission

TO

THE PRESIDENT

FROM

JOHN P. WHITE, Commissioner

MINORITY REPORT.

DEAR MR. PRESIDENT: The inability of the Bituminous Coal Commission to agree upon fundamental issues compels me to set forth clearly and briefly my viewpoint.

I have in mind the duty and obligation I owe to you, the industry, and the country. My report and award embodies this principle, with the expressed hope of enabling you to so determine and act that stability to the industry may accrue, justice and equity be established, and unrest displaced by contentment in such a full measure as to bring a long period of essential well-being to all.

The testimony and evidence submitted to your commission brought forth all the elements entering into the controversy between the coal operators and miners that caused the deplorable and disastrous condition that led to the creation of this commission.

If this commission was to succeed in its work, a calm, dispassionate, judicial decision, unanimous in its findings, should have resulted. That this was not accomplished is, indeed, regrettable, which I deeply deplore.

I have carefully analyzed the majority report as a solution of the main and principal issues, with some of which I am in accord. To subscribe to their plan of reference of many major problems I can not agree. To do so would only leave unsettled many of the clearly defined issues that have caused so much contention and controversy of long standing.

The majority in arriving at its conclusion was guided mainly by the theory of war-time methods in applying wage increases, namely, the increased cost of living. To this principle I can not subscribe. The great outstanding fact that developed by this commission's hearings in which every citizen is interested is the increased cost of coal.

From 1913 to October 31, 1919, the mine workers' rate per ton increased $0.23, the operators' receipts increased $1.41, and the retail dealers' receipts increased $2.10.

The mine workers' prewar earnings did not permit a subsistence wage. While the 24 cents per ton increase on pick and machine mining recommended in the majority report will not reflect a reasonable standard of living of health and comfort into the lives of the mine workers, it will materially improve their conditions, and in the interest of honorable compromise I assent thereto.

The following recommendation for the increase to day men provides the same percentage increase given tonnage men and follows a time-honored practice of the past.

Reducing to a minimum the grave and disputed points that, in my judgment, must be adjudicated, I submit the following plan by which final and complete adjustment may be obtained and peace established in the industry:

METHOD FOR PROMPT SOLUTION OF MAIN AND PRINCIPAL ISSUES AFFECTING BITUMINOUS COAL-MINING INDUSTRY.

That the mining rates and wage schedules in effect on October 31, 1919, in what is known as the Washington agreement applying to the central competitive field and the outlying districts, except as hereinafter provided, shall be subject to the following increases and conditions.

1. Wage Increases to Pick and Machine Miners.

That the mining prices for mining mine-run coal, pick and machine, shall be advanced 24 cents per ton of 2,000 pounds.

In the block coal field of Indiana and in other localities that are still on the screen-coal base, the usual methods of applying the tonnage rates shall continue. This also has its application to districts that have a joint understanding in applying wage increases to low coal.

2. Wage Increases to Day Men.

That all day labor and monthly men, except trappers and other boys, be advanced $1.35 per day, trappers and boys receiving less than men's wages to be advanced 75 cents per day.

3. Wage Increases Applying to Yardage, Dead Work, and Room Turning.

That all yardage, dead work, and room turning be advanced 20 per cent. Nothing shall prevent the representatives of the miners and operators in any district in joint conference from taking the flat equivalent of 20 per cent and applying it to yardage, dead work, and room turning if by so doing they will make for uniformity and maintain the differentials. Failing, however, to agree to such application, then the 20 per cent shall be applied on the existing rates, effective October 31, 1919.

4. Central Competitive Field Differentials.

The differentials existing in western Pennsylvania as between the thick and thin vein pick and machine mining, the 12-cent machine differential in Indiana, and the 4-cent differential in southern Illinois are disposed of in the following manner: The miners' international officials shall select two representatives and the officials of the Coal Operators' Association of the Central Competitive Field shall select two representatives and the Secretary of the United States Department of Labor shall select the fifth and disinterested member, and the selections herein enumerated shall constitute the tribunal for the purpose of determining the disposition of the equities involved in the claim of adjusting the foregoing differentials. This tribunal shall be selected and enter upon its duties not later than June 1, 1920, and its awards shall become effective the 1st day of the month following the determination and conclusion of its findings.

5. Special Application for the Payment of Soapstone.

Payment for handling soapstone directly overlying the No. 8 seam of eastern Ohio and the Pittsburgh district of Pennsylvania shall be subject to the increase provided herein; and that part of the stone up to and including the 12 inches is referred to the operators and miners of these two respective districts, and that 2 cents a ton be allowed, to be paid upon the ton, or it may be converted to a yardage basis if desired.

The principle of determining the flat rates for the payment of yardage and dead work may be applied in these two fields in fixing and establishing pay for the handling of soapstone.

6. Western Kentucky Differentials.

The differentials existing in what is known as the western Kentucky coal fields, involving day wage, pick and machine mining, be referred back to the joint conference of operators and miners of that field for the purpose of mutual adjustment, and failing to agree, the matters in dispute shall be referred to a commission composed of two operators and two miners from that district, and the fifth and disinterested member shall be selected by the four so chosen, and failing to appoint, the Secretary of the United States Department of Labor shall make the appointment. Under no consideration shall the mines cease operation pending the investigation and findings of this commission.

7. Car Pushing.

We refer this important matter back to the various district joint conferences to be worked out in accordance with mutual understanding, taking into consideration the conditions that obtain in each of the districts from which these complaints emanate.

8. Eight-Hour Day.

That the present arrangement regarding the working hours of mine employees continue in effect until March 31, 1921. Beginning April 1, 1921, the maximum hours for employees shall not exceed eight hours underground per day and six days per week.

9. Fulfillment of Award.

The award becomes the base upon which all wage agreements shall be predicated. The specific awards set forth shall not be subject to negotiations, but shall apply automatically in such agreements or schedules of wages. Latitude to unify or to enter into mutual arrangements is authorized, provided, however, that specific awards and references as well as principles are adhered to and in all other respects the agreement as of October 31, 1919, will be continued in effect and the application of this award shall be arranged mutually and without recourse to strike or suspension of mining.

This basic award substitutes and absorbs the 14 per cent average wage increase and becomes effective April 1, 1920, and will continue in effect until March 31, 1922.

BRIEF REVIEW OF ABOVE DIFFERENTIALS.

The differential now existing between the thick and thin seams of western Pennsylvania was established years ago in order to compensate the operators for privately owned locks in the upper pools of the Monongahela River. The United States Government took over these locks with proper reimbursement to the owners.

The differential in Indiana of two cents per ton on machine mining coal below the Danville, Ill., basing point is of long standing. The pick rate is in accord with the Danville basing point.

The southern Illinois differential of four cents per ton was established mainly through freight rates and inadequate transportation facilities; this reason no longer exists.

The western Kentucky differential, like southern Illinois in character, should receive the same consideration.

Each of the districts with these differentials has enjoyed the Government selling rate f. o. b. mine as its competitors which now continues to exist. Any change in these differentials to their proper base can under no circumstances add any of the cost or burden to the public or consumer. The majority report evades adjustment of these issues while this report definitely and finally points the way to final conclusion and determined on their merits.

FURTHER WAGE INCREASES SHOULD BE ABSORBED BY OPERATORS.

It is acknowledged in the majority report that 80 per cent of the increase of 14 per cent granted to the mine workers at the time of the establishment of the commission has already been carried on to the public through increased prices by the operators.

If the 27 per cent increase is granted, as recommended by the majority report and concurred in by me, this would leave only 13 per cent which the operators would have to absorb. As Dr. Garfield stated originally that they were able to absorb an increase of 14 per cent, and this increase is acknowledged not to have been absorbed, it seems apparent that the additional 13 per cent now called for could be taken care of by the operators, assuming that Dr. Garfield was correct in his original statement.

CAMPS AND HOUSES.

The principles and suggestions embodied in this section of the majority report are commendable. In this connection attention should also be directed to some grave evils which still exist. Some coal companies still maintain what is known as the "closed camp." In these camps the companies dominate all the conditions of life of the people. The slightest opposition of the miner to the living and working conditions offered, the coal companies are in a position to evict them from their houses and impose upon them almost any conditions they may desire, including discrimination against them on account of membership in the United Mine Workers or any labor organization. These conditions are un-American—economically, socially, and politically—and can not be too strongly condemned.

POWDER.

The findings of the majority report would be acceptable with two additions which are of fundamental importance: (1) That the price to be charged for powder in the future shall under no conditions exceed the prices charged on October 31, 1919; and (2) that detonators shall be furnished to the miners without charge.

COAL TO MINERS.

As a substitute for this section of the majority report, I would suggest the following:

The price in effect on October 31, 1919, for house coal furnished to the miners at the mines shall be increased by adding the labor cost only. No stipulation should be made as to the cost of delivery of coal to the miners' house for the reason that this provision may be abused by excessive charges.

BLACKSMITHING.

The simplest and most direct method of handling this problem would be to substitute for the findings of the majority report a recommendation that "the charge for blacksmithing be made on a basis of actual cost." By sanctioning charges as of October 31, 1919, many excessive charges would be perpetuated. In some instances miners are now arbitrarily charged for blacksmithing in machine mining.

CAR PUSHING.

The statement made in the majority report that car pushing is a natural condition of the industry is without foundation in fact. The joint report is contradictory. The first paragraph states that the complaint has no foundation, the second reciting that it has foundation. The Government itself in the central Pennsylvania field allowed during the war miners five cents a ton for pushing cars. The majority report states there is not sufficient information on this subject to form a correct conclusion. The commission is, therefore, admittedly incompetent to pass upon the question. It should, therefore, be referred to the various joint conferences to be worked out through mutual understandings and agreements.

PRICE FIXING.

The price-fixing policy should be continued until June 1, when the operation of the laws of supply and demand will be such that it will no longer be necessary.

SPECIAL CASES.

The majority report is objectionable in its recommendations relative to the central competitive field, because it leaves unsettled these vital and all-important issues, which have caused so much of the existing unrest and intensification.

The method provided by the joint report merely means a continuation of the conflict, as neither side, as experience has shown, will yield. This situation can only be effectively handled by the creation of such a commission as I have already in the beginning of my report recommended.

The recommendations of the majority report as to northern Illinois are acceptable.

As a substitute for the recommendations of the majority report for the State of Washington, I would recommend the following:

> The situation in the State of Washington, as presented by briefs and oral statements of the operators and miners, reveals one of the most unusual and complex problems submitted to this commission for its determination. The operators show by their briefs that in many of the commercial mines of the State, which produce the majority of the State's tonnage and sales realization, the price is below the production cost. They also show that foreign coal and fuel oil enter in a large degree into the future life of the coal industry in that State.
>
> The miners in rebuttal attack the figures in the briefs of the operators, declaring the depreciation, depletion, and miscellaneous items of production cost are excessive and unwarranted.

In view of the vital issues involved and the lack of time and funds for this commission to make a survey and enable them to deal adequately with the problem, we recommend the following:

That the representatives of the miners and operators of the State of Washington, at the earliest possible moment, select one operator and one practical miner, the two selected to agree upon a disinterested mining engineer as the third member, and, failing to agree upon such a person, the Secretary of Labor shall make the appointment. This local commission shall make a survey of all the mines in the State to develop the facts underlying the whole problem as it applies to this industry in the State of Washington and at the earliest possible moment submit its report to the joint conference of operators and miners of that State. Pending this investigation the miners and operators will jointly agree on what basis the mines will operate while the survey is being made. The expenses incurred by this commission shall be borne equally by the operators and miners of the State.

I would also recommend the substitutive for the section of the majority report entitled "Alabama, Tennessee, eastern Kentucky, and Maryland" the following:

The representatives of the miners from these States filed briefs citing the wages and conditions of employment, but, as the records show, none of the operators from these districts appeared before the commission, merely filing letters with the commission to the effect that they have no joint relations with the mine workers in their districts.

In each of these districts during the war wage increases were adopted and put into effect by the United States Fuel Administration and tribunals were set up for the adjustment of the usual complaints common to mining. These tribunals included a permanent umpire in each district, and in order that justice may be done to all and mine workers be given the right, as given mine workers elsewhere, the commission would recommend that the operators arrange to meet with representatives of the miners in those districts and to put into effect the award of this commission, and to adjust the differences that may prevail in the industry in their respective localities, to the end that industrial peace and tranquillity prevail.

The recommendations of the majority report as to "Kanawha, Point Creek, and Cabin Creek districts, in West Virginia," are acceptable.

SPECIAL REPORT.

In order that more detailed expressions of my views as to the foregoing and other points may be had, I have appended herewith for reference Appendix A, a complete tentative award which I originally formulated for the consideration of the commission.

WAGES.

The joint report predicates its calculation of what it deems a fair wage award upon the rise in the cost of living as estimated in a preliminary figure of the United States Bureau of Labor Statistics, namely, 97 per cent increase since the prewar period up to December, 1919. They say, further, they "were guided by the principle that every industry must support its workers in accordance with the American standard of living." Unfortunately, this increase of the majority report, even if granted—and we show later it is not—does not conform to any known standard of living except one that is necessarily degraded and debased, because the prewar wages of the mine workers were inadequate for comfort and decency, and the joint report makes no attempt to show that the awarded rates will enable the recipient to earn a wage sufficient to maintain himself and family above the poverty level. The mine workers submitted data from Government sources and from prominent experts, all pointing to the necessity of at least $2,000 per year, whereas the proposed increase will bring the yearly earnings that may be expected up to an average of only $1,200 to $1,300 and a maximum of only $1,600 to $1,700.

We object to this method of wage determination, for two reasons: First, because it results in perpetuating all the old hardships and suffering attendant upon an inadequate wage; and, second, because it makes no allowance for the fact that during the past two and three years the mine worker has been obliged to curtail his standard of living on account of prices soaring far above the purchasing power of his wage. It is true the report makes mention of this in the following terms:

> We hope that there will be a decline in the cost of living in the next two years, but we realize that the miners have borne an increase above their advance of wages and consider the possible future decline in living costs as an offset for these losses.

In other words, the report sets a "hope" before the mine workers as sufficient recompense for actual monetary loss in the past. With all the objections that exist, however, the mine workers would be willing to accept gracefully this method of procedure, if the calculation and the apportionment of the increase were to be properly made.

There are two errors into which the joint report has fallen in the calculation and apportionment of its wage increase. In the first place, the weighting chosen is upon the *tonnage* basis, instead of upon the *man* basis; and in the second place, the day workers, who have received the larger increase heretofore, are utilized to depress the average increase due to pick and machine miners, *and then are not themselves awarded even the increase as thus depressed.*

We make no special criticism upon averaging respective increases that have heretofore been received in the four fields of western Pennsylvania, Ohio, Indiana, and Illinois on the tonnage basis, and we accept the figures of the joint report for the average increases in the central competitive field that have been received, respectively, by the machine miner, the pick miner, and the day worker. These increases are:

	Per cent.
Machine miner	48.5
Pick miner	35.5
Day worker	76.1

However, when it is sought to combine the increases of the machine and the pick miner, obviously the weighting chosen should be on the basis of the number of men actually employed at the two occupations, and not upon the number of tons produced by the two methods. *This wage determination is intended to fix the compensation to be paid to human beings, to enable them to support life in such a manner that they will be a credit to the country.* The number of tons of coal that these human beings are able to produce should not be allowed to be a determining factor, though it is doubtless important. A coal-mining machine is able, on the average, to produce about 17,000 tons of coal per year. The production per employee is considerably less than 1,000. If, then, the figures are weighted on a tonnage basis, the machine is made the dominant factor, far outweighing the man.

Below is given in parallel columns the effect of these two systems of weighting upon the increases that have been received since the prewar period (1913):

	Weighting on tonnage basis.			
Machine miner	66% of 48.5%	32.01	23% of 48.5%	11.16
Pick miner	34% of 35.5%	12.07	77% of 35.5%	27.33
	100%	44.08	100%	38.49

The effect of this difference is seen when the miner is combined with the day man. (At this step the joint report uses the man basis, though here again the mine worker receives the worst of it owing to the excessive weight placed upon day man—36 per cent instead of the correct 30 per cent.) The joint report states that the average increase already received for all employees combined is 55.61 per cent. The proper weighting on the man basis reduces this figure to 52 per cent, and if the proper distribution of miners and day men is adopted the figure will be 50 per cent. This means that the increase to be awarded, if it is done on this basis, should be, not 27 per cent as claimed by the joint report, but 31 per cent, and the increase in tonnage rates should be not 24 cents per ton but 27 cents per ton.

It should be noted that in the above, as in the joint report, the day men who, it is admitted, have since 1913 received a greater increase than the miner, are utilized to bring down the average per cent increase that should be granted in order to raise the present rates up to the same purchasing power they possessed in 1913. If the day men are not taken into account, and simply the wage rates of miners, both pick and machine, are considered, it would be necessary to increase these tonnage rates by 37 per cent or by 32.4 cents per ton according to the weighting on the tonnage basis, or by 42 per cent or 36.8 cents per ton, according to the weighting on the man basis.

The joint report, in our opinion, is grossly unfair in this part of its calculations. One of the two methods should be chosen in order to be consistent: Either the increase due the miners should be determined irrespective of the day men, and then the increase due the day men should be calculated independently; or else the day men should be taken into account and the same increase given to all. The joint report takes the day men into account, thus depressing the increase due the miner, and then proceeds to fix the increase to be awarded these day men at an entirely arbitrary figure. Manifestly, if the day men are included in the combined average, they should receive the increase that results from the calculation.

Summing up the above, if it is decided to base the award solely upon the increase in the cost of living, granting nothing to the employees as recompense for losses they have borne during the past few years when their wages lagged far behind soaring prices, the average increase already given the pick miner, the machine miner, and the day man should be combined, and weighted according to the numbers in the respective classes. This procedure results in an increase amounting to 31 per cent as being necessary over and above the present rates of *all* employees.

In order to apply this increase, the tonnage rates of both pick and machine miners should be increased 27 cents per ton, that all rates for yardage, dead work, room turning, and the like be increased by 31 per cent, and that the wage of day men be likewise increased by 31 per cent.

In order that the losses which the mine workers have undergone through previous failure to raise their rates to correspond with the increased cost of living may be apparent, and for the further purpose of showing that an incease in rates of 60 per cent would be necessary during the next two years to adequately reimburse them, a brief reference may be made to the data submitted by the mine workers during the proceedings.

The mine workers presented a series of tables and charts showing that if the relationship between wage rates, cost of living, and value of the coal produced which existed prior to the war is to be maintained a 60 per cent increase must be granted.

The wage rate taken as a fair example is the rate per ton for hand mining in the Pittsburgh district. This rate is the basing rate for the district, and is not very different from the basing rates in other parts of the central competitive field. Since 1909 this rate has increased 49.6 per cent, while in the same period the value of the coal produced per ton has increased 141.1 per cent. This discrepancy between the wage rate and the value of the product has existed only since 1916. Before that time the two maintained a very close relationship.

If the wage rate had kept pace with the value of the product since 1916 as it did up to 1916, the rate in 1918 would have been $1.41 per ton, or 61 per cent above the actual rate at the time. In other words, the mine workers' claim amounts merely to the claim that the old relationship between wages and value produced be reestablished.

And by a strange coincidence approximately the same rate will be necessary if the mine workers are to be compensated for the increase in the cost of living. As already pointed out, the present rate must be increased by 36.5 per cent in order to bring it up to the old relationship with the cost of living. Such an increase will bring the wage rate in question up to $1.1958 per ton.

But another factor enters in. The last adjustment of the wage rate took place in November, 1917, and just barely brought the level of wages even with the cost of living. During the succeeding 27 months the cost of living rose steadily. Each month the mine worker's wage would buy less. In other words, each month the discrepancy between the increase in the cost of living and his wage became greater. If we grant that the workers have a right to a wage which keeps pace with the cost of living, this means that each month the mine workers were losing a part of the wages which were justly due them.

Where wages are readjusted only at long intervals equity requires that they be raised enough in excess of the increase in the cost of living to cover this steady loss, which goes on from month to month. In order to fix the present amount which will compensate the miners for the hardships they have suffered during the period when their wages were falling further and further behind the cost of living the average loss per ton must be ascertained. In one of the exhibits presented by the mine workers this has been carefully worked out. Careful investigation showed that the aggregate loss suffered during the 27 months amounted to $4.95 per ton.

If a rate is fixed at this time to be effective for two years, starting with January 1, 1920. the amount lost during 27 months will have to be made good in 24 months during which the new rate is to be in effect. This would add one-twenty-fourth of $4.95, or $0.206, to the rate per ton necessary to bring the 1917 wage rate abreast of the cost of living. Adding this $0.206 to $1.1958 brings the total to $1.4018 per ton as a just and equitable rate to be fixed for the ensuing two years for the pick miners of the Pittsburgh district.

It is an interesting fact that the rate of $1.4018 thus obtained is essentially the same as the rate of $1.41 per ton necessary to maintain the old relationship with the value of the coal produced, and is practically an increase of 60 per cent over the present rate.

THE LIVING WAGE.

The proposal of Messrs. Robinson and Peale for a 27 per cent increase in wages is based upon the idea that such an increase will restore the prewar status of the mine worker. This results in a gross injustice, as pointed out in preceding section, to those employees whose wages had been little increased between 1914 and 1919. Thus the pick miner, who previously had been the basing occupation in making wage increases, received an increase of only 35.5 per cent between 1914 and 1919. The proposed additional increase of 27 per cent would give the pick miner a total increase of only 72 per cent over his 1914 rate, an increase far below the increased cost of living as accepted by Messrs. Robinson and Peale themselves. It is absolutely no solace to the pick miners, under such circumstances, to be told that the average increase for all mine workers had been as great as the increase in the cost of living, no more than it would be to a street car conductor to be told that, even though he received no increase in wages, the average earnings of street car employees had enormously advanced, owing to large advances granted the motormen. Each man must live on the opportunity of earnings within his own occupation.

But even if these inequalities had been adjusted and every occupation had been restored to its prewar earning capacity, the mine workers would not feel that full justice had been done. For the primary demand of the mine worker before this commission was not for a restoration of prewar conditions. Their primary demand was for a living wage—a wage which would permit the average mine worker to maintain his family in health and decency; to live in modest comfort as regards housing, food, and clothing for his wife and children; to enjoy some of the minor pleasures of living; to set aside some little of his income against old age and disability; to live, in other words, according to the accepted standards of an American citizen.

We are highly gratified to note that Messrs. Robinson and Peale, in their report, recognize the justice and righteousness of this demand. They state that in arriving at their proposal they "were guided by the principle that every industry must support its workers in accordance with the American standard of living." Thus our contention is conceded as fully and expressed as well as we could desire. The disappointment is that the concession is merely in words. The principle is granted, but no attempt is made to apply it. Instead, the wage proposal made is based, as noted above, on the idea that justice may be done by restoring unjust conditions of the past.

In making a demand for a living wage the mine workers were asking for nothing extreme, nothing that had not been guaranteed by governmental policies during the war and sanctioned by the opinion of all enlightened peoples. Thus in the proclamation of President Wilson of April 8, 1918, and in the principles of the National War Labor Board, it was provided that if the rates of pay of workers were below a living wage, these rates would be brought to such a level as to provide a decent standard of health and reasonable comfort. If rates of pay before the war were below the requirements of a living wage they were to be advanced not only as the cost of living advanced but to a higher point—to a rate which would meet the requirements of standards of living based upon health and reasonable comfort.

Later the leading commercial and industrial nations of the world gave their sanction to the principle of the living wage in the peace treaty, holding of supreme international importance "the payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country."

In addition to the political, economic, and social sanction which has been given to the principle of a living wage, it has recently been given the widespread moral and spiritual approval of the churches. The failure of industry to pay a living wage has been pronounced by the leading church denominations, both Catholic and Protestant, without exception, as not only antisocial but as opposed to the principles of Christianity.

Such facts mean that the old theory of wages, prevalent in the past generation, has received the unqualified condemnation of the civilized world. This old theory or "law of wages" was that wages were determined by the forces of supply and demand. Labor, in other words, was viewed merely as something to be bought and sold. Little, if any, consideration was given to the human side of the wage problem. As a result of this law, labor's position was hopeless. It was required to suffer all the ills that arose in the industrial system as if ordained by the laws of the universe. This meant that in the bituminous coal industry the workers not only had to undergo the results of lack of markets but also had to contend against an oversupply of labor brought about by unrestricted immigration.

During recent years, however, and especially during the war period, there has been a complete change in economic thinking in regard to the determination of wages. The enlightened opinion of mankind refused to continue to sanction such a hopeless theory. More consideration came to be extended to the worker as a human being. Gradually it came to be felt that human welfare was above considerations of relentless economic selfishness. Industry came to be considered as existing for men and not men for industry. Industry, it was concluded, should be the servant and not the master of humanity. Any industry which could not operate under these humane conditions was antisocial. Labor was no longer to be considered as a raw material of industry, to be bought and sold at a price.

It is in the light of those principles that the justice of the mine workers' contentions must be considered. And in the light of these principles we find that even if the miners are granted sufficient increases to keep pace with the rising cost of living, the resulting rates would fall far short of the measure of justice. Such a miserly policy would simply sanction the preservation of rates of pay and working conditions far below the level of subsistence and health—rates which would promise no possibility of comfort or of provision for sickness, old age, or incapacity. It would simply approve a standard of earnings inadequate to the support of a family and to the education of children. The mere maintenance of the old earnings would mean the necessity of continuing the practice of putting children and young persons to work, of bringing lodgers into the home in order to supplement the inadequate earnings of the head of the family.

The best prewar investigation of the problem of a living wage was made for the Russell Sage Foundation by Dr. Robert C. Chapin. The results of his investigations, published in 1909 under the title "The Standard of Living Among Workingmen's Families in New York City," together with the conclusions of other authoritative investigations, show that annual earnings of $900 by the head of an average household were barely sufficient prior to the war for a minimum of physical subsistence. Dr. Chapin's analysis of the proportion of underfed in the various income groups showed that of the total number of families earning less than $800 annually 71 per cent were both underfed and underclothed.

In the steel manufacturing town, Johnstown, Pa., a governmental investigation prior to the war disclosed that the death rate among infants was considerably above the average unless the family had an annual income of at least $800. This is an indicator of the degree of health in living conditions. It can be interpreted only as meaning that a family could not provide sanitary housing, healthful environment, and adequate food, and that the mother could not have the proper rest at home unless the family income was over $800 a year. And it should be noted that the majority of these studies as to the minimum requirements of healthy family life were made during the period 1907–1910. During the succeeding years the cost of living steadily rose until, in 1914, $900 was inadequate to maintain even a bare subsistence.

When we turn from these studies to a consideration of the actual earnings of the mine workers prior to the war, we find those earnings below the standard set for bare subsistence. According to a report made by the Bureau of Labor in 1902, on the basis of a detailed investigation of the families of 758 mine workers, all earned less than $900 a year, 93 per cent earned less than $700, 81 per cent earned less than $600, and 54 per cent, or a majority, earned between $400 and $600 annually.

One of the most exhaustive and comprehensive investigations of the bituminous coal mining industry ever made was conducted by a special body, the United States Immigration Commission, during the year 1908–9. It included within its scope practically all mining areas of the country. It disclosed that the average annual earnings of all male heads of the 2,100 households studied by the commission averaged only $451 for the country as a whole. The average annual earnings of the native-born workers was $590 and of the foreign born $442. The average family income of these 2,100 families was only $577, the American families showing an income of $707 and the foreign born of $569. In the Middle West the average family income was only $532, in western Pennsylvania $551, in the South $699, and in the Southwest $582. Only about two-fifths of the families investigated derived their entire income from the earnings of husbands at the mines. The remainder found it necessary to supplement the earnings of the husband by taking boarders or lodgers, or putting the children of the household to work.

The average annual earnings of Illinois pick miners, according to the State board, were only $485 in 1902, $538 in 1907, $516 in 1909, $556 in 1912, and $526 in 1913. Machine men and loaders in Illinois in 1914 earned on an average only $724. The average earnings of all mine workers in Illinois in 1913, a very prosperous year, were only $704; in Ohio $766; in Indiana $708; in western Pennsylvania $856;

or an average for all of these States of $761. During the next year the average earnings were only $615.

All of these facts, gathered from the most reliable sources, lead to the irresistible conclusion that *prior to the war the mine workers were not securing earnings adequate even to maintain the barest physical requirements of their families.*

It is, therefore, evident that were mine workers given increases in rates of pay corresponding to the rise in the cost of living the present level of earnings would be unsatisfactory to a nation which holds important the physical and moral well-being of its population. Adding the increased cost of living would only restore the inadequate prewar standards. What the mine worker needs, and what the interest of the country demands, is that, irrespective of increases in living costs, the rates of pay should be increased sufficiently to assure him a living wage.

In view of the need of a living wage, and of their demand for such a wage, the mine workers felt under obligation to define what they meant by a living wage. In doing so, however, they did not urge their own views. They were satisfied to rest their case upon the results of the studies made by qualified students of recognized scientific authority and impartiality. They had all the authoritative material assembled and analyzed. In addition, they requested Prof. W. F. Ogburn, of Columbia University, a recognized authority on cost of living and living standards, to make a special study and report on the subject of the living wage as related to bituminous mine-workers' families.

It was, of course, realized that the cost of living, as well as the methods of living, in bituminous mining areas were different in some respects from those which were characteristic of industrial cities. In order to meet this difficulty, the United States Bureau of Labor Statistics was requested to make, and is at present engaged in making, a study of specific mining centers. With the material which had already become available, Prof. Ogburn adjusted items of earlier studies to the peculiar needs of the mine workers and to the peculiar conditions of the mining towns. The result of his work is a budget which is believed to represent the barest minimum of health and decency for a mine-worker's family. The total cost, at prices now prevailing in the towns covered by the studies of the United States Bureau of Labor Statistics, is $2,243.94.

This budget, as has been the case in all previous studies, takes as a basis a family of five. This is done because the average American family is of this size, because marriage is socially and morally desirable, and because it is necessary that marriage should result, on the average, in a minimum of three children if the race is to perpetuate itself. As a matter of fact, it seems certain that the average mine-worker's family contains more than five members.

The standard of living provided in this budget represents certainly no more than a minimum of human decency. It has been described by Prof. Ogburn as a "minimum-comfort budget." And there is little doubt that the average housewife, after glancing at the full list of items given, would emphasize the word "minimum." The amount allotted to food allows but slightly over $2 a day for the entire family of five. The following facts taken from the detailed budget will show how conservative Prof. Ogburn has been in his estimate regarding clothes:

The man's suit, bought at $40, is to last him 2 years. His overcoat, priced at $35, is to last him 4 years; and his raincoat 6 years. The clothing problem of the miner is complicated by the fact that it carries a very considerable item of expense for the clothes which he wears down in the mine.

Perhaps the most noticeable economy is found in the clothes allowed the wife by this budget. No allowance is made for those minor clothing luxuries which are of great importance, if not of actual necessity, to the comfort of a woman. The budget provides simply for homemade cotton waists and dresses. And the winter clothes which she wears when she goes out must do her at least two years, while a cheap winter coat must last three years.

In short, this budget provides only those things that a family *must* have in order to maintain health and keep its self-respect. It provides for no luxuries and omits many things which are necessities, according to our American standards. Most striking of all, it provides for no savings. Surely a man should be expected to have a sufficient income to save at least 10 per cent. This item alone would add $200 to the budget.

To show how conservative the budget is, the main items are quoted in full:

Summary of Prof. Ogburn's budget.

1. Food		$801.38
2. Clothing:		
Husband	$146.81	
Wife	130.92	
Boy (11 years)	77.40	
Girl (5 years)	66.13	
Boy (2 years)	34.00	
		455.26
3. Housing, fuel, and light		286.00
4. Miscellaneous		576.30
Total		2,118.94
Average saving on garden and chickens		15.00
		2,103.94
Explosives, smithing, etc		140.00
Total		2,243.94

Accepting the above budget as representing the best of present-day thought on the subject, it remains to point out how completely an increase of 27 per cent in present wage rates would fail to raise the great body of bituminous mine workers to a level of healthy and decent living. For this purpose, the pick miner may again be taken as representative. There are not as many pick miners as machine miners in the bituminous fields, and their average wages are probably not as high, but the basic principle of the living wage is that it should be high enough to permit all workers, even the unskilled, to maintain the level above indicated. At rates prevailing in 1919 the actual annual earnings of pick miners in all bituminous mines were approximately $1,130, according to the comprehensive study made by the United States Bureau of Labor Statistics and published in the December, 1919, Labor Review. According to exhibits submitted by the operators themselves the average annual earnings of pick miners and loaders in the northern Illinois district were, at 1918–19 rates, under $1,000 a year. Furthermore, these same exhibits show that if conditions had been such as to permit these men to work every day when the mines were in operation in 1918, they would have been able to earn not over $1,200 per year; that if conditions had been such as to permit these men to work every day when the mines were open in 1919, when conditions were worse, their annual earnings would have been less than $1,000; and that in less than one-third of the companies shown in the exhibit were the average monthly earnings of all occupations listed as high as $100, while in almost half the cases the average monthly earnings were below $80.

It is clear, therefore, that an increase of 27 per cent in present wage rates would fall far short of raising these workers to a level of health and reasonable comfort.

Until this level is attained the mine workers will remain on the precarious level of mere subsistence—where the great body of them now are. It is from these deplorable conditions that we wish to escape, and our hope has been that we would be granted a living wage so that the workers in the mines and their families might arise from the economic darkness and despair which now engulfs them into the economic sunlight. We are weary with long years and generations of mere existence. We wish the opportunity to earn a wage which will command a human standard of living and hold out hope for the future.

IRREGULARITY OF EMPLOYMENT AND THE SHORTER WORKING DAY.

The Relationship Between Production and the Problem of Irregularity.

We agree fully with the statement of the majority report concerning the importance of irregularity of mining operations as a cause of unsatisfactory working conditions as well as of high prices. The fundamental importance of this phase of the subject was ably stated by Mr. Herbert Hoover in his inaugural address before the American Institute of Mining and Metallurgical Engineers, February 17, 1920, in which he said:

> Many of the questions of this industrial relationship involve large engineering problems, as an instance of which I know of no better example than the issue you plan for discussion to-morrow in connection with the soft-coal industry. Broadly, here is an industry functioning badly from an engineering and consequently from an economic and human standpoint. Owing to the intermittency of production, seasonal and local, this industry has been equipped to a peak load of 25 or 30 per cent over the average load. It has been provided with a 25 or 30 per cent larger labor complement than it would require if continuous operation could be brought about. * * * There lies in this intermittency not only a long train of human misery through intermittent employment, but the economic loss to the community of over 100,000 workers who could be applied to other production, and the cost of coal could be reduced to the consumer. This intermittency lies at the root of the last strike in the attempt of the employees to secure an equal division among themselves of this partial employment at a wage that could meet their view of a living return on full employment.

This states the gist of the whole problem. The question of a living wage can not be considered apart from the problem of securing the mine worker enough days of employment to enable him to earn such a wage. In fact, the whole case presented by the United Mine Workers of America has been based upon the fundamental unity of the request for a living wage and the request for a shorter working day.

The fact brought out in the majority report, that the principal causes of this irregularity are the unusual character of the market and inadequate car supply, are simply another way of stating that the problem is one of overproduction. This fact is recognized by the majority report when it states as one of the two main causes of idleness "overdevelopment of the industry" with the following supporting statement:

> At the present time America requires less than 500,000,000 tons of bituminous coal a year, while the capacity of the mines in operation is over 700,000,000 tons.
>
> Under the stimulus of war demand many new mines were opened and many old ones expanded in order to secure sufficient coal to meet the exceptional and urgent national requirements. As a result, the coal industry, *which you speculatively overdeveloped before the war*, is still more overdeveloped now and employs more capital and more labor than is necessary to supply the present needs of the country.
>
> Full-time employment in the coal mine can not, therefore, be expected until the industry is put on such a basis that only those mines remain in operation whose output is required to supply the needs of the country.

This statement of the case is absolutely sound. We wish to emphasize that both the public and the workers are suffering from the diseased condition of the industry brought about by speculation as the result of unregulated competition. To what extent will be shown later. But we wish to point out that after carrying the analysis to this point the majority report comes forward with no constructive suggestion to meet this problem of an overexpanded industry. Instead it evades the issue and attempts to make the public believe that the whole matter can be handled by regulating the market so that the demand will be equally distributed throughout the year. As we will show, this is a fundamentally superficial approach to the problem. It does not take into consideration the very facts which the report is at such pains to emphasize. And it is on this account that we feel the importance of a thoroughgoing study of the problem and an intelligent decision from the angle suggested by Mr. Hoover, as above quoted, who would not, we feel sure, palm off on the public the idea that the unemployment due to the fact that the men were producing too much could be removed by distributing it throughout the year. As Mr. Hoover said, it is an engineering problem.

Before turning to the really fundamental approach to this problem offered by the mine workers, we wish to call attention to another statement upon the subject in the majority report, a statement which gives an entirely erroneous impression. We refer to the assignment to "Labor shortage and strikes" of one-fourth of the time lost. The United States Geological Survey provides us with ample material from which to form an estimate in regard to this point. A diagram prepared in February, 1920, shows that for the entire period, 1910 to 1918, only 10.6 per cent of the days lost in the bituminous coal industry were due to strikes. Since October, 1917, the Geological Survey has been issuing weekly reports as to the allocation of days of nonoperation to the various causes. During the first nine months of 1918, a year when the market was abnormal in its ability to absorb full production, only 19 per cent of the loss of production was due to labor shortage and strikes. The higher figure given in the majority report may be best explained by the following analysis of the weeks showing abnormally high percentage of time lost due to labor.

An examination of the reports of the Geological Survey will show that labor shortage and strikes are charged with more than a 10 per cent loss of production in only 9 out of a total of 108 weeks. That these instances largely resulted from an observance of holidays is shown by the following explanations, given mainly in the Geological Survey's weekly bulletins:

Week ending.	Cause of labor shortage.
October 20, 1917	Strikes in Illinois.
December 29, 1917	Christmas.
April 6, 1918	Miners' holidays and Liberty loan day.
June 1, 1918	Memorial Day.
November 2, 1918	Epidemic of influenza and unexpected warm weather.
November 9, 1918	Election day and celebration of premature notice of the armistice.
November 16, 1918	Celebration of signing of the armistice.
December 29, 1918	Christmas.
November 1, 1919	Beginning of the strike.

It is admittedly common belief, and that belief has been fostered and encouraged with the intent of discrediting labor, that the miner himself is largely responsible for the notorious unemployment record in the industry. But from a careful analysis of the reports of the Geological Survey it becomes evident that the miner, as a rule, is clearly the victim rather than the cause of the unfortunate conditions which have led the majority report to speak of the bituminous industry as a part-time industry. A conservative estimate would place four-fifths of the unemployment beyond his control. And with this statement it must be recognized that were the mine worker to work on the days when idleness is recorded against him he would be faced with compensatory days of idleness some time later, for the industry only produces long enough to satisfy the market.

Thirty-Hour Weekly Average Can Not Be Increased by Regularizing Market.

To put the matter most charitably, the majority report shows great inconsistency in that, while recognizing the inability of the market to absorb full production, it still implies that a solution can be reached by regularizing the market. In other words, the presumption is that unemployment can be eliminated by being distributed. The casual reader of the majority report will undoubtedly assume that regularization of the market will provide full-time employment for the mine worker. This would be a gross misapprehension. For a study of the best available material shows clearly that had available labor been utilized to a reasonable extent during the year following the armistice the output would have been far in excess of the market demands. That this unfortunate condition has long existed in the bituminous coal industry is a well-known fact. Mr. Francis Peabody, who was chairman of the coal committee of the Council of National Defense during the war, recently stated to a Senate committee that the total cost of production of coal, as well as the earnings of the miner, depend entirely upon continuous work, and that the cost of his mines is affected by irregular operation to the extent of between 50 and 60 cents a ton. Commenting further on the existing irregularity of operation, Mr. Peabody makes the striking statement that the physical capacity of the mines themselves throughout the United States is sufficient to produce 40 per cent more coal than the possible demands of the country.

This may be expressed in another way. With an average of 30 hours of operation per week the industry can meet all the requirements of the normal market. This is no hypothesis. It is based upon the figures given in the weekly reports of the United States Geological Survey. The extraordinary demands of the war years were met with an average operation of between 30 and 40 hours per week, the highest figure being under 42 hours per week; while the normal needs of the country for the year following the armistice were met by an actual operation averaging under 30 hours per week. In other words, the voluminous suggestions for regularizing the market put forward in the majority report will amount to a regularizing of the 30-hour week, or to an award of a 5-day week, with 6 hours per day.

But here lies the evil of the suggestion carried in the majority report. While actually recommending readjustments which will mean such a regularization of the 30-hour average week actually necessary to meet the production requirements, it avowedly awards a 48-hour week and of course bases its wage award upon that number of working hours. In other words, while verbally accepting the principle of the living wage, it actually fails to afford the worker an opportunity to earn this living wage which is based upon a hypothetical 48-hour week. This arrangement of the award closely approximates hypocrisy. For it will lead the public to accept the wage award as just on the supposition that the bituminous mine worker will have an opportunity to work as many hours per week as his fellows in other industries. A supposition which we have shown by elaborate statistics, drawn from the most authoritative sources, to be utterly false. What does this suggestion of the majority report, then mean? *It means simply the regularizing of unemployment, its distribution throughout the year so that it will be less noticeable.* It is because of this superficial approach to the solution of an evil in the industry, vital to every man employed, to every family, and to the consumers who pay the price, that the mine workers emphasize the importance of a study from the point of view suggested by Mr. Hoover—an approach to this "diseased" industry with a view to a fundamental cure.

It is because the wage award suggested in the majority report will be conceived and judged upon the basis of a 48-hour week that we wish to stress the present improbability of a week of more than 30 hours whatever the award may say. This discrepancy between the week actually awarded and the week which will be worked is the true measure of the unfairness of the award. For it is a measure of the amount which the mine workers will apparently receive and will not actually receive. It is this failure of the majority report to deal with actual conditions that requires comment. If the American mine worker produced only as much coal as his fellows in other countries, he would have full employment, for it would require more hours to produce the amount required by the country. As it is, the American mine worker produces more tons per year than his fellow in any other country in the world. *This is clearly substantiated by data compiled by the United States Bureau of Mines. And his great productivity brings him not shorter hours with correspondingly higher pay, in order that he may earn a living wage, but unemploy-*

ment and an accident death rate twice as high as the average for these same other countries.

In the face of these facts we feel that the request that the actual facts of the industry be recognized and that the wage increase be related to the fact that an average week of 30 hours will produce all the coal required by the country is fundamentally just. *Failure to face a situation in which 30 hours a week will be averaged whether it is officially sanctioned or not is merely juggling with solutions in order to avoid the true issue.*

The Request for a Shorter Working Day.

In other words, the recommendation of the majority report under the caption, "The six-hour day and the five-day week," is entirely equivocal. The authors state that they were influenced in arriving at their decision "by the fact that steady work on the part of all workers is urgently required by the entire world during the period of reconstruction and reorganization when the enormous destruction and disorganization wrought by the World War in all countries and affecting all industries must be counteracted by unusual industry and perseverance. To make any restriction affecting the output would be an economic crime." Who, we ask, is it, then, who is limiting the average work of the mine workers to 30 hours per week? The majority report makes such statements despite its former recognition of the fact that the American market will absorb only five-sevenths of the full time output of the industry, and despite the following earlier statement:

> It is not to be expected that exports of coal will increase sufficiently to absorb a perceptible proportion of the gap between the demand for coal and the capacity of mines, *as our shipping terminal facilities are such that not more than 25,000,000 tons of coal a year can at present be exported.*

In contrast with such sham and hypocrisy we feel the importance of a frank acceptance of the reality of the situation. The request for the recognition of a shorter working day has been misrepresented as a movement for the reduction of the working period, when in reality it is a request for recognition of what actually exists and the adjustment of wages on that basis. The demand for recognition of the shorter working day is, in fact, a demand for the opportunity to earn a living wage; it is a demand that the public understand clearly that rates awarded must be understood in terms of a 30-hour week and not of a purely hypothetical 48 hours which is never attained. Increase in the earning power of the mine worker is almost as dependent upon his securing a greater and more regular opportunity to work and to earn as it is upon an increase in his rates of pay. With inadequate rates of pay in the face of lack of opportunity to work, the position of the mine worker has grown desperate.

The Shorter Working Day in the Mines of England.

In addition to the actual fact of the 30-hour week proved by the figures of the Geological Survey, there is another cogent reason why we can not concur with the majority report in its opinion that the demand for recognition of this fact is "clearly uneconomic." In theory it may be, but in practice in England this has not proved to be the case.

Official reports from one of the oldest and most important coal-mining districts of England, where tens of thousands of miners have been for years working under agreements limiting their work at the coal face to less than six hours a day, prove conclusively that the request for a six-hour day should be regarded neither as extraordinary nor as bad economics. In fact, this short working day has improved so many conditions in the industry that the employers themselves would not go back to the longer day.

These facts are embodied in the reports of two British governmental commissions appointed to inquire into the coal industry. They went at the problem with praiseworthy thoroughness, and as a result their reports are a mine of information. Such thoroughgoing studies of the industry are needed in this country, and it is to be hoped that in the future it will be taken up in an exhaustive way from the superficial and equivocating condition in which the majority report of this commission has left it.

According to Mr. Guthrie, secretary of the Durham Operators' Association, the agreements provide that the hours shall not exceed seven from the time of the last man going down to that of the last man coming to the surface at the end of the shift. According to his statement this means 5 hours and 20 minutes as the average time at the face in Durham and approximately 6 hours in Northumberland. This means work from one to two hours less per day than in other districts in England. Yet tables accompanying these reports show that the production of coal per man per shift is well up to that for the rest of England, and that the cost of production per ton is no higher. This led the coal miners' eight-hour day committee to report as follows:

> We can not but conclude that an hour's work of the men employed in east and west Scotland, Northumberland, and Durham, where the hours of work are shortest, is more effective than it is in Lancashire and south Wales, where the hours are longest. The tables do not show a uniform proportionate correspondence, but they do show some general relation between short hours and efficient work.

In addition to this interesting fact of sustained production we find tables in the appendixes of these reports showing that there is greater regularity of work in the districts where the shorter hours are worked. To quote a brief extract from the report of the eight-hour day committee:

But after making due allowance for these local encouragements of the practice of abstention from work, we find that the statistics that we have collected of absenteeism give grounds for believing that upon the whole shorter hours of the working days do at present conduce to greater regularity of attendance at the pits in the districts in which the shorter hours are worked.

And finally we find from those same voluminous reports that the rate of mortality is lower and the standard of health higher in these same districts where shorter hours are worked. According to the committee already quoted:

The tables put before us show that of the counties for which separate statistics are available the lowest mortality (675) occurred in Derbyshire and Nottingham, counties in which the hours worked are below the average, and the highest (1,006) in Lancashire, where they are longest. The tables further show that in Lancashire, Monmouthshire, and south Wales alone the districts in which hours are longest, did the mortality from all causes exceed that of "all occupied males," and that it is only in Lancashire that there is an excess due to "other causes than accident."

The information available which would enable us to form a judgment as to the probable effect of the limitation of the working day upon the health of coal miners is of the scantiest nature, but so far as the evidence goes it tends to show that the standard of health of the workers is lowest in those districts where the longest hours are worked.

This last is of great importance to the mine worker. For a large number of investigations all point to the same conclusion—that the hazards of the miner are greater than those of any other important industrial occupation. The experience of the leading industrial insurance companies has shown that the bituminous coal miner has a death rate 32 per cent above the average for all other industrial occupations. Representative life insurance companies will accept a miner only if he pays rates of risk 16 years above his actual age and then will permit him to have no cheaper policy than a 20-year endowment. The mortality experience of the Metropolitan Life Insurance Co. for the years 1911–1913 showed that 63 out of every 100 coal miners who died between the ages of 15 and 24 died a violent death; that 44 out of every 100 between the ages of 24 and 34 years died an accidental death; while 31 out of each 100 between the ages of 35 and 44 years died as the result of an accident.

As a matter of fact the American miner is approximately twice as liable to death by accident as is the mine worker of the other countries of the world. It is admitted that this is due to his greater productivity. And the conclusion seems to be indisputable that justice requires that this be counterbalanced by some such ameliorating conditions as those prevailing successfully in large regions in England.

Employers in England admit that the standard of citizenship is higher among the miners where shorter hours are worked. They agree that the mines in the short-hour districts are worked much more scientifically. And a representative of the Durham Coal Owners'

Association, when asked whether he thought it would be economical to go back to the longer working day answered, "No; I do not."

On the basis of such facts, carefully studied, the British coal industry commission made recommendations which have led to the establishment of the seven-hour day throughout the mines of England, with the probability that when the effects on national production have been carefully watched by experts, the industry will go on to the six-hour day.

The Cost of Excessive Capital When Unemployed.

In general, the whole question of shorter hours is a question of economy, of human economy. We concur with the majority report in its statement that under existing conditions "a labor supply, sufficient to meet the needs of the rush season, is excessive during the rest of the year, part-time employment results, and the Nation will ultimately have to pay in its fuel bills the cost of maintaining this larger army of only partially employed workers." But we maintain that this is a very partial and one-sided statement of the case. What of the excessive capital investment which is employed only part time during a great part of the year, and for the maintenance of which the Nation ultimately pays in its fuel bill. *The majority report has carefully provided that labor shall be paid on the supposition that it works an average 48-hour week, and the public will call it a fair wage on that basis. The difference between the hypothetical 48-hour week and the actual average 30-hour week represents a part of the year for which the majority report makes no provision so far as labor is concerned. On the other hand, it ignores the fact that the Nation is called upon to pay profits and maintenance to capital on the basis of its normal employment being a 30-hour week. Capital is to get its full normal remuneration, although it works but 30 hours per week on the average. That is to say, the majority report tacitly awards the companies a 30-hour week while denying it to the mine workers.*

This fact came out very interestingly because the operators recognized that the request for a six-hour day five days a week was in reality a request for an opportunity to earn a living wage. In other words, recognizing that the argument that granting the request would limit production was a specious argument they denied the principle that labor was entitled to a living wage if the country needed its services only part time. A representative of the operators put the question in this way: "Must the workers in the bituminous coal industry be maintained whether they work or not?"

It was indeed fortunate that the operators raised the question, for its implications are of great significance and there is danger that they would otherwise have been passed over.

The conclusion drawn by the operators was that if the country needed the mine workers only 212 days out of the year, it was under no obligation to pay them a living wage for the full year. Let the mine worker go out and find a job somewhere else. In other words, the speaker implied that the public was under no obligation to give the mine worker sufficient annual earnings to maintain his family for a full year when it only needed his services for three-quarters of a year.

This, of course, led naturally to a similar question in regard to the capital invested in the industry. Was the public under any obligation to maintain this capital, whether it worked or not? In other words, if a 30-hour week, as actually worked during 1919, was not to be recognized for the mine workers, should it in equity be recognized for the companies? For, obviously, when the mines were idle the capital invested in the mines was no more serving the public than were the mine workers. And yet, as a result of careful analysis of financial returns, found in the reports of the companies and in the report of the Federal Trade Commission, the interesting discovery was made that in paying the regular price for coal the public is paying the coal companies over $100,000,000 each year for periods when the companies are doing nothing for the public: that is, for periods when the public does not need their services. This is not the whole amount paid to capital in the coal industry during the year. It is only the amount paid for maintenance and profits during the actual days of idleness; for capital invested in the coal industry expects the public not only to maintain it—that is, to pay its expenses—during these periods when it is unemployed, but also to pay profits for no services at all.

The earnings of the wage earner are not given exclusive of the cost of maintaining himself and family. The question of a fair return to the worker is not based upon his profit over and above what it requires to maintain him as a serviceable member of industrial society. Applying this to capital invested in the coal industry, the full wage must naturally include maintenance, depreciation, and depletion charges, as well as the interest and dividends paid on stocks and bonds. The question raised by the operators was, therefore, found to involve the question whether the Nation is under any obligation to continue this wage to capital whether it works or not.

The exhibit presented by the mine workers shows that in the cost of each ton of coal are items of overhead and profit which continue whether the mines are working or not. Taking these items only for the period when the mines were idle in 1917, it was found that for this period of idleness the public paid the coal operators approximately $144,000,000; that is, $225 per man employed. In the following year the total paid to maintain invested capital in idleness was approximately $128,000,000, or $200 for each man employed. And it must be remembered that none of this went to the mine workers, and that they were, during these periods, without opportunity to earn a wage.

It was also discovered that the public is to-day maintaining in idleness at a regular charge included in the prices which it pays, large investments in coal lands which were acquired by the coal companies for deferred use in order to gain a monopoly. And, furthermore, the Nation is paying for the maintenance of these natural resources not on the basis of their original cost to the original companies but on the basis of the enhanced value given to them in terms of the present market, largely due to the monopoly obtained by these purchases.

In view of these facts, the answer to the question must apply to capital as well as to labor, to the companies as well as to the mine workers. Should it be decided that the public is under no obligations to maintain its servants during periods when they are not actually serving, it would immediately be clear that when the public pays only for the maintenance of the companies during the portions of the year when they are actually working, there will remain over a very large annual fund out of which may be met the cost of the living wage asked by the mine workers and of the shorter working day as a means to greater regularity.

Such a question leads to other questions of the same order. For instance, it would be an interesting situation were a country to treat its soldiers as it does its miners, maintaining them only when there was specific fighting to be done. Surely, in the last analysis, it is not so much a question of obligation as it is of wisdom, of farsightedness. There can be no question as to the vital importance to the country of maintaining in a state of well-being a large body of its population which is performing a difficult an essential service.

This is the gist of the matter. It is not a question to be settled in terms of economic theory, or by the use of current and misleading economic platitudes. The maintaining of an important part of the industrial population in a state of well-being to-day requires that the actual working hours dictated to them by the nature of the industry be recognized as a matter of fact, not as a principle, in order that on this practical basis their ability to earn a living wage may be gauged. Irregularity of employment is due to overproduction. Regularity attained by the methods recommended by the majority report would simply regularize the short working period required to satisfy the needs of the country. The mine workers only ask the opportunity to earn a living wage, and we feel that a truly thorough study of the industry would find the circumstances substantially as discussed in this report.

Inability to Concur with Partial Statement of the Case.

In the face of these facts we feel that we can not concur with the majority report in dismissing this fundamental question with a notice so casual that it is almost insulting to the men who have placed so much faith in the President's commission. The scant three typewritten sheets with which the majority report dismisses a question vital to the lives of the mine workers hardly justifies the following statement with which the section is prefaced: "We have gone fully into the mine workers' demand for a six-hour day and a five-day week * * *."

Mr. Hoover, as already quoted, has stated that there lies in the recognized intermittency of employment in the bituminous industry, "a long train of human misery." With three typewritten pages the plea of half a million human beings to be relieved of this train of human misery is dismissed. In the face of the fact that the mine workers are actually averaging approximately a 30-hour week, the majority report "can not help but feel that 8 hours a day is not too much to work under present circumstances * * *. Therefore, our conclusion is that, under all conditions, the eight-hour day should be maintained."

The very wording of this, which is the substantive part of the award is equivocal. It exhibits the casual way in which the problem has been treated. For, on the one hand, a real eight-hour day is not general throughout the industry even in theory, while on the other hand it exceeds that which has been demonstrated as possible in practice. On neither one side nor the other does the statement conform with the facts which have been placed before the commission.

In the interest of the Nation as a whole, however, we are inclined to go much more than halfway toward meeting the majority report in this matter. In doing this, we can not fail to point out that so casual has been the "careful" consideration reflected in the majority report that it has utterly failed to provide any means of enforcing the eight-hour day. Their lame statement, then, amounts to a mere pious hope.

Punitive Overtime.

We feel, therefore, under obligation to cover this point. Closely associated with the request for a shorter working day, whether that be of six, seven, or eight hours, is the request for punitive overtime, a request which has been completely ignored in the majority report. Punitive overtime is recognized generally as the accepted means of securing strict adherence to the standard working day. Here again in an industry where unemployment constantly results from overproduction, it is important to have safeguards against the extension of the working day.

That this request is not extraordinary is proved by following survey of the practice in this country. It is a practice current in practically all the organized trades, such as the building trades, metal trades, laundry workers, granite and stone trades, bakery trades, cigar makers, stationary fireman, glassworkers, hatters, paper makers, photo-engravers, printers, and printing pressmen.

Punitive overtime is almost universal in the basic industries of the country except in the coal mines. It is paid in all of the four principal centers of the men's clothing industry, with over 100,000 workers.

The shipyards of the country, with approximately 300,000 employees, have adopted the practice. Even the railroad freight service accepted the practice, effective in December last, and practically all railroad employees, or approximately 2,000,000 wage earners, now operate under this rule. The newsprint paper industries, so far as 35,000 or more employees are concerned, and the lumber industry of the Pacific coast, with 50,000 employees, pay punitive overtime as a result of war-time experience.

The packing-house industry, in which are employed 100,000 wage earners, was required to pay its employees time and a quarter for all work over 8 hours and time and a half for hours in excess of 10 hours per day. Judge Alschuler, in making the awards in May, 1918, declared the higher rate served to deter employers from unnecessarily requiring employees to work at such times, but if such work is necessary it serves also to compensate the employee for the added sacrifice he makes in so working at times when he should have his liberty.

While punitive overtime is not paid in the steel industry as a whole, it is observed in the steel mills of Colorado Fuel & Iron Co. at Pueblo, Colo. In the case of the United States Steel Corporation the basic 8-hour day was recently put in force, and the men were paid for 8 hours' work as much as they had previously been paid pro rata for the remaining 3 hours of the day, as the men are still required to work 11 hours during the day shift and 13 hours during the night shift.

One of the most remarkable instances of the application of punitive overtime is that found in the merchant marine, presumably one of the last occupations where it would be practiced, where 270,000 employees in the service have regularly been paid overtime as a result of long-standing trades-union practices, and with the confirmation and approval of the United States Shipping Board. The practice in the merchant marine affects all classes of employees—seamen, licensed officers, engineers, and galley and mess-room employees.

The merchant marine service of Norway, Sweden, and Italy may be instanced as examples of the practices in foreign countries.

In the street railway service of this country the payment of punitive overtime is gaining ground. It is observed in Boston and practically all of the cities of Massachusetts. The new agreements in New York and Chicago provide for it. It is prevalent in Newark and Paterson, N. J., and in other cities in that State. Detroit and Cleveland observe the rule. The practice is to pay from time and a quarter to time and a half.

The decisions of the National War Labor Board respecting the payment of overtime were fairly uniform. They fixed time and a half for all overtime, with double time for work on Sundays or holidays. The board also awarded double time for work on Saturday afternoons and for such work late at night by those who were not night-shift men. In one case the joint chairman awarded time and a quarter for work between 8 and 10 hours and time and a half for work over 10 hours, while in another case they awarded time and a half and double time for the same work, respectively.

State legislation in Oregon provides for punitive overtime for work done in excess of 10 hours, limiting such work to emergency work. In the case of work by the State, county, and other governmental divisions, punitive overtime is effective after eight hours of work per day. A law somewhat similar to the last named is also effective in the State of Washington.

Our War and Navy Departments during the period of war required the payment of punitive overtime for all work in excess of eight hours, stating: "The theory under which we pay time and a half for overtime is a recommendation that it is usually unnecessary and also undesirable to have overtime. The excess payment is a penalty and intended to act as a deterrent."

The general practice under the minimum-wage legislation, which as a rule affects women and children only, is to discourage and limit overtime as much as possible. When overtime is necessary, compensation is required somewhat in excess of the normal rate of compensation.

Either by law or administrative order, punitive overtime is required to be paid to those persons coming within the scope of the general eight-hour laws in the following countries: Finland, France, Ecuador, Poland, Austria, and Portugal. The eight-hour bill, now before Parliament in Great Britain, specifies not less than time and a quarter as the punitive overtime.

The International Labor Conference, at its recent meeting in Washington, when it recommended the adoption of a general eight-hour day by the countries which are members of the international labor organiaztion, also recommended the payment of time and a quarter for all overtime work.

In the voluntary agreements and in the binding awards of the arbitration courts or wage boards of Australia and New Zealand, all overtime in excess of 8 hours a day, or 40 hours per week, must be paid for at a higher rate of remuneration. Such a review of the industrial practice in regard to overtime tends to show that the mine workers, in asking for the establishment of punitive overtime, are merely asking that their industry be brought into line with the general industrial progress of the world.

A Conservative Recommendation.

If we are to take at all seriously the majority recommendation concerning the eight-hour day, we must be assured:

(1) That it shall be a real and not a sham eight-hour day.

(2) That punitive overtime shall be established as a means to its enforcement.

With a view to arriving at a settlement which will spare the country chaos in an essential industry, while standing firmly upon the justice of the request that the shorter working week now in actual practice be regularized, we put forward as the basis for compromise a suggestion which will make definitive the incomplete recommendation of the board concerning the eight-hour day.

In order that the mines shall be allowed full time to adjust themselves to the change we recommend that the present working hours of mine employees continue in effect until March 31, 1921; *and that, beginning April 1, 1921, the maximum hours for employees shall not exceed eight hours underground per day and six days per week. We further recommend the establishment of punitive overtime as a means to enforcing this standard day.*

This is merely a fair interpretation of the recommendation of the majority report which, as expressed, was so hopelessly vague as to mean nothing. It was manifestly unfair to put forward such a recommendation without at the same time making plain to the public that the miner's day is at present much over eight hours. He works at the coal face 8 hours, but he is down in the mine 9 or 10 hours and sometimes more, for many mines are deep and the galleries long. Which means that the mine worker must travel many minutes, even hours, below ground, far from the light of day, subject to all the hazards that prevail in the industry. It is no more than fair, as well as strictly conservative, to ask that the eight-hour day be made a real one, an eight-hour day from the time the miner leaves the surface until the time when he returns to the surface again. This will merely put into effect in the bituminous industry what is to-day recognized as just in the majority of industries in the enlightened countries of the world.

In our attempt to bring the matter before the public in this light we are encouraged by the statement of President Wilson, in his remarks urging the Adamson law, which may be quoted in part as follows:

> Because a man does better work within eight hours than he does within a more extended day, and that the whole theory of it, a theory which is sustained now by abundant experience, is that his efficiency is increased, his spirit in his work is improved, and the whole moral and physical vigor of the man is added to. This is no longer conjectural. Where it has been tried, it has been demonstrated. The judgment of society, the vote of every legislature in America that has voted upon it is a verdict in favor of the eight-hour day.
>
> The reasonable thing to do is to grant the eight-hour day, not because the men demand it, but because it is right, and let me get authority from Congress to appoint a commission of as impartial a nature as I can choose to observe the results and report upon the results in order that justice may in the event be done the railroads in respect of the cost of the experiment.

In brief, then, we are willing to go more than halfway in order to secure a working basis for the next two years, deferring to a future day and more thorough study judgment upon the request that actual working hours in the industry be recognized. But we can not refrain from commenting upon the injustice to the mine workers involved in the summary dismissal of the whole subject without any attempt to embody in the report facts which would inform the public as to the true hours worked by the mine workers and as to the real nature of the so-called eight-hour day. The public has a right to feel insulted at being thus fed with hand-picked material, predigested, as it were, in order that its judgment may be furnished ready-made. The phrasing of the final award concerning the eight-hour day is especially to be condemned. It is so worded as to have all the appearance of being a liberal recommendation of the eight-hour day, when in point of fact the interpretation of "maintain" would surely result in a continuance of the present inhuman conditions in the bituminous industry.

RELATION OF LABOR COSTS TO TOTAL COSTS, PROFITS, AND PRICES IN THE BITUMINOUS COAL-MINING INDUSTRY.

A survey of the coal-mining industry demonstrates conclusively the fallacy of the assumption that wage increases have been the primary factor in the advance in the price of coal over prewar prices. It is equally erroneous to assume that the proposed wage increase now under consideration for bituminous mine workers must necessarily be followed by a corresponding increase in the cost of coal to the consumer. The utter falsity of this position is clearly shown by a review of the Federal Trade Commission's recent report on the coal industry and other official data bearing on the production and distribution of coal.

An examination of these data shows that the increase in the retail price of bituminous coal since 1916 has been from three to four times as great as the increase in labor costs during the same period, and that the operator's share in the proceeds of the coal industry has increased from 75 to 400 per cent, while the distributive share of labor has actually decreased.

In the central Pennsylvania coal field, for example, out of every dollar received by the operator in 1916 for his coal, 66 cents went to labor, while 6 cents was retained by the operator as his profit. In 1917, labor received only 46 cents out of each dollar, while the operator retained 32 cents. This was a decrease in labor's share of 30.3 per cent, and an increase in the operator's share of 433.33 per cent. In 1918, labor's share of each dollar was 35 cents, a decrease over 1916 of 16.7 per cent, while the operator's share was 25 cents, an increase over 1916 of 316.7 per cent.

Again, in the southwestern field, labor's share of the dollar in 1916 was 60 cents, and in 1917 it was only 39 cents, a decrease of 35 per cent, while the operator's share in 1916 was 13 cents, and in 1917 it was 42 cents, an increase of 223 per cent. In 1918, labor's share was 55 cents, as against 60 cents in 1916, a decrease of 8.33 per cent, while the operator's share was 24 cents as against 13 cents in 1916, an increase of 84.6 per cent.

Thus, there are established the following facts:

(1) That increased coal prices were not due to increased labor costs, but, on the contrary, were due largely to increased profits exacted by the operators; and

(2) That increased wages to labor were more than offset and rendered less than negligible by the increased efficiency and increased productivity of labor.

In 1917, the operators in the central field could have sold their coal for 20 per cent less than they did exact for it, and still have retained twice as much out of each dollar they received as they retained in 1916; in 1918, they could have reduced the price 13 per cent and still had a share twice as large as they had in 1916.

In 1917, these operators could have given the mine workers a wage increase of more than 43 per cent, without increasing the price of coal, and still have retained twice as much out of each dollar as they retained in 1916; in 1918, they could have made the wage increase almost 24 per cent, without increasing prices, and still have had their share in each dollar twice what it was in 1916.

Additional data contained in the report of the Federal Trade Commission and the reports of the United States Bureau of Labor Statistics may be cited further to prove that increased coal prices were not due to increased wages granted to, or exacted by, the mine workers.

Although labor costs per ton of output in the southwestern Pennsylvania coal field, for example, increased 54 cents per ton or about 66 per cent in 1918 over 1916, the proceeds to the operator per ton of output, for this period, increased about 250 per cent or more than double the increase in the cost of labor. During the same period the wholesale price of coal advanced $20 or about three times the increase in labor costs and the retail selling price increased $2.19 which was more than four times the amount awarded to labor.

In the case of the central Pennsylvania coal fields the figures are equally as conclusive. In this district there was an advance in 1918 over 1916 in labor costs of 80 cents, or 87 per cent, in total f. o. b., mine costs of $1.05, or 79.6 per cent, and in sales realization of $1.75, or 125 per cent, and an increase in the operator's margin of profit of 70 cents, or 875 per cent. The increased labor cost in 1917 over 1916 was 41 cents, or 44.5 per cent, whereas the increase in the operator's margin in 1917 over 1916 was 84 cents, or 1,050 per cent.

It may be noted that in 1917, had the operators in this field been content to exact a margin of profit only three times as great as their margin in 1916, they could have increased the wages of the mine workers more than 50 per cent without increasing the price. In 1918, with a margin of profit three times as great as they received in 1916, these operators could have reduced the price of coal more than 16 per cent, or they could have increased the mine workers' wages over 31 per cent without an advance in the price of coal. These operators, however, exacted and received a margin of profit in 1917 ten and a half times as great as they received in 1916, and in 1918 almost nine times as great.

No further evidence should be necessary to demonstrate whether higher coal prices have been due to wage payments to the mine workers or to the profits of the operators.

In this connection, however, it may be stated that under prewar conditions a margin of 8 cents a ton was regarded by the operators as normal and acceptable, while a margin of 10 cents was regarded as extremely gratifying. This would indicate that a margin of not to exceed 25 cents should have satisfied the operators during war times, while on the contrary their margin soared to 92 cents in 1917 and to 78 cents in 1918.

In the Illinois coal fields, increases in labor costs per ton of output in the various districts in 1918 as compared with 1916, ranged from 63 cents to 75 cents. The amounts realized by the operators from the sale of coal during the same period show increases which ranged from $1.03 to $1.41, and in most instances were more than double the advance in labor costs. As contrasted with the increase in the retail price of bituminous coal, the advances in labor costs ranged as low as 22.8 per cent and were less than 35 per cent, in each instance, of the advance of $2.19 per ton in average retail prices in 1918 over 1916.

In district No. 1 of the Illinois coal fields, for example, labor costs per ton of output increased from $1.48 in 1916 to $2.23 in 1918, or only 75 cents as compared with an increase in sales realization from $1.87 to $3.19, or $1.32, and an advance with operator's margin from 3 cents to 42 cents. This increase in labor costs, it should be noted, represented only 34 per cent of the advance in retail prices during the same period, which increased from $5.61 to $7.80, or $2.19, as pointed out above.

In district No. 2 labor costs advanced from a minimum of $1.08 in 1916 to an average of $1.75 in 1918, an increase of over 67 cents as compared with an increase in sales realization from a minimum of $1.31 to an average of $2.72, or $1.41, and an increase in the operator's margin from a minimum of 3 cents to an average of 42 cents. In this district the increase in labor costs represented only 30.6 per cent of the advance in retail prices in 1918 over 1916.

In district No. 3 there was an advance in labor costs from 87 cents in November, 1916, to $1.37 in 1918, an increase of 50 cents as compared with an increase in sales realization from a minimum of $1.13 in 1916 to an average of $2.23 in 1918, or $1.10. In the case of the operator's margin there was an increase from a minimum of 1 cent in 1916 to an average of 46 cents in 1918.

In district No. 4, labor costs increased from 80 cents in 1916 to $1.35 in 1918, or 55 cents, while sales realization during the same period increased from $1.12 to $2.15, or $1.03, with an increase in margin from 10 cents to 40 cents.

In district No. 6 labor costs advanced from a minimum of 85 cents in 1916 to an average of $1.48 in 1918, an increase of 63 cents, as compared with an increase in sales realization during the same period from $1.07 to $2.42, or $1.35, and in the operator's margin from 1 cent to 45 cents.

As contrasted with the increase in the retail price of bituminous coal, it will be noted that the increase in labor costs in districts Nos. 3, 4, and 6 represented only 22.8 per cent, 25.1 per cent, and 28.8 per cent, respectively, of the advance of $2.19 in average retail prices in 1918 over 1916.

In the Illinois fields it is also found that the share of labor in each dollar of sales realization decreased, while the share of the operator invariably increased. For example, in district No. 4, labor's share in the dollar dropped from 72 cents in 1916 to 63 cents in 1918, a decrease of 12.5 per cent, but the operator's share increased from 9 cents to 19 cents, or 111.1 per cent. In district No. 1 labor's share decreased from 79 cents to 70 cents, or 11.4 per cent, as compared with an increase in the operator's share from 2 cents to 13 cents, or 550 per cent.

Incontrovertible evidence of the enormous earnings of bituminous coal operators and the most complete exhibit of their profits, is to be found in their tax returns to the United States Treasury Department. These were sent to the United States Senate in response to Senate resolution 253 and were, thereupon, published as Senate Document No. 259, Sixty-fifth Congress, second session. These returns, together with those for the year 1918, as well as the returns of 32 companies collected from financial manuals, indicate that the coal companies have passed all increased production costs and their income and excess profits taxes on to the public, and have then still further increased the price of coal so that they might retain more than twice their normal income.

PROFITS OF BITUMINOUS COAL COMPANIES.

The majority report deals with this subject very briefly. As a matter of fact, considering the important bearing which the question, whether or not the coal operators realized large or small returns on their operations, has upon the entire controversy, it is apparent that this matter has been lightly touched upon and quickly passed with the evident purpose of leaving the impression that the profits of the industry have been at least normal during the war. The data submitted by the majority report, however, carries itself the condemnation of any such conclusion.

The report fails to mention either the exhibit which the operators, during the hearings, submitted on this point, or that offered by the mine workers. The former consisted of a voluminous tabulation of the income, so-called net worth, of a large number of industrial companies which had profited greatly during the war. This was exhibited as offsetting the fact that the coal operators had made larger gains during the war than previously. The earnings of the Pittsburgh Coal Co. were included in this tabulation. This was the only coal company shown, the operators stating that because of its magnitude it was representative of the bituminous coal mining industry, and pointing to the fact that it had made only a comparatively small percentage on its "net worth" or capital stock. The utter fallacy of this contention was proven by the mine workers in their reply brief, as it was conclusively shown that, like the majority of the corporations floated at the beginning of the twentieth century, practically all of the common stock of this company was given as a bonus. It is not necessary here to go into all of the details of the past financial history of this concern, but the facts conclusively show that of the present $68,000,000 capitalization of the Pittsburgh Coal Co. little more than half represents actual investment of money or of property. This, of course, means that in order to arrive at the real return on actual investment, the dividend rate given in the report must be doubled. In other words, this great corporation earned 40 per cent in 1917 and 20 per cent in 1918.

Further than this, in order to furnish an apparent basis of value for this stock, the company, in 1917, had certain mining engineers in the Pittsburgh district revalue its holdings. This revaluation placed a book value upon the property several hundred per cent in excess of the actual cost of the property, which meant, of course, that without one cent of additional capital being subscribed or paid in, the "invested capital" or "net worth" of the Pittsburgh Coal Co. was increased several fold.

The mine workers' exhibit on this point, of which the joint report likewise fails to make mention, was in two sections; the first was a tabulation of the financial statistics of every coal and coke company which published its annual statements. The income, capital stock, and tonnage of coal produced by each of these companies for the seven-year period, 1912–1918, where the same were obtainable, were shown in this compilation. All told, 32 companies, ranging in size from comparatively small to the largest bituminous coal corporation in the United States, were included. Some of these companies showed very large profits, others only average incomes, while some showed a net loss. The profits tabulated in the exhibit represented the net income of the companies after the deduction of all items of depreciation, depletion, amortization, sinking funds, royalties, interest on indebtedness, and Federal income and excess profits, as well as local, taxes.

As the income and production figures for all companies were not available for each of the seven years, it was impossible to draw an accurate comparison of the actual increase in tonnage produced and the increase in profits realized. In 1917, however, the amount of coal produced by 31 companies of the group was obtained, the aggregate production in that year being 81,000,000 tons, or approximately 14 per cent of the entire tonnage mined in the United States.

The percentage of the total net income to the total amount of capital stock, and the amount of net income per ton of coal produced by all companies combined, for each year, is shown below.

	Per cent of net income to capital stock.	Net income per ton.
		Cents.
1912	7.3	21.0
1913	9.0	21.0
1914	6.4	21.0
1915	6.4	18.4
1916	8.9	25.1
1917	21.3	67.9
1918	15.5	48.8
Average for prewar period, 1912–14	7.6	21.0
Average for war period, 1916–18	15.2	48.4

The chief value of these figures is the contrast furnished between the percentage earned on capital stock and the net profit per ton produced for the prewar years, when normal competitive conditions fixed the price of coal, and the period of the war. It will be noted that these companies made an average rate of profit during the three years, 1916–1918, exactly twice as great as during the prewar period, and this despite the fact that many of them had greatly increased the amount of capital stock during this time. The significant feature brought out here, however, is that this advance in earnings was not due to increased production, at least primarily, but *to a greater profit taken from each ton of coal. This is evidenced by the fact that the net income per ton is shown to be almost two and one-half times greater during the war period than previously.*

When the representative nature of this group of companies is considered, as well as the fact that it includes all companies publishing income statements, many of which have pursued this policy for a great many years, long before the war, it would seem to be sufficient evidence that profits in the bituminous coal-mining industry were much greater during the war than ever before. The fact that some few companies earned a low rate of return on their so-called invested capital or capital stock in 1917 or 1918 would seem to indicate that they were either overcapitalized or else were holding large amounts of coal land idle at the expense of the public for future profit or exploitation.

The second section of the mine workers' exhibit on profits in industry, concerning which the majority report also makes no mention, is a compilation of data from Senate Document No. 259, entitled "Corporate Earnings and Government Revenue." The data presented therein are from income and excess-profits tax returns to the Treasury Department of approximately 400 corporations engaged in mining bituminous coal and the earnings of these companies were as follows in 1917:

	Before deducting tax.	After deducting tax.
Per cent of net income:		
To capital stock	45.0	31.5
To invested capital	38.4	24.5

The per cent of net income to capital stock in 1916 was 13.2.

The companies included were considered by the Secretary of the Treasury as being representative of the industry. Sufficient data concerning corporations engaged in producing bituminous coal are not available from public records to afford a satisfactory basis of comparison with the figures contained in Senate Document No. 259. In the case of anthracite coal, however, a comparison of figures collected from other sources with those contained in Senate Document No. 259 is possible.

Published financial reports of three large companies engaged in producing anthracite coal show a total capital stock of $47,411,000 in 1917, while Senate Document No. 259 lists six companies the capital stock of which was but $1,150,000 in 1917.

Thus it appears that the figures presented in Senate Document No. 259 are not representative of the anthracite coal mining industry and they may not be representative of the bituminous coal-mining industry.

The majority report contains a tabulation of the profits of 1,551 bituminous coal companies taken from their income-tax returns for the year 1918, with the tonnage of coal produced as reported by the United States Geological Survey. The grouping in the table relates entirely to the percentage of profit to invested capital, and therefore only the total figures are of any real value in considering the same.

It is noted that this group of companies, measured by the tonnage of coal produced in 1918, represents approximately 31 per cent of the bituminous industry. It is noticed also that the combined total of capital stock is $271,000,000, and it is therefore evident that this compilation from that standpoint is not as representative of the industry as the tabulation submitted by the mine workers which was taken from the companies' published financial statements, the aggregate capital stock of the 32 companies there included being $278,000,000.

The majority report cites the fact that 337, or 22 per cent. of the total of 1,551 companies reported net losses in 1918. To say the least, it was unfortunate that the Treasury Department, in furnishing these figures, did not go a step further and give the information with reference to *all* bituminous coal companies. There, then, could have been no doubt left in the minds of anyone as to the percentage of the entire industry that made profits in that year, and it would certainly have set at rest speculation as to what the actual profit per ton of coal is.

But the strangest feature of this portion of the majority report is the fact that *only the per cent of net income to invested capital* was considered in arriving at the conclusion that a comparatively small return was realized by the coal operators in 1918. In the first place, the term invested capital is misleading, inasmuch as it rarely means the amount of money actually invested in the business or industry, but rather the book value at which the corporation carries its land and other property. This, of course, may be arrived at in a number of ways, or may be merely a surmise, or the result of an earnest desire to justify excessive profits or stock issues, as in the case of the Pittsburgh Coal Co.

The conclusion reached in the majority report seems to be that, as the average percentage of income to invested capital for the 1,551 companies was less than 10 per cent, profits in the bituminous coal-mining industry during the year 1918 were moderate. That the Treasury Department did not take the same view of it is quite apparent from a glance at the figures as presented in the table shown below. It will be noted that the total net income, before deducting taxes, and before deducting the losses of the 337 companies showing deficits, was $91,000,000. Despite the fact that this amount only represented a little over 20 per cent of the total invested capital of the combined group, the Treasury Department required these corporations to pay $6,000,000 in income taxes and $36,800,000 in excess profits and war taxes; in all, practically 50 per cent of their total profits. From this it would seem that Mr. McAdoo was not at all impressed with vast amounts of money "invested" in the coal-mining properties of these concerns, but took the position that they should base their profits upon the amount of capital stock. Even after paying their taxes, it will be seen that these companies profited quite generously in relation to capital stock, the average, including the 337 companies with losses, *being practically 17 per cent.*

Statement compiled from a tabulation in the report of the Bituminous Coal Commission entitled: "Table prepared from 1,551 returns of net income filed by bituminous coal-mining concerns for 1918, distributed according to the ratio of net income or net loss to invested capital, showing the number of returns, the aggregate amount of capital stock, invested capital, net income, income tax, for profits and excess profits tax, total tax, and the net income after deducting tax, also for those returns reporting loss, and net aggregate loss (also total tonnage for 1918, supplied by the Geological Survey)."

	Companies reporting net income.	Companies reporting loss.	Total.
Number of companies	1,214	337	1,551
Capital stock	$251,002,554	$20,932,839	$271,935,393
Invested capital	$443,520,546	$27,445,231	$470,965,777
Net income	$91,454,207	[1] $2,619,732	$88,834,475
Income tax	$6,233,168	...	$6,233,168
War profits and excess profits tax	$36,812,269	...	$36,812,269
Total tax	$43,045,437	...	$43,045,437
Per cent of total tax to total income	47.10	...	48.46
Net income after deducting tax	$48,408,770	...	$45,789,038
Average per cent of net income to invested capital before deducting tax	20.62	[1] 9.55	18.86
Average per cent of net income to invested capital after deducting tax	10.91	...	9.72
Average per cent of net income to capital stock before deducting tax	36.44	[1] 12.51	32.67
Average per cent of net income to capital stock after deducting tax	19.29	...	16.84
Tonnage	168,893,351	11,009,536	179,902,887
Net income per ton:	*Cents.*	*Cents.*	*Cents.*
Before deducting tax	54.15	[1] 23.80	49.38
After deducting tax	28.66	...	25.45

[1] Loss.

Another feature which was entirely ignored in the tabulation contained in the majority report is the relation of the net income to the tonnage of coal produced. It surely must be conceded that a company, no matter what amount of money it may have invested in coal lands or equipment, is not entitled to a return on this investment when its property is nonproductive. The true measure, therefore, of the rate of return to which a coal corporation is entitled would naturally be the amount of coal produced in a given year. This information is contained in the table, but as above stated was *not used* in the majority report in arriving at a conclusion as to the reasonableness of the profits made thereon.

The inclusion of this information by the Treasury Department and the Geological Survey is gratifying to us. The profit per ton has been computed in the foregoing table and shows that these companies, the fortunate and the unfortunate, the large and the small, all combined, made a *net profit*, after paying out 50 per cent of their income in taxes, *of approximately 25½ cents on each ton of coal produced. When it is considered that this profit is after all deductions for depletion, to pay for the coal land, for depreciation, to pay for the equipment, for interest on borrowed money, which usually represents the entire investment, and for all other charges which can be crowded into an income tax return, it would seem as though the profit realized was quite adequate.*

As figures similar to those for the prewar years are not obtainable, it is not possible to make a comparison of this per ton profit, but in a general way it has been understood that in normal times a net profit of 10 cents a ton by coal-mining companies was considered a fair return. As is evident, these companies realized two and one-half times this amount. It is also evident that the group is composed almost entirely of comparatively small concerns, the average capitalization being practically $175,000, and from the compilation made by the mine workers of the earnings of the larger corporations it is clear that their profits are even a greater amount per ton. As a considerable proportion of the total tonnage of bituminous coal is mined by large concerns, the average rate of profit in the industry is apparently a great deal more than 25½ cents per ton.

In the light of all these facts, it is absurd for the operators to put forth the claim that if the mine workers are paid a living wage the public will suffer a forced advanced cost of coal and a further increase in the cost of living. While the mine workers, during our great national emergency, were working every day available in order to maintain production, were being paid wages even far below their prewar purchasing power, which, as has been pointed out, was below a level of actual subsistence, and at the same time were sending members of their families to France and straining their inadequate resources to the utmost in the purchase of Liberty bonds in order to aid our common cause, the coal-mining companies were helping to win the war by taking extortionate profits from the Government, our war industries, and domestic consumers, and were telling our harassed people, when they protested against the prices of coal, that the high prices were due to the exaction of high wages by the mine workers. Their action has cast a stigma upon the industry and upon the patriotic honor of our people.

INTRODUCTION OF LABOR-SAVING DEVICES AND MACHINERY.

As a substitute for the extended section of the majority report on the topics we would recommend the following statement which more briefly and effectively covers the questions at issue:

> Labor-saving machinery: The operators have the right to install labor-saving machinery at any time, and such machine work not now covered by this agreement shall be governed by such scale as the miners' and operators' representatives may determine.

The United Mine Workers have always been favorable to and have never opposed the introduction of machinery or labor-saving machinery in the operation of the mines. As a matter of fact, the substitute of mechanical methods for hand labor has been a very noticeable feature of the development of the industry during the past 25 years. The number of machines in use has increased from 545 in 1891 to 18,463 in 1918. In the former year only 5.3 per cent of the bituminous coal supply was mined by machinery as contrasted with 55.9 per cent, or more than one-half, in 1918. The growth in machine mining is shown by the following table:

Production of coal by machines in the United States since 1891, in short tons.

Year.	Number of machines in use.	Per cent of total production mined by machines.	Year.	Number of machines in use.	Per cent of total production mined by machines.
1891	543	5.3	1907	11,144	34.9
1896	1,446	11.9	1908	11,569	37.1
1897	1,956	15.4	1909	13,049	37.6
1898	2,622	19.5	1910	13,254	41.7
1899	3,125	22.7	1911	13,829	43.9
1900	3,907	24.8	1912	15,298	46.8
1901	4,341	25.6	1913	16,381	50.8
1902	5,418	26.7	1914	16,507	51.7
1903	6,658	27.6	1915	15,692	54.9
1904	7,663	28.2	1916	16,198	56.5
1905	9,184	32.8	1917	17,235	55.5
1906	10,212	34.6	1918	18,463	55.9

In its annual report on coal for 1914, the United States Geological Survey says:

> During the last quarter of a century the cause of unionism among the miners has shown noteworthy progress and a number of coal-mining States are now all unionized. Prices of labor have been markedly advanced, the

higher cost of labor being chiefly offset by the economies effected through the use of mining machines and other mechanical and technical improvements.

The great saving effected by the coal operators through the use of mining machines is manifest at a glance at the scale of wage rates. At present the rate for hand mining in both the Hocking Valley and the Pittsburgh districts is \$0.8764 per ton (thin vein) while the rate for machine mining (chain machines, thin vein) is only \$0.70 per ton. At the rate of this differential of 17½ cents per ton, the operators made a gross saving through the use of mining machines amounting to \$56,688,000, in the year 1918, and owing to the rapid growth of the use of machines, this profit is growing every year. In the year 1915, when the differential was larger than it now is, the saving through the use of machines was \$48,000,000 and that the operators were keenly alive to their financial interests is shown by the fact that the number of mining machines has increased in the three years from 1915 to 1918 by over 17½ per cent.

There are naturally some deductions that must be made from the above gross saving. There is the interest on the investment, and cost of the power required to operate, as well as repairs and depreciation. The saving per machine, however, taking all makes and styles together can be readily found by multiplying the differential (17½ cents) by the average tonnage mined per year per machine (17,500 tons in 1918). This product is over \$3,000 as the average saving for each machine, and when this sum is compared with the average cost, it is seen that the investment is a very profitable one for the operators.

The differential that now exists in Illinois between pick and machine mining is 10 and 7 cents per ton, and in Indiana it is 12 cents per ton, both States having a considerably lower differential than in the Hocking Valley and the Pittsburgh districts, but even at this comparatively low differential the saving to the operators is large. The tables show that in the three years from 1915 to 1918 the number of machines in use in Illinois increased 20 per cent and in Indiana increased 37 per cent.

The cost of mining machines varies with the style and the make, but they average between \$2,200 and \$3,200 apiece. If the interest on the investment is figured at 5 per cent, and the depreciation is large enough to replace the machine entire at the end of five years of use, the yearly overhead charge per machine will vary between \$550 and \$800. The necessary repairs are more than counterbalanced by the junk or "turning in" value of the discarded machine, and the power for the operation is furnished from already existing power stations. Thus, a differential of 7 cents per ton with a yearly output of 17,500 tons per machine will effect a gross saving to the operators of $1,225, which is a net saving above overhead charges of from $675 to $425. A differential of four and one-half cents is sufficient to justify the operators in installing machines and obtaining the benefits of the resulting increased production.

The coal miner's position, however, is not that all the savings from the use of the machine should be credited to him. His position is admirably set forth by John Mitchell, formerly president of the United Mine Workers of America, in his book, "Organized Labor," chapter XXVIII. President Mitchell says:

> Trade-unionists know that they can not do without further advances in machinery, just as they realize that they could not maintain their present status if all the machinery introduced in the past were to be suddenly withdrawn.
>
> *What the trade-unionist desires is not the prohibition of machinery, but its regulation. The unionist demands, first, that machinery be introduced in such a way as to give the greatest possible benefit to all classes, with the least possible damage to the workman, and, second, that the introduction of machinery shall rebound to the direct and immediate advantage of the workman, as well as to the direct and immediate advantage of the employer.*
>
> Whatever may be the ultimate effect of the introduction of machinery, the immediate effect has been to work extreme hardship on the employee. The workmen who are obliged to work longer hours or more intensely for the same amount of pay, or who are thrown out of employment entirely, will not be consoled by the fact that in the long run prices will be reduced and the articles which they manufacture, cheapened to them. The unionists believe that machinery should be introduced with the least possible friction and the least possible hardship to individuals. When the employer is asked to increase wages or reduce hours, he frequently asks for an interval of a certain time in order to allow him to accommodate himself to the change, and the labor unions are now beginning to recognize the necessity of making great changes in industrial conditions by slow degrees. An equal duty should rest upon the employer to make alterations gradually, so as to extend the effect of the change over a series of years, and thus permit the workmen to accommodate themselves to the conditions.
>
> It is felt by the trade-unionists, moreover, that the workman should receive some direct benefit from the introduction of new machines. Apart from the fact that machinery works damage indirectly by making work more irregular, apart also from the fact that the introduction of the machine often means increased intensity of work and increased wear and tear upon the nervous system, apart from all other considerations, the workman should receive a portion of the benefit which is derived by the employer from the introduction of machinery. Originally the simple tool of the workman was his own property, and any improvement in this tool redounded to his own advantage. The machine was an extension and a combination of tools, and its introduction and improvement meant a gradual separation of the workman from the instruments of production. The vital fact of machinery was this—that it was too effective to permit the workman's tool to compete with it and too expensive for the individual workman to own it. As a result there grew up separate from the workman a capitalist class, a class owning machines and hiring labor. The result of this separation was that every improvement in the machines was to the immediate, if not the ultimate, advantage of the employer and to the immediate, if not the ultimate, detriment of the workman. The majority of trade-unionists do not take the stand of the Socialists, that these machines should be taken away from the capitalist class and be owned by the whole body of workmen, but they do claim that whenever a machine is improved or a new machine introduced, a part of the advantage should go to them immediately in increased wages or decreased hours. It is felt by the unionists that this is only fair and just, and that such a distribution of

benefits would compensate the workman for the increased intensity of his work and would be to the ultimate advantage of the employer and of society.

* * * * * * *

The inventor receives his reward through royalties or through a cash payment, society through the cheapening of the product; *and the employer and employees should arrange among themselves for an equitable distribution among them, the employer to be paid for his increased expense, for the cost of equipment, maintenance, and risk, and for his enterprise, while the workingman should be paid for his increased exertion and should be given a share of the bonus above that amount. The introduction of the machine should be done upon what may be likened to the cooperative system, and the machines should not be used to make the profits of the employer greater and the pittance of the employee less.*

As a matter of history, trade-unionism has not only not restricted the use of machinery, but has actually encouraged and stimulated its application.

Respectfully submitted.

JOHN P. WHITE, *Commissioner.*

WASHINGTON, D. C., *March 12, 1920.*

Appendix A.

[To the Minority Report.]

TENTATIVE AWARD ORIGINALLY PREPARED FOR THE CONSIDERATION OF THE COMMISSION.

United States Bituminous Coal Commission,
Washington, D. C., February 26, 1920.

Messrs. Henry M. Robinson and Rembrandt Peale,
Commissioners.

Gentlemen: Pursuant to our understanding of last week, I herewith transmit an outline of the award on the labor section of the bituminous coal controversy.

Aside from my intimate knowledge of the questions at issue, I took pains to follow closely the subject matter submitted to our commission. In addition to this I examined carefully the principal briefs submitted by each group of operators and miners, have weighed every phase of the situation, and I firmly believe that the proposals outlined herein are fully sustained by the records.

The history of this case as presented to the commission seems to me to bear out the outstanding fact that the mine workers have been denied proper consideration in the matter of wages and working conditions during the war, when we take into consideration the high cost of living and the many substantial adjustments that were made in the wages, hours, and working conditions of men in many other lines of industry.

The mine workers were keenly disappointed that they were driven back to work, in the manner and way so well known to each one of us, in the recent strike, and they must, in my judgment, receive substantial consideration in the claims that they are making if our commission is to be instrumental in rendering an award that will stabilize the coal industry.

That the mine workers have confidence in the judgment of the commission I feel quite sure. The coal operators, on the other hand, can afford to meet these issues in a broad manner, because their profits have been large and substantial.

The hazardous nature of the miner's calling is such that he can no longer be denied a proper adjustment of those outstanding abuses so characteristic of the past history of the industry.

I have endeavored to make my contribution to the work of this commission helpful, because I quite understand the burdens the miner has to bear in his calling, and I can fully appreciate his feelings. Smarting under methods that were employed to force him back to work, the miner has not given up the idea that he was right in the course he was pursuing. And because of these conditions he is performing his work to-day somewhat in a state of subdued rebellion. He knows full well the many decided advantages his employer enjoys at his expense.

My record in the labor movement is such as to leave no doubt of my desire to adjust matters through conciliation, and I am more than anxious that we reach a unanimous conclusion, because the President of the United States has so ably pointed out to us the necessity of doing so and because I know that if it is not done the mine workers' existing agreement will expire on April 1, 1920, in all the bituminous districts of the United States; that this is also true of the anthracite region, and hence the necessity of getting together in the broadest manner.

I have drafted this outline, disregarding many fundamental claims that are made by the mine workers, and knowing full well that the coal operators can meet the obligations imposed in this award, approximately, without serious inconvenience to themselves and without the public being seriously discommoded, and by so doing will demonstrate that they are willing to be generous and share some of the boundless prosperity they have enjoyed and will no doubt continue to enjoy.

Respectfully submitted.

United States Bituminous Coal Commission.
John P. White, *Commissioner.*

EXPLANATORY.

Central competitive field agrees to 11 cents as a correct flat rate of applying 14 per cent increase.

Districts South of Ohio River.

Average pick-mining rate Oct. 31, 1919		$0. 7165
Flat rate based upon 14 per cent		$0. 1003
Production south of Ohio River, 1918	tons	157, 852, 274

Districts West of Mississippi River.

(Including Michigan and Maryland.)

Average pick-mining rate Oct. 31, 1919		$1. 0450
Total rate based upon 14 per cent		$0. 1463
Production, 1918	tons	73, 025, 978

Production in Central Pennsylvania and Adjacent Territory.

Average pick-mining rate Oct. 31, 1919		$0. 87
Flat rate based upon 14 per cent		$0. 1218
Production, 1918	tons	73, 817, 477
Number of tons south of Ohio River at less than 11-cent rate		157, 852, 274
Number of tons west of Mississippi River and central Pennsylvania on per cent basis		146, 843, 555

When applied on a flat rate, pick mining for entire country brings more than 11 cents.

WHY PICK-MINING BASE SHOULD APPLY.

It is the human base; all handwork. It has always been the method used by operators and miners in the application of wage increases and reductions.

Pick mining includes mining, drilling, shooting, and loading into the mine car, this being uniform in all mining fields.

WHY MACHINE BASE SHOULD NOT APPLY.

Because of the many types of machines used and the varied rate for each type.

Every new machine would bring constant changing of base rates and result in unending disturbance in the industry.

Let the machine enter upon its merit to compete against the pick standard. The human element must always be protected.

The $1.70 day wage increase and $1 for boys is an increase of 35 per cent on the average wages of October 31, 1919.

TABLE OF INCREASE SINCE 1913.

	Per cent.
Average increase in the central competitive field, all employees, to Oct. 31, 1919	48.83
Increase cost of living to date	86
Increase selling price of coal f. o. b. mines	120

UNIFYING EXAMPLE.

ENTRY YARDAGE.

	New rate, 35 per cent.	Increase.
Rate Oct. 31, 1919:		
Mine A, $1	$1.35	$0.35
Mine B, $1.25	1.6875	.4375
Mine C, $1.50	2.0225	.5225
Mine D, $1.75	2.3625	.6125
Mine E, $2	2.7000	.7000
Average equivalent per cent rate		.5245

Any such differentials may be made uniform when mutually agree to.

The mining rates and wage schedules in effect on October 31, 1919, in what is known as the Washington agreement, applying to the central competitive field and outlying districts except as hereinafter provided, shall be subject to the following increases and conditions:

1. That the mining prices for mining mine-run coal, pick and machine, shall be advanced 30 cents per ton.

In the block coal field of Indiana, and in other localities that are still on the screened coal base, the usual methods of applying the tonnage rates shall continue. This also has its application to districts that have a joint understanding in applying wage increases to low coal.

2. That all day labor and monthly men, except trappers and other boys, be advanced $1.70 per day. Trappers and boys receiving less than men's wages to be advanced $1 per day.

3. That all yardage, dead work, and room turning be advanced 35 per cent. Nothing shall prevent the representatives of the miners and operators in any district, in joint conference, from taking the flat equivalent of the 35 per cent and applying it to yardage, dead work, and room turning, if by so doing they will make for uniformity and maintain the differentials. Failing, however, to agree to such application, then the 35 per cent shall be applied on the existing rates effective October 31, 1919.

4. The differential existing in the western Pennsylvania district between the thick and thin veins, both pick and machine mining, shall be adjusted in the following manner: Commencing with April 1, 1920, one-half of this differential shall be eliminated, and on April 1, 1921, the remaining one-half shall be eliminated; and the operators of the thick vein district will be required to pay the basic price provided for in the thin vein mining scale.

5. Payment for handling soapstone directly overlying the No. 8 seam of eastern Ohio and the Pittsburgh district of Pennsylvania, shall be subject to the increase provided herein; and that part of the stone up to and including the 12 inches is referred to the operators and miners of these two respective districts, and we recommend that two cents a ton be allowed, to be upon the ton, or it may be converted to a yardage basis if desired.

The principle of determining the flat rates for the payment of yardage and dead work as set forth in section 3 may be applied in these two fields in fixing and establishing pay for handling soapstone.

6. The base rate in effect for inside day labor in the central competitive field shall be established and made uniform throughout the central competitive field.

7. The present daily working hours shall continue until April 1, 1921. On and after that date employees will be required to work seven hours daily, six days a week, when required by the operator, in their usual working places. This shall be exclusive of the time required in reaching such working places in the morning and departing from them at night. And the conditions of the Columbus day wage scale of 1898 are hereby reaffirmed, except as to the number of hours constituting a day's work.

8. The machine differential in Indiana of 12 cents per ton to be adjusted in the following manner: Commencing with April 1, 1921, it shall be 11 cents per ton, and on and after April 1, 1921, it shall be 10 cents per ton. Within the two-year period the total

machine rate to the miner will be increased two cents as a result of the elimination of these differentials as above described.

Four-Cent Differential, Southern Illinois.

The differential in the southern Illinois field has been a controversy of long standing, and the commission is of the opinion that there is no justifiable reason for its continuance, and therefore decided as follows:

Commencing April 1, 1920, the mining rate in southern Illinois will be increased two cents per ton; on April 1, 1921, it will again be increased two cents per ton, and by this process the four-cent differential will be obtained.

Northern Illinois.

A very peculiar condition exists in the long-wall coal fields of northern Illinois. This matter, like many other questions familiar to the operators' and miners' conventions, has proved a very vexed problem, and the men who are employed in mining the coal in this field are not able to earn a corresponding wage with the men employed in the thicker veins in the other sections of the State.

It is also true that the rate of increase per ton, while equal to other fields within the State, has not yielded the miners of northern Illinois the same returns that have come to the miners in the thicker veins. It is therefore the opinion of this commission that miners and operators of this field, that there should be a joint commission of three operators and three miners appointed by the Illinois miners' and operators' associations, who will have full and complete authority to deal with all phases of the situation, including the adequacy of the increase ordered in this award and as it may affect these mines.

Assumption and Decatur.

And, in view of the fact that it is alleged that at Assumption and Decatur, Ill., conditions similar to those in northern Illinois exist, the same joint commission will have power to investigate and decide what may be necessary to determine matters at Assumption and Decatur.

Michigan.

Conditions in the Michigan coal fields, as reflected by the briefs filed by the mine workers and operators, reveal the fact that there are several questions in dispute submitted.

(1) The question of whether or not the extra 10 cents per ton allowed by the United States Fuel Administration during the war should be continued, the miners contending for its continuation and the operators asking for its elimination.

(2) The question of the number of rooms that should be given the loaders in the various machine mines is a very vital one, as the miners put it.

The commission believes in the matter of the 10 cents a ton given by the United States Fuel Administration that the decision of the Fuel Administration should govern.

With respect to their contention that two places should be given to each loader, the contention seems to be well grounded and we recommend that the loaders be given that consideration.

IOWA.

From an examination of the briefs and arguments that were made by the representatives of the operators and miners of Iowa we find there were but a few questions submitted, some of which have been composed by the general terms of this award. The commission is therefore of the opinion that the remaining questions can be, and are hereby, referred back to the operators and miners joint conference in Iowa for adjustment. We believe that in taking this course the best interests of miners and operators within Iowa will be conserved.

SOUTHWESTERN INTERSTATE FIELD.

(KANSAS, MISSOURI, ARKANSAS, OKLAHOMA, AND TEXAS.)

By reference to the oral statements and extensive briefs filed in regard to matters touching the southwestern interstate districts, it will be seen that nearly all the subject matters submitted are purely local questions, and the commission believes that they should be ventilated in the scale conferences in the Southwest, and we advise such course.

We might say further that the situation in the Thurber field of Texas, like that in the Osage field of Kansas, is most extraordinary, and the conditions prevailing at these places are exceptional; and if these mines are to continue operating it appears to the commission that they can only operate when the markets are most favorable, as the physical conditions surrounding the mines in these fields are such that we believe the only way prices and conditions in these localities can be determined is by referring these matters back to the scale conference of the Southwest with that end in view. We recommend such course.

WYOMING, MONTANA, AND COLORADO.

An examination of the briefs filed by the operators and miners of these districts show no special or peculiar grievances not common to the industry as a whole. They do not appear to be complicated, and we would therefore advise that they be referred to the joint conferences of operators and miners in their respective districts for the purpose of having them mutually adjusted.

Washington.

The situation in the State of Washington, as presented by briefs and oral statements of the operators and miners, reveals one of the most unusual and complex problems submitted to this commission for its determination. The operators show by their briefs that in many of the commercial mines of the State, which produce the majority of the State's tonnage and sales realization, the price is below the production cost. They also show that foreign coal and fuel oil enter in a large degree into the future life of the coal industry in that State.

The miners in rebuttal attack the figures in the briefs of the operators, declaring that depreciation, depletion, and miscellaneous items of production cost are excessive and unwarranted.

In view of the vital issues involved and the lack of time and funds for this commission to make a survey and enable them to deal adequately with the problem, we recommend the following:

That the representatives of the miners and operators of the State of Washington, at the earliest possible moment, select one operator and one practical miner, the two selected to agree upon a disinterested mining engineer as the third member, and, failing to agree on such a person, the Secretary of Labor shall make the appointment. This local commission shall make a survey of all the mines in the State to develop the facts underlying the whole problem as it applies to this industry in the State of Washington and at the earliest possible moment submit its report to the joint conference of operators and miners of that State.

Western Kentucky, District No. 23.

An examination of the briefs filed with the commission from this district will show that the burden of complaint of the miners is that they have contended for many years that their rates of pay for certain classes of labor bear too great a differential against the central competitive field and other districts. They cite that in the past the coal operators of western Kentucky claimed that when conditions would improve in what is known as the Hopkins County field the matters complained of would receive their most earnest consideration.

It is true that the operators claim they can not now change these long-established differentials because of market and freight conditions. Like many other cases submitted to the commission, and in order that no undue advantage will be taken of either operator or miner within these various districts, we find it necessary, in weighing the subject matters contained in these briefs, and where the conditions are extraordinary, to refer them to a joint commission or joint conference.

It is therefore ordered that these matters be referred back to the joint conference of operators and miners of western Kentucky, and if they fail to agree the mines must continue at work and the unsettled matters disposed of by the United States Bituminous Coal Commission. It is expected in all these references that the operators and miners will reduce to a minimum all matters that are likely to be controversial and that may lead to unstabilizing the coal industry.

Alabama, Tennessee, Eastern Kentucky, and Maryland.

The representatives of the miners from these States filed briefs citing the wages and conditions of employment, but as the records show, none of the operators from these districts appeared before the commission, merely filing letters with the commission to the effect that they have no joint relations with the mine workers in their districts.

In each of these districts during the war certain wage increases were adopted and put into effect by the United States Fuel Administration, and tribunals were set up for the adjustment of the usual complaints common to mining. These tribunals included a permanent umpire in each district, and in order that justice may be done to all and the mine workers be given the right to enjoy the corresponding advantage that this award may reflect as given to mine workers elsewhere, the commission would recommend that the operators arrange to meet with representatives of the miners in these districts and to put into effect the award of this commission, and to adjust the differences that may prevail in the industry in their respective localities, to the end that industrial peace and tranquillity may prevail.

West Virginia.

The miners and operators having agreed in joint conference to the establishment of a joint commission (this was done two years or more ago), for the purpose of making investigation within the Kanawha field, with the object of trying to correct inequalities and bring about a more uniform condition locally, have not had opportunity to present their report to their joint conference because of the Federal Government exercising control over the coal industry. We feel, however, that we should recommend that they compose their internal matters in harmony with the report of the joint commission herein referred to, and we so decide.

Central Pennsylvania.

Evidence submitted and facts developed by the miners and operators of this field in the presentation of their case clearly defines the issues involved, and the commission sets forth the following award in relation thereto:

The general award of the commission covering basic principles determines and deals with some of the matters of vital import to this field. In deciding upon local and internal questions affecting the district the commission recognizes inequalities that should be rectified in some degree. Therefore all additions to the base pay or otherwise by bonus during the war period shall be utilized in payment for dead work, or low coal standard, or for any of the complaints set forth in the miners' demands.

The variation of conditions throughout the district is of such character that in referring back to the next joint conference in this district, the commission hopes by this award and by cooperation and mutual agreement the bonus may be applied to remedy some of the evils complained of in the district.

COMPLAINTS THAT ARE GENERAL IN CHARACTER.

I.

Car Pushing.

This practice was complained of very bitterly in many of the briefs filed by the miners from nearly all sections of the bituminous coal fields. As shown by the briefs, the evils of this system are pronounced and impose a heavy burden upon the mine workers. With the growth of modern mining and the use of machinery the equipment has enlarged to a great degree, and, in our judgment, demands that a change take place in the method of handling mine cars.

We recognize very forcibly that steps must be taken to change this system, which should not be revolutionary, as it will require organization and in some instances careful consideration where physical conditions of the veins are such that the financial outlay necessary to make roadway heights would possibly render it prohibitive.

In order that the evil may be eliminated, we respectfully refer this important matter back to the various district joint conferences to be worked out in accordance with a mutual understanding, taking into consideration the conditions that obtain in each of the districts from which these complaints emanate.

II.

Powder Question.

The price of blasting powder furnished the miners shall not exceed the price in effect on October 31, 1919. This commission is of the opinion that there should be no attempt on the part of the employer to profit by the handling of powder sold to his employee, and we recommend that the policy in the future shall be that powder be furnished to the miners at cost plus transportation and insurance. Where detonating powders are used, the detonators shall be furnished by the companies free of charge.

III.

Blacksmithing.

We are of the opinion that the price charged the miners for smithing is excessive, and recommend that the charge be made on the basis of cost.

IV.

Price of House Coal to the Employees at the Mines.

The price in effect on October 31, 1919, for house coal furnished to the miners at the mines shall be increased by adding the labor cost only.

V.

Introduction of Labor-Saving Devices and Machinery.

The commission finds that the United Mine Workers are in complete harmony with the introduction and use of machinery and other mechanical devices that tend to increase production and efficiency in the mining industry. An examination of the brief filed by the mine workers on this subject is ample proof of their position.

Government statistics bearing on the subject of machine-mined coal, which is now 57 per cent of the total production, sustains the miners' contention that they have encouraged the introduction of machinery and mechanical devices that tend to intensify production.

We find only a few isolated cases where it might appear that there was some opposition to the introduction of machinery, and we would recommend that wherever such instances are recorded that the good offices of the miners' international organization be exercised to maintain the principle that they have so ably set up, and some equitable rule be jointly worked out that will conserve this principle.

VI.

Contract Observance.

Much was said by the coal operators in the hearings of the failure of the miners to observe contracts once they were entered into. The operators pleaded that the miners' international organization assume more responsibility for contract fulfillment.

We would suggest, owing to the fact that this question involves policies and long-standing customs, that it be taken up in the central competitive field joint conference, and whatever rule will be worked out in this conference shall become the rule for a similar policy in the outlying districts.

We can see no logical reason why a greater responsibility should not be exercised by the miners' international organization over the subordinate branches. We believe, however, that the miners' international organization should not be made the place where every petty grievance can be referred, but have in mind the larger principle involved in this question.

VII.

Discounting Employees' Wages.

It was cited by the miners during the hearings that a very serious evil exists in the industry, through the practice of the coal operators advancing money to employees during the interim of pay days and exacting discounts. This policy, in the opinion of the commission, is absolutely wrong, and we find no justification for its existence.

The commission decides that the coal operator shall not accept advance orders on the employees' wages, and, in the event the operator advances money on account, it shall be without order or discount.

VIII.

Paying Miners by the Car.

From an examination of the briefs filed with the commission, we find the practice of paying miners by the car measurement instead of the ton still exists. The evils of this system are outstanding and it is replete with abuses; it can not be defended on any honest or legitimate grounds.

The commission therefore decides that the practice of paying by car measurement be abolished, that the coal be weighed, and that 2,000 pounds constitute a ton, the basis upon which all miners should be paid.

IX.

Maintaining Open Mining Camps.

If the mine worker and his family are to enjoy the emoluments of advancing civilization, there must come an organic change in his environment. While there has been marked progress made in the better mining centers of the country toward ameliorating the conditions of the miner and his family, yet, on the other hand, in the isolated mining camps where large groups of miners are employed this has not been done. We wish to commend those mining companies that have taken into consideration the social conditions and the advantages that have accrued by reason of establishing better homes and enabling the mine worker to acquire a home.

There still exist some grave evils in that direction and some coal companies still maintain what is known as the "closed camp," where they dominate the entire situation, and at the slightest opposition of the miners to conditions that are offered the operator is in a position to evict them from their homes and impose upon them almost any condition he sees fit.

If we expect cooperation and helpfulness to exist between the employer and the employee, these evil conditions must give way to a more enlightened and humane attitude on the part of the employers. We therefore earnestly recommend that wherever miners and operators meet in joint conference they will use their influence for the purpose of bringing about substantial improvements that will eliminate these evils, and thus remove one of the great causes of unrest.

X.

Application of 14 Per Cent Wage Increases.

We find great confusion prevailing throughout the various coal-producing districts, outside of the central competitive field, because of the manner and way in which the 14 per cent increase has been applied.

The commission made known to the operators and miners through the hearings that when making its final award we would determine how the 14 per cent would be applied. We find that it has always been customary to follow the rule of the central competitive field, which was considered somewhat as the key to the whole situation and has served as a guide to the entire mining industry of the country.

The 14 per cent increase applied at the basing points in the central competitive field amounts to 11 cents per ton and was added to the pick and machine mining rates, thus maintaining the differentials. The 14 per cent increase was added to the yardage, dead work and room turning, day wage, and monthly men.

Percentage increases always disturb established differentials. It is therefore our decision that 11 cents per ton be added to the pick and machine mining rates in effect October 31, 1919, and that yardage, dead work, and the day wage and monthly men be advanced 14 per cent in all bituminous districts; that it be made retroactive from the date of resumption of mining and continue until March 31, 1920, as the award of the commission will become effective April 1, 1920, and will substitute and absorb the 14 per cent wage increase.

XI.

Joint Wage Negotiations.

The commission's award becomes the base upon which all wage agreements shall be predicated. The specific awards set forth shall not be subject to negotiations, but shall apply automatically in such agreements or schedules of wages.

Latitude to unify, or mutual arrangements that may be entered into, are hereby authorized and suggested, providing the specific awards and principles are adhered to.

XII.

Terms and Tenure of Contract.

The terms and provisions of this award shall become effective April 1, 1920, and continue in effect until March 31, 1922.

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