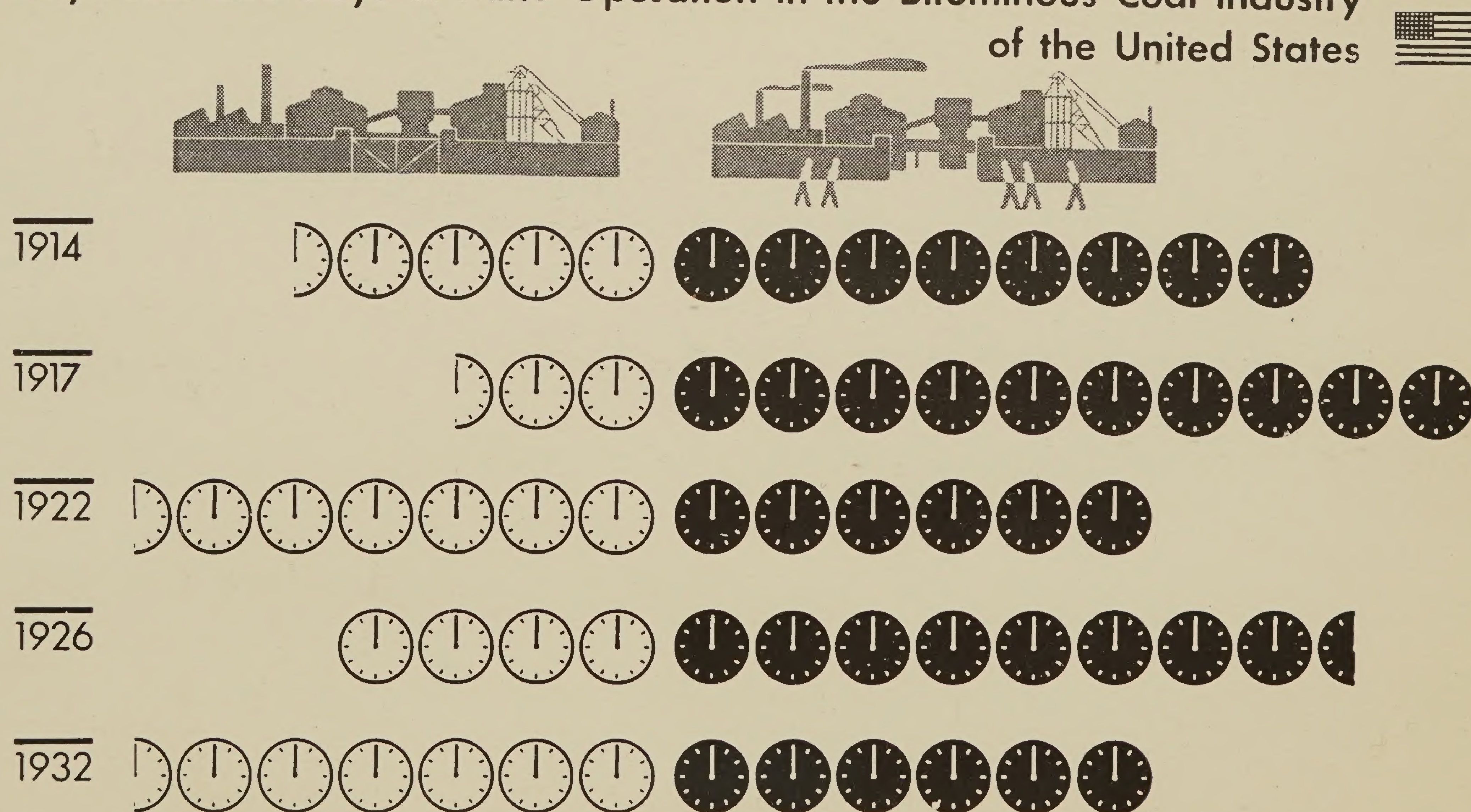
MINERS AND MANAGEMENT

VAN KLEECK

Days Lost and Days of Mine Operation in the Bituminous Coal Industry of the United States



Each white clock represents 25 days lost

Each black clock represents 25 days of mine operation

MUNDANEUM INSTITUTE VIENNA

INDUSTRIAL RELATIONS SERIES

MINERS AND MANAGEMENT

A Study of the Collective Agreement between the United Mine Workers of America and the Rocky Mountain Fuel Company

AND

An Analysis of the Problem of Coal in the United States

BY

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PREFACE

JOHN STUART MILL is credited with the observation that growth in the capacity for and practice in the habit of co-operation is the surest test of an advancing civilization. If the evidence for such a conclusion was apparent in his time, it has become even more obvious now when social changes have been speeded up and the interrelationship and interdependence of the various elements in organized society have become more pronounced. The truth of his conclusion as well as its implication for those who would make their contribution to "advancing civilization" is not decreased but increased as community life has become more and more industrialized.

It is the realization of the fundamental changes taking place in industry; of the resulting problems affecting the health, family well-being, standard of living, and general human welfare of vast numbers of people; and of the necessity for continuing study and analysis of these problems if improvement is to be achieved—indeed if ground is not to be lost—that has led to the long list of studies in industrial relations which have been made by the Department of Industrial Studies of the Foundation, under the direction of Mary van Kleeck.

Miners and Management is the sixth in a series of studies of experience in organizing relations between employers and employes in this country with a view to giving the workers a larger measure of participation in the management of industry. The major part of it sets forth the facts regarding methods employed by the Rocky Mountain Fuel Company since it came under the control of Miss Josephine Roche. This company, in the greatly overdeveloped state of coal mining in general, has undertaken with the co-operation of its workers, as stated in the agreement between the company and the union, "to stabilize employment, production and markets, and to establish industrial justice; to substitute reason for violence, confidence for misunderstanding, integrity and good faith for dishonest practices, and a union of effort for the chaos of the present economic warfare"; and finally "to assure to consumers a dependable supply of coal at reasonable and uniform prices."

The record of the company, which is a story full of difficulties and struggles against great odds, covering five years of operation under the agreement, contains much which bears upon problems confronted by many other companies and industries. This significant venture in union-management co-operation is fully and competently described by Miss van Kleeck, and conclusions are drawn out of a perspective of fifteen years of study of kindred industrial experiments.

Some of the difficulties found to exist in the Rocky Mountain Fuel Company are inherent in the disorganized and over-expanded condition of the industry, and this has led to consideration in the last chapter of the book of the general situation in coal mining throughout the country. Here Miss van Kleeck sums up the main facts as to conditions, interprets their meaning as she sees them, and describes or defines a plan for public consideration in dealing with this very large question now facing the nation.

The report in many places deals with highly controversial questions, and with matters on which there is a wide difference of opinion as to practicable remedies. This is particularly true of the situation described in the last chapter. This, however, is not the first time members of the staff of the Foundation have taken up controversial questions; and here, as heretofore, the long established attitude and policy of the organization in its research work have been followed.

In carrying out its purpose of "improving social and living conditions in the United States" the Foundation maintains a staff which, among other duties, conducts studies of social conditions, authorized by the General Director, where new information, its analysis and interpretation seem necessary and desirable in order to formulate and advance practicable measures and methods aimed at improvement. The results of these studies are published in book or monograph form.

The Foundation has sought and secured competent people for its research work. In formulating the problem for a study, in mapping out a plan of work on it, in collecting facts, in drawing conclusions, and in the presentation of findings, the author, who is always either a member of the staff or a specially commissioned research worker, has the benefit of the criticism and advice of colleagues in the organization. Full freedom is given the research worker for the final decision on all of these steps, and to present and interpret both factual material and conclusions in his own way. While the general responsibility for management of the Foundation is vested in a board of twelve trustees, the responsibility for facts, conclusions, and interpretations rests with the research worker alone and not upon other members of the staff or upon the trustees. Publication under the imprint of the Foundation does not imply agreement by the organization or its members with opinions or interpretations of authors.

SHELBY M. HARRISON, *General Director*

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Dr. Otto Neurath, Director

FOREWORD

THE study described in this book is the sixth in a series,[1] of which the first was published in 1924. During the ten intervening years great changes have taken place in the economic scene in the United States. The center of interest has shifted from relations between employer and employe in one establishment or even in one industry to the basic problem of industrial depression with unemployment widespread, wages and earnings declining, profit-making problematical, and prices at levels which are unstable and often unrelated to costs of production. These factors have driven wages down and weakened the trade unions. In the coal industry the disaster is greatly magnified, since its disorganization had preceded the general decline in economic activity. "Industrial Relations," which constituted the general title of the Series in 1924, seemed by 1934 less vital than the twofold problem of how to restore employment and how to re-create markets for America's goods.

Nevertheless to determine the basic principles of the relation of labor to management becomes more important as the probable necessity for fundamental changes in economic organization emerges from the present distress. The Foreword to the Industrial Relations Series in 1924 empha-

[1] These studies, which have been published by the Russell Sage Foundation, include: Selekman, Ben M., Sharing Management with the Workers: A Study of the Partnership Plan of the Dutchess Bleachery, 1924; Selekman and van Kleeck, Mary, Employes' Representation in Coal Mines, 1924, and Selekman, Employes' Representation in Steel Works, 1924, both covering the Industrial Representation Plan of the Colorado Fuel and Iron Company; La Dame, Mary, The Filene Store: A Study of Employes' Relation to Management in a Retail Store, 1930; Bloch, Louis, Labor Agreements in Coal Mines, 1931.

sized the importance of experience in the setting up of co-operative relations between labor and management in the conduct of industrial enterprises. Nowhere did it suggest a possible fundamental change in ownership and control of industry. Yet it undertook to ask questions about the relationship of labor to "matters affecting their employment." Those questions, if honestly asked and fundamentally answered, take on a new significance today. The original conception of the subject for study is here reviewed for the better perspective which it provides for the present inquiry.

Workers' participation in management was the general subject on which the Department of Industrial Studies initiated its series of investigations of new experiments in the organization of relations between employers and employes in industrial enterprises in the United States. As the Foreword to the previous studies has explained, the series was planned early in 1919 after interviews with a number of persons, including engineers, social workers, investigators, government officials, employers and representatives of labor, whose advice had been sought as to how the Foundation could most effectively contribute toward the improvement of human relations in industry in the period following the World War. The consensus of opinion seemed to be that there was great need to record the experience of those industries in which definite effort had been made to give workers a voice in matters affecting their employment. These efforts had taken forms varying from conferences between employers and employes on wages, hours, and other conditions of employment to genuine participation by labor in management.

The experiments included many kinds of organization under many different names, but roughly they were grouped into two major types: (1) those which were limited to a single company or to one plant, as were practically all the forms known as employes' representation; and (2) those which might include an entire industry, with machinery for joint negotiation between groups of employers on the one hand and trade unions on the other, such as were found in the garment trades and the mining industry.

Neither the typical plan for employes' representation nor the usual trade union could be characterized as aiming consciously to provide opportunity for workers to participate in management. Nevertheless the object of our interest in all these experiments was the status they gave to labor as measured by the workers' opportunity to share in decisions affecting industrial relations. We were not concerned primarily with the conditions established, the rate of wages paid, nor the hours worked except as these were the result of a larger influence on the part of employes. Our chief task was to find out by what procedure conditions had been established and, particularly, how effective the voice of the workers had been in the process of determining them. Beyond this lay the important question, as we defined it after the World War; namely, how an industrial enterprise could be conducted so that "the relations between employers and employes shall square with American ideals of democracy and brotherhood. Co-operation," we said then, in the Foreword to the Series,

> is sometimes a vague word to conjure with, but in its accurate meaning of "working together" it represents not only an ideal but a practical necessity in carrying on the specialized and complicated economic processes of modern industrial society. It is to give the more substantial content of actual experience to our aspirations for more satisfactory relationships in industry that studies of typical experiments are needed.

By 1934 the question had taken on another significance. Can the economic system of the United States find a way to distribute purchasing power equitably among the people so that they may buy the goods and services of a highly developed productive machine? The vast majority of the people are workers. Their purchasing power is determined by wages and by steadiness of employment. If labor has a voice in determining conditions of employment, will purchasing power be better distributed and industry thereby stabilized? Does past experience, as shown in this series of studies, and present practice, as shown in the latest investigation which is the subject of this book, provide a basis for a new economic program looking toward balancing production and consumption? Shall production be restricted or can consumption be increased? Can increased consumption be achieved without change in the status of workers?

The groundwork for the status of labor is laid in the separate establishment or workshop; but, as this series has already shown, human relations do not end there, but extend to the outward boundaries of all the influences affecting employment. The limitations upon "employes' representation," as already revealed,[1] are set by the fact that its scope restricts the action of workers to the place of their employment. Since a representation plan is confined to one establishment, there are no contacts, such as union organization provides, to enable labor to act for a whole industry or to connect it through such a body as the American Federation of Labor with fellow trade unionists in other industries. On the other hand, even the United Mine Workers of America, which comprehends all labor in the mining industry, has been so seriously shattered by economic disorganization in coal-mining and in industry

[1] See particularly Employes' Representation in Coal Mines; and in Steel Works, listed in footnote, p. 15.

at large that the mine workers have an insecure status and their "voice" today "in matters affecting employment" is far from powerful.[1]

In this situation, with federal legislation, particularly the National Industrial Recovery Act, recently passed and new policies of control awaiting the development of administrative machinery, it is of vital importance to call attention once more to the question of the status of labor with which this series began in 1919. In that year and the following, labor was sharing to a certain degree in general prosperity. The United Mine Workers had succeeded in maintaining the maximum wage scale achieved during the war. On the whole, its work was effective in the unionized fields, though a number of powerful companies refused to deal with it and already the competing form in employes' representation, as employers called it, or the company union, as the trade unionists called it, was gaining headway in American industry. Both movements were predicated upon the private ownership and control of coal.

The widespread unemployment and the severe depression which began in 1929, however, challenged the trade unions to fresh thinking on these deeper problems of economic organization. The American Federation of Labor in 1932 put forward a demand in its annual convention for a five-day week and a six-hour day. Few seemed to remember that that had been included among the objects of the United Mine Workers of America in its nationwide strike in 1922; but this shortening of hours was not accomplished. In addition to the shorter day and week, however, the American Federation of Labor at the con-

[1] As will appear later, in Chapter IX, with the enactment of the National Industrial Recovery Act in June, 1933, miners in large numbers all over the country joined the United Mine Workers. Following the adoption of the code for the bituminous coal industry in September, 1933, trade-union agreements were signed, but the effectiveness of these agreements in securing adequate wages in the present condition of the industry remains a question which time alone can answer.

vention of 1932 demanded "national economic planning" and insisted that it be directed toward the raising of the general standards of living, not toward the restriction of production nor the keeping up of profits. How the demand for this objective in economic planning would affect private ownership and control, and what forms of workers' organization would have to be developed to bring it about, are questions as yet unanswered. Nevertheless the program adopted by the labor movement of the United States, when taken seriously, must compel examination of these fundamentals and the adoption by the workers of a thoroughgoing economic policy and program.

Hence this Industrial Relations Series takes on new significance. The questions were posed at first in a scene where organized labor sought merely a chance to arrive at an agreement with organized employers regarding wages and hours. Employers were suggesting that these agreements could best be made by each company with its own employes. Now, both must face the question whether control by government is to increase and if so what form it shall take; what modifications should be made in the forms of private ownership and its claims upon profits; and what place the workers are to have in determining larger economic and industrial policy. To this last question, namely, what shall be the status of the organizations of workers and how are they to be given a voice in all matters affecting their employment, including the stabilization of industry and the wider policies affecting it, a partial answer from experience in one company is offered as a result of the present study; supplemented, however, by previous studies and by analysis of present developments in this industry during the economic crisis.

January, 1934.

INTRODUCTION

THE subject of this investigation is a collective agreement between miners and management, setting forth principles and procedure in the relationship between the United Mine Workers of America and the Rocky Mountain Fuel Company, which produces coal, mainly lignite and some bituminous, in the state of Colorado. Study of this written agreement, however, extends beyond it into the background of industrial relations preceding it in the state and in other parts of the country where coal is produced. The inquiry includes also day-to-day interpretation and administration. As an example of so-called union-management co-operation, it is a study in social functioning, involving attitudes and relationships of groups of human beings in the prevailing economic environment.

The pertinent facts are to be found only in part in documents and in statistics. It is not difficult to analyze the written agreement between the coal company and the union and to collect the statistics of operation as shown in payrolls and financial reports. Facts about changes in prices charged for coal and their influence on wage scales, the division of the market between industries and retail consumers, and to some extent a comparison of all these data with similar information available concerning the rest of the industry are pertinent and obtainable. Output and its regularity can be compared for the state as a whole and for the country as a whole. Accident statistics tell the story of the miners' safety.

More important, however, than all these statistical data are the more elusive evidences of purposes and attitudes which reveal the significance of this experiment and its potentialities for wider application. This information is not to be found in documents or in the accounting department. The investigator in search of it must have opportunity to observe workers and managers in action. Occasionally a letter or a committee report gives important evidence. But it is only through observation and through some measure of participation that an investigator can acquire the insight necessary to understanding. A study of union-management co-operation which does not deepen understanding of social relationships in industry would be of little avail.

The participation to which reference has just been made is not the digging of coal by the investigator, but the sharing in conferences; and on the other side, collaboration by miners and managers in the investigator's task of finding the truth. This collaboration was wholehearted and intelligent, so that the investigator needed merely to function as a scribe, to write the record of a significant social and economic experiment. In some experiments those who take part are unaware of their significance. But in the Rocky Mountain Fuel Company it is characteristic that leaders representative of both the union and the management have been explicit in their interpretation of their aims and procedures. They have adopted principles and they discuss these in their application to daily questions requiring adjustment.

Scope and Method of Investigation

The scope of the inquiry was outlined by the investigator in a memorandum early in the course of the field work and submitted to representatives of both workers and management. This memorandum appears in full in the appendices to this book.[1] After describing the forerunners of the present study, particularly those relating to coal, the following statement was made of the possible bearing of the experience of the Rocky Mountain Fuel Company and the United Mine Workers, combined with other previous investigations, upon the national problem of coal:

It will be observed that coal figures rather prominently in this series. It has also been touched by other studies in the Department. A study of the Canadian Industrial Disputes Act, published under the title, Postponing Strikes,[2] gave a good deal of space to the coal industry. Indeed it was a strike in coal which led to the framing of the law. As the law establishing the Industrial Commission in Colorado was based on this Canadian Act, the study of its operation in Canada bears on conditions in Colorado.

Another study of coal was a pamphlet published in 1922, under the title, The Coal Miners' Insecurity.[3] It brought together available statistics showing the irregularity of employment and operation in the bituminous coal industry since 1890—the period covered by governmental statistics. Another study, not yet published, analyzed statistics of employment in German coal mines, where the cartel had tended to keep production down to the level of market demands.[4] In addition, of

[1] Appendix I, Memorandum Regarding Study of Union-Management Co-operation in the Rocky Mountain Fuel Company: Prepared as basis for discussion with miners; union officers in mining and in other industries in Colorado; management in this company; and others informed of pertinent facts; March 7, 1932.

[2] Selekman, Ben M., Postponing Strikes; a Study of the Industrial Disputes Investigation Act of Canada. Russell Sage Foundation, New York, 1927.

[3] Bloch, Louis, The Coal Miners' Insecurity. Russell Sage Foundation, New York, 1922.

[4] In 1932 the author of this book had an opportunity to begin a study of workers' participation in management in the Soviet Union. Brief reference to these observations is to be found in a paper read at the annual meeting of the Taylor Society in December, 1932 (van Kleeck, Mary, "Observations on Management in the Soviet Union," in Bulletin of the Taylor Society, April, 1933).

course, the general problem of coal has absorbed much of the interest of the Department in the past ten years.

It seems obvious to all who are familiar with conditions in coal that it is time to make the industry an issue requiring thoroughgoing national action. It is a basic industry and a natural resource. It plays a large part in the present crisis of unemployment and industrial instability.

As a contribution to a national program for coal, then, this study of the Rocky Mountain Fuel Company is undertaken. Out of previous studies has come the general conclusion that the basic condition for stabilization of industry in the United States must be the establishment of right principles of relationship between labor and management and the proper joint organization for carrying them out; both groups being subject to the only valid purpose for industry, namely, to serve the public interest by producing goods and services with the least waste of human energy and materials and the maximum of stability, combined with progressive improvement in methods and relationships. Thus, the technical management of an industry functions within an environment of reciprocal human relations of management to labor and both to the consumer. How far ownership of capital, as distinct from management and labor, actually does and should control management, and upon what principles this element should function if the aims of conservation, stabilization and public service are to be paramount, is one of the vital questions before American industry. In the past ten years, ownership of capital has been the controlling element, largely controlling the policies of management in relation both to labor and to the consumer and the public. The result of this control is a proper subject for objective study. Finally, there remains to be worked out the relation of the community as a whole, through legislation, administration and the judicial process, to the functioning of labor, management and capital ownership in the public interest. The emphasis here is upon *functioning* and *responsibility for service*; not *rights* or *power*.

As for the details of the study in Colorado, in general the outline prepared in the working memorandum was followed with results which will appear in the following pages. It is only necessary here to say that the investigator spent three months in Colorado, from February 13 to May 13, 1932, and again some time in June, 1933, for the purpose of studying the current situation; and that, aside from obvious documentary sources of information, the facts here presented were gathered through interviews, through attendance at meetings of miners, through listening to hearings of the Industrial Commission, and through reading proceedings of past hearings; through reports of the state mine inspector; through contacts with trade unions in other industries and attendance at their meetings; through reading the daily press; and through more informal observation of opinions and attitudes which may be said to be representative of the general public.

The fact that a previous study for the Russell Sage Foundation, which dealt with employes' representation in the Colorado Fuel and Iron Company,[1] had given the investigator a considerable body of information about mining conditions in that state, was a great advantage in providing the background for the present study.

That whatever is significant in this inquiry is the result of collaboration on the part of representatives of labor and management, has already been noted. To name all those who have thus contributed would be impossible, but by way of representing the positions which they occupied at the time of the study, as well as their personal share in this experiment, it is fitting to express our debt to several. The first is Josephine Roche, president and, recently, also general manager of the Rocky Mountain Fuel Company. Hers are the vision, the courage and the devotion to

[1] See Employes' Representation in Coal Mines, cited in footnote, p. 15.

principle which have made possible this constructive effort to establish justice and sound practice in the coal industry. Contributing in degrees which it is impossible to measure in comparative terms is the co-operation of a group whose order of mention must be determined by the alphabet: John Green, representative of District No. 15 of the United Mine Workers of America and an employe in the mines; John E. Gross, executive secretary of the Colorado State Federation of Labor; Robert Johnson, chairman during the brief period of its work, of the Joint Advisory Board of the Rocky Mountain Fuel Company, who was also a miner and later assistant foreman; John R. Lawson, vice-president of the company and formerly international board member of the United Mine Workers; James Lord, at the time of the inquiry president of one of the local unions, formerly head of the Mining Department of the American Federation of Labor; O. F. Nigro, president of District No. 15 of the United Mine Workers of America; J. O. Stevic, member of Typographical Union and director of Organized Labor's Central Coal Committee, which was organized to sell the coal of the Rocky Mountain Fuel Company, and endorsed by the State Federation of Labor, the Trades and Labor Assembly of Denver and the Building Trades Council; and Merle D. Vincent, executive vice-president of the Rocky Mountain Fuel Company during the early part of the study and formerly president of the Colorado Bar Association. Mr. Vincent resigned his office in the Rocky Mountain Fuel Company on January 15, 1933, but retained membership in the Board of Directors until the annual meeting in March. To him we are particularly indebted for collaboration in the study of a possible national program for the coal industry; and for the preparation of notes on possible legislative action (Appendix IX). For the author's conclusions, however, she alone must be held responsible.

To superintendents and mine foremen and to members of pit committees, as well as to other miners and representatives of the different departments of the company, we express also our satisfaction and our appreciation of their unfailing courtesy and co-operation. Of the workers in the mines not already mentioned, two were especially helpful not only in the inquiry but in reading and criticizing the first draft of the manuscript; they are Louis Gaspar and George Jones, and we gladly acknowledge their aid. The study itself was in no small measure a demonstration of the co-operative spirit which is working itself out in the production of coal in those northern counties of Colorado.

The tabulation of the statistical tables which constitute Appendix X was made by Regina Stolz of the Foundation's Department of Statistics.

Finally, we call attention to the pictorial charts prepared at Mundaneum Institute, Vienna, under the direction of Dr. Otto Neurath. The Institute is the international organization which grew out of the Social Economic Museum (Gesellschafts- und Wirtschaftsmuseum) of the city of Vienna. To this Museum the city contributes partial support because of its importance in the social and economic education of the people. International headquarters are now legally established at The Hague, in the International Foundation for the Promotion of Visual Education by the Vienna Method.

The combination of scientific statistical work with skill in graphic portrayal which characterizes the work of the Museum's staff constitutes a new method of visual education, of special importance in these days. Presentation of economic facts in a form understandable by everybody is essential in a democracy facing the necessity for fundamental action on economic and social problems.

PART ONE

UNION-MANAGEMENT CO-OPERATION IN THE ROCKY MOUNTAIN FUEL COMPANY

CHAPTER I

PRINCIPLES OF AGREEMENT

THE story of the Rocky Mountain Fuel Company is picturesque. Its president is a woman; and that fact, in this industry of men, stirs the imagination. Moreover, in any industry in the United States the choice of a woman for high office is unusual. This president, Josephine Roche, is also owner of the majority of the stock. That is less extraordinary; but again she is distinguished because she is not an absentee owner but an active manager, having become, indeed, general manager in 1933. Finally, she has separated herself from the policies of the owner class in Colorado and has squarely opposed them by inviting the miners' union, the United Mine Workers of America, to join with the company in the collective agreement in which she has voluntarily accepted limitations upon the traditional powers of an owner of capital and has declared that the organized miners, through their own officers, who are not even employes of the company, have the right to share with the management in all decisions regarding conditions of employment.

The farthest any operator of Colorado had been willing to go in that direction in the past twenty years had been to let employes elect their representatives from their fellow-employes. This was done under the influence of John D. Rockefeller, Jr., in the "Industrial Representation

Plan" of the Colorado Fuel and Iron Company.[1] But in the history of that plan, as brought out in the study made by the Foundation, the steady refusal of the company and of Mr. Rockefeller to recognize the miners' union turned employes' representation into an instrument of opposition to unionism. Naturally, then, recognition of the union by an operator in the same state became a rival of employes' representation. Thus Miss Roche challenged the Rockefellers, original sponsors of the company-union idea, and all their allied interests in what is fundamentally a struggle for power between labor and capital.[2] A dramatic story might be written with this woman as the center.

A personal story, however, would obscure the deeper principles involved. Nor would it be true to the person herself. Miss Roche is impersonal. She is acting from an inner conviction of what constitutes social justice, reinforced by an intellectual grasp of the larger significance of the problems for which her solution, in her view, is merely the best that can be done in a changing world.

Likewise the miners and their union and the labor movement in Colorado, which co-operates in supporting the company in its labor policy, are acting not out of loyalty and devotion to a personal leader, as some newspaper stories would have the public think, but because they be-

[1] A study of this plan was published in 1924 by the Russell Sage Foundation. See reference to it in footnote, p. 15. There had been trade-union agreements signed occasionally by mine operators of the state, such as that of the Victor American Fuel Company in 1918, but they were not permanent. Regarding the miners' vote in 1933 for officials of the United Mine Workers to represent them, instead of employes' representatives under the Industrial Representation Plan, see note at end of Appendix VIII, p. 320. This note describes also the signing of trade-union agreements by this company and others, following the promulgation of the code for the bituminous coal industry under the National Industrial Recovery Act.

[2] The experience of the Rocky Mountain Fuel Company, in contrast with that of coal producers having company unions, is particularly significant now because of the widespread revival of the company-union idea in an effort to circumvent the guaranty of the right of collective bargaining contained in the National Industrial Recovery Act.

lieve, after years of unsuccessful strikes in Colorado for recognition of the miners' union, that the first substantial victory is this collective agreement. To some workers in the labor movement, both inside and outside the state, this enthusiasm on the part of labor, this willingness to help the company even to the extent of the miners' lending it part of their wages as they did in 1931,[1] seems to be merely a compromise with capital. They even call the agreement "a company union" because the initiative was taken by company officials. Supporters of the agreement, on the other hand, contend that in a state with a different history of relations between "capital and labor" this might be true, but that, in view of the bitter defeats of the past for the unions, this recognition is a vantage point to be held even at the sacrifice of the immediate interests of the workers in any instance in which these are apparently in conflict. In supporting the company, they believe that they are strengthening the labor movement. Thus again from labor's point of view the significance of this contract between a coal operator and the union derives from basic economic realities, not from personalities.

It has been stated in the Introduction that the subject of study is a written instrument, how it came to be adopted, in what economic and social environment it is functioning, and how it works in day-to-day practice. This instrument is the collective agreement between the Rocky Mountain Fuel Company and District No. 15 of the United Mine Workers of America, with the international organization concurring. It was first adopted on the sixteenth day of August, 1928, for the two-year period beginning September 1 of that year. District No. 15 is the Colorado district organization of the national (and inter-

[1] See p. 114.

national)[1] union. This contract contained a preamble entitled "Declaration of Principles," which had never before appeared in agreements signed elsewhere in the industry.[2] It set forth the principles on which both parties undertook to act.[3]

"A New Era in Industrial Relations"

The signers declared that they were "seeking a new era in the industrial relations of Colorado." Therefore they welcomed this agreement and declared their purpose to be "the establishment of industrial justice"; "the substitution of reason for violence, confidence for misunderstanding, integrity and good faith for dishonest practices, and a union of effort for the chaos of the present economic warfare."

They undertook to avoid those conflicts which had taken the form of "needless and wasteful strikes and lockouts"; in place of this method they would seek to investigate and correct the underlying causes of strikes and lockouts; they would establish "genuine collective bargaining between mine workers and operators through free and independent organization."

Stabilization through Co-operative Endeavor

This collective bargaining, which is the purpose of the ordinary trade-union agreement, would not, however,

[1] Includes Canada.

[2] For copies of these agreements in the state of Illinois, see the study by Louis Bloch listed in footnote, p. 15.

[3] Appendix III, Agreements between the Company and the Union, p. 248. We chose for printing the agreement for the period when this study began, namely, the biennium ending August 31, 1932; but all differences in the first agreement are noted and an addendum describes changes in the subsequent contract.

constitute the whole purpose. In addition, a broad statement was made that the company and the union together would undertake "to stabilize employment, production, and markets through cooperative endeavor and the aid of science." This is probably the first time that any trade union affiliated with the American Federation of Labor has gone so far as to include these broad economic policies within its scope.

This purpose was further elaborated in the agreement signed for the second biennial period, beginning September 1, 1930, in which effort was made to deal with the problems of labor's share in increased productivity by adding the following words (the idea, however, is somewhat vague): "recognizing the principle that increased productivity should be mutually shared through the application of equitable considerations to the rights of the workers and to economic conditions affecting the operations and business of the company." The public interest was included in the statement of principles. It was declared to be a purpose of the company and the union to assure "consumers a dependable supply of coal at reasonable and uniform prices."[1]

Evidently in signing the agreement it was recognized that it would be no easy undertaking. Both sides were prepared for attacks and solemnly agreed in advance "to defend our joint undertaking against every conspiracy or vicious practice which seeks to destroy it." But they had full confidence in ultimate public support, and the pre-

[1] There is no evidence that the full import of this objective was understood at the time of its adoption. It referred to the erratic price changes which will be later described as characteristic of the industry, but in the light of the present broad economic problems it may be taken as bringing within the scope of effort the whole problem of control of price fluctuations through stabilization of money. This is an illustration of an interesting aspect of this study, namely, that problems envisaged in the experience of one company and its workers in this one area in Colorado ramify far beyond its operations and demand wider solutions than were dreamed of when the agreement was first adopted.

amble ends with the statement of purpose, "in all other respects to enlist public confidence and support by safeguarding the public interest."

Origin of the Agreement

All the principles here formulated had come out of vital and unforgettable experiences and represented years of thought on the part of those who participated. This experience must needs be written in personal terms, because the decision to change the policy of the Rocky Mountain Fuel Company was made by individuals who in turn drew into collaboration other individuals having a background of experience with the coal-mining industry in Colorado and its impacts upon the public interest.

The history of industrial relations in mining in Colorado has been written in many official documents. The United States Industrial Relations Commission made a thorough study including extensive testimony during the disturbed period of 1913-1914.[1] This bitter strike had been preceded by others which indeed had recurred once in ten years, in 1883, 1893, and 1903.[2]

It was out of the conflict of 1913-1914 that impulses and purposes emerged leading toward changed attitudes of the contestants. The Colorado Fuel and Iron Company, influenced by John D. Rockefeller, Jr., established its Industrial Representation Plan in 1915. The Rocky Mountain Fuel Company, which was also involved, made no definite change in its policies at that time, but the events of that bitter strike had deeply impressed Josephine Roche,

[1] Commission on Industrial Relations, Final Report and Testimony Submitted to Congress by the Commission Created by the Act of August 23, 1912. Sixty-fourth Congress, First Session, Senate Document No. 415, Government Printing Office, Washington, 1916.

[2] See study of Employes' Representation in Coal Mines, p. 276, cited in footnote, p. 15.

the daughter of its president, and in 1927, when she inherited her father's minority ownership of stock, she came face to face with a responsibility and an opportunity.

This first contact of hers with the company's affairs after she became a responsible owner stirred memories of that strike. She found in the company's offices the paraphernalia of war, and in the books the records of expenditures for detectives and mine guards. Like the armaments of nations, this equipment was in itself a temptation to use in times of controversy, in place of reasonable procedures based on principles which might have prevented bloodshed and bitterness. In her own mind she had accepted the ideas of labor on the side of the union in the strike of 1913-1914, and of public-spirited citizens who had endorsed them. To these latter she turned for advice when her inheritance gave her the responsibility for a new policy.

Among the leaders of labor was John R. Lawson, who had been the Colorado member of the International Executive Board of the United Mine Workers during that memorable strike. He was eliminated from the affairs of the union by internal controversies which arose after its defeat in the strike, and had been living meanwhile in another state until recalled to Colorado as a mining inspector. In Miss Roche's leadership he saw the possibility of attaining the recognition of the United Mine Workers for which he had struggled as a leader in the strike, risking even his life, as he was tried for murder in the violence which accompanied the conflict. He was acquitted. Clearly, his was a record which would bring strength into a new relationship between management and miners in the state, and in 1928 he was chosen as one of the vice-presidents, following the company's reorganization.

His defender in the murder trial, and one of the outstanding citizens who had spoken for justice for the miners in the public interest, was Edward P. Costigan, elected United States Senator in 1930. He became general counsel for the company, but before taking that office he had been an adviser in the formulation of principles in the agreement.

The first president and general manager after the beginning of reorganization in 1927 (who subsequently became executive vice-president and general manager with Miss Roche as president) was Merle D. Vincent, formerly president of the Colorado Bar Association. He, too, was representative of the general public interest in the effort to establish better human relations in industry. He had been active in the Progressive Party and as a lawyer had used his influence for the humanizing of legislation and its administration. Made aware in this experience of the importance of wider public understanding of the basic processes of industry, he had welcomed the opportunity to advise Miss Roche and to participate actively in the carrying out of a new policy, involving, as it did, day-to-day contact with the miners which he recognized as a needed guide in a new public program.

The task was not easy. Certain directors continued in office who had been members of the Board prior to 1927 and approved the policy of fighting the union which was then customary in the coal industry of the state. The administrative staff in the offices likewise had worked under these former practices. Superintendents and mine foremen had been active agents in preventing agitation for unionism in the mines. By this process, union leaders in past strikes had been eliminated from the industry. Union sympathizers among the miners had concealed their views. They worked side by side with men who had come in as strike-breakers and sometimes as spies in previous conflicts.

The district organization of the United Mine Workers of America could not be called strong. It had repeatedly been defeated in strikes. It was not even autonomous, not being regarded as having sufficient membership nor a sufficient treasury for independence. Therefore it was governed from the Indianapolis office of the United Mine Workers. If it were not for the fact that union men in the state had worked in mines in other states, notably Wyoming, under a trade-union agreement, the experience of the Colorado miners in unionism would have been limited to strikes. There had been no opportunity to develop the constructive functions of the union in the making and administration of agreements. It was natural, moreover, that they should be suspicious of a company which had been a bitter opponent of trade unionism. The Colorado miners needed to be convinced of the sincerity of a new policy.

Step by step the group interested in working out new principles gained sufficient control in the Board of Directors for their adoption. In 1927, when Miss Roche's inheritance became available, a few new members, representative of the new ideas, were added to the Board. These included Miss Roche and Mr. Vincent, who at first became executive vice-president. Finally, Miss Roche was able to acquire a majority of the stock, and it was then possible to elect a new board. In 1928 Mr. Vincent became president and general manager, Miss Roche and Mr. Lawson were vice-presidents and Mr. Costigan general counsel, and in the Board of Directors a majority was ready to follow the new lead.

While this process was unfolding in the autumn of 1927 there occurred a strike in the mines of northern Colorado, under the leadership of the Industrial Workers of the World. Dramatically it served to remind the citizens of Colorado that the conditions which had given rise to conflict in the past were still active. The Rocky Mountain Fuel Company was involved, and the tragedy of this latest struggle in the Colorado coal fields was enacted at one of the company's mines, Columbine, where early one morning in November, 1927, the revolvers of the state police were turned upon the strikers at close range and lives were sacrificed once more in an industrial conflict. Had the new group been in control of the Board of Directors at the time when this strike broke out, it is probable that they would have closed the mines instead of attempting to operate them and thus inevitably running the risk of violence.

It was the Industrial Commission[1] of Colorado which summed up the miners' grievances in an official report. While condemning the Industrial Workers of the World and declaring that the strike was illegal under the law which requires thirty days' notice of any intention to change wages or working conditions and prohibits a strike until the Commission has taken cognizance of a threatened dispute over such a change, the Commission nevertheless declared that all was not well with the coal industry. As a result of hearings in Denver in December, 1927, when testimony was taken regarding the northern coal fields, including the Rocky Mountain Fuel Company, the Commission wrote in a lengthy report dated March 20, 1928, as follows:

The people of Colorado have a right to ask what is wrong with the Coal Industry in this State; why did a large proportion of the coal miners accept the leadership of the Industrial

[1] The scope of the Industrial Commission is described later, p. 63. The charge of illegality of this strike was contested by the I.W.W.

Workers of the World? The answer, according to the evidence, is as follows:

1st: Lack of an organization of their choice among the miners. The miners believed they had many grievances; the Industrial Workers of the World organizers were there promising anything and everything; the miners through the lack of something better, followed their leadership.

2nd: Intimidation by some of the superintendents and mine bosses.

3rd: Dissatisfaction with the two cuts in wages in 1925.

4th: The prevailing opinion among the miners that they were not receiving correct weights for the coal mined.

5th: The interference of some of the superintendents and mine officials in the election of a checkweighman.

6th: Lack of understanding as to pay for dead work, waiting for material such as props, ties and rails, bailing out water, shoveling coal three or four times in order to load cars, etc.

7th: Bad air and charges that the State Mining Law has not been complied with in regard to cross-cuts in a number of the mines.

8th: Lost time waiting for tools, going into the mine, and waiting for mantrip or cage, going out of the mine.[1]

Having thus outlined the causes of dissatisfaction, the Commission made the following statement regarding "collective bargaining." It should be read in the light of the fact that in the coal fields of Colorado at the time of the strike in November, 1927, no company recognized labor's right to bargain collectively through the mechanism of the trade union. No agreement existed, though it is true that from time to time there had been sporadic agreements between an operator and the United Mine Workers, generally short-lived and seldom accepted in a spirit of sincerity or determination to make the agreement successful. Nevertheless the Commission declared:

[1] Industrial Commission of Colorado, Tenth Report, for the Biennium, December 1, 1926, to November 30, 1928, pp. 49-62.

Labor is entitled to an adequate wage and the employer to a fair return on his investment. Labor and capital are necessary for the success of any kind of an industrial enterprise. One is as necessary as the other. They should work in harmony if labor is to receive an adequate wage and the employer is to receive a fair return on the investment. To secure these ends it would seem that some system of collective bargaining should be used. Experience has shown that it is not to the best interests of the employes to leave their welfare exclusively in the hands of the employer. While it is true that many of the employers protect the interests of their employes, there are others who do not. The only safe and sure protection for the employe consists in his ability to bargain collectively.[1]

Two days before the date of this report, namely, on March 18, 1928, the Rocky Mountain Fuel Company, through its president, Mr. Vincent, issued the following statement as a result of "a conference of executives, heads of departments and mine superintendents":

The policy of the company will be based on the fact that the men employed are as much an essential factor in the industry as the capital invested in it, and have independent rights in the determination of working and living conditions.[1]

The statement reviews recurring strikes of the past which have resulted from "denial of these rights." It shows that as a result miners, operators and the public have suffered, and that such settlements as have been made are of a character to leave "the parties still at war with one another."

Moreover, reference is made to the practice of cutting prices, which the company in its new policy recognized as of importance almost equal to the denial of the right to collective bargaining and indeed closely involved with it.

[1] See Appendix II-A, Statement of the Company's New Policy, Issued March 18, 1928, p. 243.

It was declared that "this system in the industry [denial of the miners' rights] has created a vicious circle of prices below cost of production, strikes, imported coal at exorbitant prices to the public." And by way of further description of the vicious circle the statement declared:

> When operators in their greed for business cut prices to bedrock, as they have just started to do again, they make their men pay for the loss, thus paving the way for another strike, for further loss of profits, for failures and receiverships such as the industry in Colorado has already witnessed.

The statement pointed out that time would be needed to put this policy into effect and that miners and officials alike understood the difficulties. "Many complex problems," declared the officials of the company,

> arising out of years of antagonism and conflict, must be worked out before these plans can be fully effective. The development of this policy will naturally require full co-operation of the management and of the men in the mines. Upon mine superintendents and other mine officials will rest a particularly heavy share of the responsibility for its ultimate success.

The statement recorded the promise already made regarding the immediate settlement of the strike, which had terminated on February 20. There would be no blacklisting of men; employes who had been on strike would be taken back as soon as there were openings; and the company would remedy conditions which had given rise to the strike, by observance of the mining law requiring checkweighmen, safety inspection committees, and certain conditions of work in the mines. And it was suggested that pending the development of "other means" the inspection committees elected by the men as provided by law should investigate current complaints and grievances and represent the men in meeting the management.

On May 29, 1928, the Rocky Mountain Fuel Company made a statement as to the form which its promised agreement with the miners would take in order to carry out its announced labor policy. Pointing out that the subject had been considered and discussed by the men in the mines and that they were taking steps to organize, the company declared "that whenever the miners are organized in a union affiliated with the American Federation of Labor, the Rocky Mountain Fuel Company is ready to recognize and contract with their organization." The only organization of miners affiliated with the American Federation of Labor is the United Mine Workers of America, and this statement therefore was an invitation to that union to join with the company in a trade-union agreement.[1] There followed activities in the various mines on the part of organizers of the union to enroll members, and in due course a conference was held between representatives of the company and of the union, which resulted in the collective agreement effective September 1, 1928. The agreement contained the declaration of principles already quoted, together with the usual provisions regarding wages, hours, settlement of disputes and other matters.[2] As has already been said, however, the agreement did not merely cover relations between the management and the miners in matters affecting their employment, but united them in a joint effort to solve their problems of production and to accept a new code of practices with reference to prices and other relations with the public.

These major problems, as the management saw them, were outlined in the annual report to the bondholders and

[1] See Appendix II-B, Statement of the Rocky Mountain Fuel Company Issued May 29, 1928, p. 245.

[2] See Appendix III-A, Declaration of Principles and Agreement, p. 248.

stockholders for the year 1928. "The coal industry in the United States," said the report, "has been for some years financially demoralized by overproduction, labor conflicts and a chaotic market condition." In the face of that situation there had been nevertheless "no concerted, systematic or intelligent effort from within the industry to solve these problems."

In Colorado there was the added circumstance of the strike of 1927 and its causes, "reflecting an unsettled labor situation which had become chronic." The bearing of this upon the company's operation was that "employment of non-union men and unsatisfactory working conditions constituted a constant threat of interrupted production."

Even when the strike which had begun in the fall of 1927 had come to an end (on February 20, 1928), "coal markets were again quickly demoralized by overproduction, price-cutting and other market conditions which have become habitual." These marketing conditions were affected also by the introduction of natural gas into Denver from Texas on July 1, 1928, and it was anticipated that installations of gas furnaces would further diminish consumption of coal in Colorado.

Out of these conditions of business came the new policy. The collective agreement reflected the change in relations with labor. The new marketing policy was described in the preamble of the agreement, "to stabilize employment, production, and markets through cooperative endeavor and the aid of science" and to assure to consumers "a dependable supply of coal at reasonable and uniform prices." That this last statement, simple as it appears, would substantially change prevailing practices in discriminatory prices, will appear in later chapters.

Thus this company, in the midst of an industry which is probably the most disorganized in the United States, undertook single-handed among its competitors, but with the co-operation of labor, to eliminate practices producing instability and to apply sound ethical principles of relationships with workers, with other industries, and with the public. Its experience is significant for industry as a whole in the United States and particularly for the coal industry. Its successes are a demonstration of proper procedure; its difficulties and its problems reveal the limits to the action of one company and the need for *a widening circle of collective action to bring stability to industry and security to the workers.*

CHAPTER II

SUPPORT AND OPPOSITION

TO UNDERSTAND the working out of the principles, analyzed in Chapter I, in the coal industry in Colorado, it is necessary to describe the parties to the agreement and to give some indication of the support and opposition encountered by the company and the union in carrying it out. Therefore this chapter might be headed "Dramatis Personae," and it must include also some description of the scene within the mines and in the mining communities where the action takes place.

The agreement was signed, as indicated in the preceding chapter, by representatives of the Rocky Mountain Fuel Company and of the United Mine Workers of America. In carrying it out, however, other groups are involved, so that the full list would read as follows:

- Rocky Mountain Fuel Company
- United Mine Workers of America, particularly District No. 15
- State Federation of Labor
- Organized Labor's Central Coal Committee
- Northern Colorado Coal Producers' Association
- Colorado Fuel and Iron Company
- Other competing companies
- Purchasers of coal, including individual consumers and industries and institutions using coal
- Other organizations of workers, including the Indus-

trial Workers of the World (the I. W. W.) and the National Miners' Union

The general public, including supporters and opponents of the policy within and without the state; together with the newspapers, which are assumed to reflect public opinion

State administrative bodies, particularly the Industrial Commission and the Coal Mine Inspection Department

The relation of these groups to this new policy is here briefly indicated.

Rocky Mountain Fuel Company

The company is organized as a corporation with the usual legal status and obligations. It has a Board of Directors elected by the stockholders. The Board chooses the management officials and determines the main lines of policy. In contrast to usual terminology, however, the company should be envisaged as including the workers, though they have acted in relation to the agreement as members of the United Mine Workers while the "company" has been identified with owners and investors to whom the management is responsible.

The Rocky Mountain Fuel Company is the second largest producer of coal in Colorado, and the largest producer of lignite coal, mining nearly one-third of the production in the northern Colorado field where five of its six mines in operation are located. The company's coal lands lie in the bituminous fields of Las Animas, Huerfano, and Fremont counties in southern Colorado, Gunnison, and Garfield counties in western Colorado and Routt County in northwestern Colorado, and in the sub-bituminous or lignite field in Boulder and Weld counties in northern Colorado.

The Rocky Mountain Fuel Company has been in operation over forty years. In 1913 the company authorized a bond issue of $5,000,000 to purchase the properties of the Northern Coal and Coke Company in northern Colorado and to retire a former bond issue of the Rocky Mountain Fuel Company. With each subscription for $1,000 in bonds, 10 shares of preferred and 10 shares of common stock were issued. The bonds are dated April 1, 1913, are payable April 1, 1943, and bear 5 per cent interest per annum, payable semi-annually, April 1 and October 1. Only $3,878,100 in bonds of the $5,000,000 authorized were sold. The remaining unsold bonds were placed in the treasury. Subsequent to the issue and sale of the company's bonds in the amount of $3,878,100, the company purchased from holders outstanding bonds in the amount of $787,800, leaving outstanding bonds by the end of 1932 in the amount of $3,090,300. Bond interest has always been paid on the dates due.

Emphasis is put here upon this financial structure because of the fact that it is a major element in the joint responsibility which the workers share by reason of the principles involved in union-management co-operation. The semi-annual payment of bond interest enters into the consciousness of workers and management alike, and savings in operating costs through the co-operation of the workers have been an important factor in helping to meet this heavy annual charge.

Co-operation also of the trade unions of the state and the general public in supporting the new policy by buying the coal of this company has reduced the cost of selling to a remarkably low point. Nevertheless, as will be seen, the burden of indebtedness rests heavily on this joint enterprise and brings into this story the problem of debts, which is recognized as a vital factor in the present far-reaching breakdown in the industries of the United States and of other countries.

United Mine Workers of America, District No. 15

This organization includes workers in all processes in unionized mines. It is an industrial union, not a craft union, and as such has jurisdiction over all occupations in coal-mining. It is affiliated with the American Federation of Labor, in which its large membership has given its representatives a voting power larger than that of any other national or international union except the carpenters.

The structure of the United Mine Workers has been described in another study made for the Russell Sage Foundation.[1] Here it need only be said briefly that its headquarters are in Indianapolis and that it is organized in districts, Colorado constituting District No. 15. As has been noted, however, it is not an autonomous district, but dependent upon the executive board in Indianapolis, which appoints the Colorado officers and organizers. In contrast with other districts, such as Illinois, which in the days of power for the union had a complete organization of the miners in that state and a state-wide agreement with more than 90 per cent of the operators, in Colorado its only agreement is with the Rocky Mountain Fuel Company; and for years before that agreement was signed, the union was not recognized by any operator in the state. Its activities were confined to difficult and unsuccessful efforts to organize the miners and to the leading of occasional strikes for "recognition."

Prior to 1927, basic agreements were made between the

[1] See Labor Agreements in Coal Mines, cited in footnote, p. 15.

United Mine Workers of America and coal operators to cover all unionized districts.[1] They were determined in wage-scale conferences held biennially, to which the various districts sent delegates after receiving the "demands" from all their local unions. They met with operators from the Central Competitive Field.[2] After the determination of the basic scale of wages for that field, each district would make its own agreement, applied to its own conditions, and indeed in some states there were subdistrict agreements taking account of different mining conditions in different regions. Under this plan the contract between District No. 15 and the Rocky Mountain Fuel Company would have been a mere application to Colorado and to this company of an agreement signed in the wage-scale conference between representatives of operators' organizations and the national scale committee of the United Mine Workers.

In 1927 the union suffered severe defeat when the so-called Jacksonville Agreement[3] adopted in 1924 for the period of three years came to an end. Thereafter, the most that could be obtained was a district agreement, with the concurrence of the national organization, which was signed, for example, in Illinois, in Wyoming, and in some other districts. Wyoming is a strongly unionized state; and when the Rocky Mountain Fuel Company was in process of negotiation, officers of the district organization in Wyoming were helpful to the Colorado union.

Thus against the background of the industry as a whole, the action of the Rocky Mountain Fuel Company in invit-

[1] While the United Mine Workers of America is an international organization, including Canada, the pertinent facts in this discussion relate to its method of functioning in the United States and therefore the description of it is limited to its national organization here.

[2] See footnote, p. 81.

[3] See Bloch's Labor Agreements in Coal Mines, cited in footnote, p. 15; also p. 200 of the present volume.

ing this collective agreement is seen as extraordinary in its implications. All signs had pointed to victory for the operators in the long struggle in which the United Mine Workers had attempted to establish a uniform, stable standard of wages while mining companies were attempting not only to bargain for the lowest possible wage but trying to prevent the union from gaining in strength.

To the operators in Colorado and in other states, the Rocky Mountain Fuel Company must indeed have appeared to be a traitor to capital in its struggle with labor. To the United Mine Workers, on the other hand, the agreement was an anchor to windward, so that for once its interests became identical with the major policies of a company. Hence the spectacle, to be described later, of the workers sacrificing their earnings to aid the company in obligations which ordinarily relate to capital rather than to labor.

State Federation of Labor

Likewise for the labor movement as a whole in Colorado this collective agreement became a symbol to be defended and strengthened. A State Federation of Labor is a state organization of the American Federation of Labor and includes all unions affiliated with the American Federation in the state. The body organized is for their common state interests, primarily with reference to legislation. In Colorado the officers of the State Federation of Labor, particularly its secretary-treasurer, John E. Gross, assist the unions and unorganized workers in defending cases before the Industrial Commission. In that capacity the State Federation of Labor will appear from time to time in this narrative as aiding in resistance to wage cuts in the coal mines of the state, thus seeking to defend the union agreement of the Rocky Mountain Fuel Company from the ever-present lower wage scales of competing companies.

The State Federation of Labor, however, has taken a more positive part in promoting the success of this joint enterprise, notably in increasing sales of coal among domestic and institutional buyers.

Organized Labor's Central Coal Committee

This Central Coal Committee is described on its letterhead as "co-operating with coal committees in each local union," referring not only to the local unions in the Rocky Mountain Fuel Company's mines but to the locals of various crafts in Denver, 73 in all. The Committee is endorsed by the State Federation of Labor, the Trades and Labor Assembly (the central body of the trade unions of Denver), and the Building Trades Council, which includes all the men engaged in the various divisions of the building industry. Moreover it is notable that the farmers and the railroad brotherhoods, which are not affiliated with these other central bodies of the labor unions, are also participating in this Central Coal Committee. The various women's auxiliaries of the unions take part by using their power as purchasers for the homes in extending the domestic market of the company. The Committee has even gone outside the state and in co-operation with the trade unions of California has helped to open the market there for the coal of Alpine Mine in Gunnison County on the so-called Western Slope of the Rockies.

Other Organizations of Workers

Only a minority of industrial workers have ever been included in the constituent unions of the American Federation of Labor, though it is the largest of the workers' organizations. Some remain outside because the trade unions of the American Federation of Labor have not succeeded in organizing their industries; others, through conviction that another method and philosophy are to be preferred. As already noted, it was the Industrial Workers of the World which led the strike of 1927 in Colorado. This body does its work under the slogan, "An injury to one is an injury to all" and calls for "One Big Union" because there is "One Enemy"—the present capitalist system.

The preamble to its constitution declares that "the working class and the employing class have nothing in common. There can be no peace so long as hunger and want are found among millions of working people and the few who make up the employing class have all the good things of life." It believes that the struggle will go on "until the workers of the world organize as a class, take possession of the earth and the machinery of production, and abolish the wage system." In trade unions as organized in separate industries it finds not only weakness but a positive barrier to the class struggle.

> The trade unions foster a state of affairs which allows one set of workers to be pitted against another set of workers in the same industry. . . . Moreover the trade unions aid the employing class to mislead the workers into the belief that the working class have interests in common with their employers.

The I. W. W. is working for "abolition of the wage system," which it believes should be the watchword "instead of the conservative motto 'a fair day's wage for a fair day's work.' "

Naturally it does not enter into agreements with management. Its strikes are for the purpose of strengthening the working class for struggle. But it declares:

The army of production must be organized not only for the everyday struggle with capitalists but also to carry on production when capitalism shall have been overthrown. By organizing industrially we are forming the structure of the new society within the shell of the old.

Among the employes of the Rocky Mountain Fuel Company are men who were leaders in the strike of 1927 under the auspices of the I. W. W. But when the company determined to establish a new relationship with labor, its decision was to adopt an agreement with the United Mine Workers rather than to work out any plan of relationship with the I. W. W., whose purposes preclude such collaboration with capitalists. The United Mine Workers, on the other hand, opposes the I. W. W., even providing in the constitution that none of its members may join that organization.

Another dissenting group includes those who sympathize with Communism. The Communist Party aims to establish a Communist society based upon the socialization of all industry. "Socialization" means the collective social ownership and operation of all natural resources and of all means of production. Such a society, in the view of the Communists, would be classless; and "the exploitation of man by man" would be abolished. In a capitalist society the private ownership of economic resources gives rise to division into classes, and the state, they believe, enforces upon the workers the will of those who possess these resources and, therefore, hold the power over those who produce but do not own the means of production. The possessing class, the Communist Party believes, resists all efforts to socialize industry and is powerful enough to use the armed force of the state to maintain private ownership. Only the class struggle of the workers, they believe, can overcome this resistance, and by establishing the "dictatorship of the proletariat" transfer possession of economic resources from private ownership to the socialized ownership of a workers' state, and thus establish the classless society.

As its immediate program the Communist Party in the United States is organizing the workers in the basic industries. In the coal industry its policy is to work in all union organizations, the United Mine Workers, the Progressive Miners' Union (which has been active principally in Illinois) and the National Miners' Union, striving, the party representatives say, to unify the ranks of the miners. In the unorganized fields and in the coal areas where the United Mine Workers of America has any effective organization, the Communists declare it to be their policy to participate in the work of building that union. The National Miners' Union has members of the Communist Party in its leadership and is active in the states adjoining Colorado, particularly New Mexico and Utah.[1]

Consumers of Coal

As usual, the consumers are not organized. Some of them are companies, public utilities, railroads, and the like; and these, by their buying policies, must be reckoned with in any effort to change trade practices. Others are individuals who can be reached by the campaign of the Central Coal Committee on behalf of a new labor policy. A considerable number make up the group of small tradesmen

[1] The Socialist Party differs from the Communist Party in its belief that the socialization of industry may be accomplished through the ballot and through legislation, and that the seizure of power by the workers through violence in revolution is not inevitable. The Socialist Party is not organizing unions, and therefore does not enter specifically into the picture of industrial relations in the coal industry in Colorado, except as miners join the party and vote for its candidates. The party program, however, calls for nationalization of the mines.

in the various communities, and to them the appeal is made that fair working conditions and good wages bring stability to business in the community by increasing and stabilizing purchasing power. These small users and domestic consumers have much at stake in the effort to eliminate trade practices which result in discriminatory rates, below cost to an industry and correspondingly above cost to the domestic market; and it may be said that the propaganda for the Rocky Mountain Fuel Company, as well as the opposition to it, constitutes good public education today on the consumer's interests.

Northern Colorado Coal Producers' Association

Ten of the companies in the northern field, including the greater part of the operations there, formed an organization in 1929. This organization adopted a code of trade practices which by implication reveals the prevailing unfair practices in the industry. The preamble stated the purposes to be

> to eliminate the wastes and the secret discriminatory and destructive practices which have prevailed to a great extent in the northern Colorado coal field, and to establish and maintain in their place integrity, good faith, open and fair prices and constructive practices.

The signers declared their conviction "that these purposes can be achieved through self-regulation sanctioned by law."[1]

The Rocky Mountain Fuel Company was represented in this organization by Merle D. Vincent during his term as president. He welcomed it as an instrument to further

[1] The code is printed in full as Appendix IV, p. 290.

the company's policy of fair trade practices, with what discouraging results will be seen later.[1]

Competing Companies

These companies in the northern field and the other operators in the state play their part in relation to the Rocky Mountain Fuel Company. Together they make up the industry, its policies and practices. Potentially they might at any moment become allies in new practices. They too might sign agreements with the union. They actually appear from time to time in the role of petitioners to the Industrial Commission of Colorado to secure reduction in wages. They compete for public support of their policy and thus have their influence on the prevailing body of public opinion. Of course the primary competition is for the market.

Colorado Fuel and Iron Company

By far the largest and most influential coal company in the state is the Colorado Fuel and Iron Company whose largest stockholders are the Rockefellers. Its mines are mainly in the southern field, but it is also a distributor of coal purchased from other mines, and in the coal market of the state as a whole, including the utilities and the railroads, it comes into direct competition with northern producers, including the Rocky Mountain Fuel Company. As has been stated, its labor policy is not in accord with union-management co-operation. It has had its own form of organization in its Industrial Representation Plan. This company enters into the story of the Rocky Mountain Fuel Company not only as a competitor in industry but

[1] See p. 107.

as representative of a rival philosophy and policy of labor relations. In this rivalry it has a significant effect beyond the state of Colorado or the mining industry, since it is linked with the movement for employes' representation to which, on the whole, the Rockefeller interests have given support together with other large companies which have opposed trade unionism in the United States.[1]

Financial and Industrial Interests

Thus the policy initiated by the Rocky Mountain Fuel Company has been at variance with the accepted program of the influential industrial groups in the state. Their support, as evidenced in the absence of any procedure for "collective bargaining," has been given either to the old method of preventing all organization among the employes, or to employes' representation, which is limited to the workers in one company, and permits them to be represented only by fellow-employes, and not by officers who are independent of employment by the company.

In this respect it is quite clear that the policy and attitude of these groups in Colorado is linked definitely with the prevailing attitude of large industries and banking interests throughout the country. While there has been, in Colorado, no open break between the Rocky Mountain Fuel Company and these interests, there is, nevertheless, no definite support of the new policy, but rather antagonism.

Indeed, one must go much farther and say that below the surface, and not so very far below, is the same kind of bitter opposition toward the Rocky Mountain Fuel Company under its present policy as has been directed against the trade-union movement in times of strike in Colorado.

[1] See study of this company's policy in Employes' Representation in Coal Mines, cited in footnote, p. 15.

These struggles are so fully described in official documents such as the report of the United States Industrial Commission of 1915, as well as in the reports of hearings before the Industrial Commission of Colorado, and in a long series of federal and state documents in earlier years, that it is unnecessary here to do more than refer to them. The public has "taken sides" in these struggles, and general observation would indicate that the division is on the lines of economic interests, with the intellectual and professional groups tending to contribute occasional disinterested support to the workers. Thus when general public opinion characterized the I. W. W. strike of 1927-1928 as an "insurrection," certain professors at one of the universities studied its causes and made speeches tending to justify the strikers. Citizens were not lacking to condemn these subversive ideas of the professors; and the same professors praise, and the same citizens condemn, the Rocky Mountain Fuel Company for espousing the workers' cause.

One may not give undue weight to such apparently trivial matters as the frequent false rumors which arise regarding the Rocky Mountain Fuel Company; yet, they have their significance. An investigator seeking the facts is at once impressed by the source of these rumors. At dinner tables in Denver, an officer of a bank will tell his fellow-guests that the Rocky Mountain Fuel Company will certainly not last longer than ninety days. Or, again, as happened in the spring of 1932, about ten days after the interest due on its bonds April 1 had been paid, a representative of a financial institution, likewise, announced to his fellow-guests at a dinner that the interest had not been paid, in spite of the fact that its payment had been announced in the daily press.

Again, in the East, in New York, in the autumn of 1932, the investigator was asked by a public-spirited person interested in the Rocky Mountain Fuel Company, whether it was true that the company had failed to pay the interest on its bonds on October 1. A business man of Denver, coming on to New York, had reported this default as a fact. There was no truth in it. But the frequency of these and similar false rumors, tending to undermine confidence, is sufficient to indicate that there is working here a force in opposition to the challenge which this company's policy presents to industry in the United States.

The Daily Press

It is a truism to say that the daily newspapers, in which the controlling interests in finance and industry place their advertisements, reflect this influence. One finds in the newspapers of Denver no expressed opposition to the agreement between the United Mine Workers and the Rocky Mountain Fuel Company, but the omission of news in that city which is accepted and printed in papers in other parts of the country is indicative of sympathy with the opposition.

Omissions are not conclusive evidence, but one instance may be considered significant. It may be best to describe it by quoting a letter addressed by the investigator on April 18, 1932, to the editor of one of the Denver newspapers, as follows:

> I have received from the East in a clipping from a New York paper, a story under the date line—Los Angeles, April 5 (U.P.)—an account of a speech made there by Miss Josephine Roche, President of the Rocky Mountain Fuel Company. It deals with the economic policies of the company in their bearing upon the general industrial situation and the importance of preventing wage cuts. The headline used in this paper is, "Woman Mine Operator Decries Wage-Slashing. Vassar

Graduate, Who Makes Vast Colorado Enterprise Pay, Declares Prosperity Lies in Purchasing Power of Workers."

As this article came from the news service, in which as I understand it your paper is included, and as it is of such exceptional interest to Denver and Colorado, I am interested to know whether it was used in your columns. I may have overlooked it. I would appreciate your sending me a reference to the date of the issue in which it appeared. Or, if it was not used, I would be much interested to know the policy governing such a decision.

I am at present engaged in a study of the coal industry, one phase of which is the attitude of the newspapers toward constructive programs for dealing with the problems of this industry, and I am, therefore, following with much interest the editorial and news policy of the newspapers on this subject. In addition to the specific question which I have asked, I would be glad to have an opportunity to talk with you in the near future on the subject of the general policy and method of educating public opinion with reference to the problems of this basic natural resource.

To this letter no reply was received. It was ignored as is news of the activities of the Rocky Mountain Fuel Company, or, to a greater degree, of the United Mine Workers and other trade unions.

The General Public

Possibly there is no such entity as the general public. Yet certainly there is such a thing as public opinion, however vague and kaleidoscopic it may be. It may oppose or support the policy of management or the attitudes of labor, and outside of the industries it plays its part in such influence as the consumer may exert. It affects and is affected by the policies of newspapers, the radio, and the like.

Its expression with reference to working conditions is to be found in labor legislation and in governmental policy generally. This policy may take the form, for example, of throwing the forces of government on one side or the other in a strike. Colorado has had many experiences in this kind of policy. Martial law has been declared in time of strike; and the state police, called in to protect property, have taken a toll of life from the workers. On the other hand, the government in administrative acts may adopt a quite different policy if public opinion demands that human rights should be conserved above property rights. Labor legislation and its administration have given some expression to this phase of public opinion.

Public opinion has commonly been thought to hold the balance in an economic struggle between so-called "Labor and Capital." Many public commissions have been constituted with representation from workers, employers, "and the general public."

Industrial Commission of Colorado

The Industrial Commission law of Colorado, enacted in 1915, is based upon the idea that informed public opinion will balance the scales of justice in disputes between workers and employers. It provides for what has been called a "cooling off" time, forbidding employers to "lock out" workers, or workers to strike until their disagreements over an announced change in wages or working conditions have been investigated by the Commission.

The Industrial Commission was established after the strike of 1913-1914. Its origin is commonly attributed to the advisory work done by W. L. Mackenzie King, afterward Prime Minister of Canada, who was called in by John D. Rockefeller, Jr., to make suggestions regarding the labor policy of the Colorado Fuel and Iron Company. The labor policy within the company took the form of employes' representation, as already noted. The state legislature at the same time enacted a law similar to the Canadian Industrial Disputes Act.[1] It requires that there shall be no change in wages or working conditions without thirty days' notice to be given by the initiator of the change, an employer, or a trade union. If on giving notice a dispute arises there shall be no strike until the Industrial Commission has made its report. On the one hand, this sets a limitation upon the right of the workers to strike, and on the other upon the right of the employer to declare a lockout. Labor may not ask higher wages nor management reduce wages without a month's notice to the Industrial Commission.

References later[2] to the hearings of the Commission on wage reductions, and to its investigations in the 1927 strike, already quoted, show the way in which the law is interwoven with union-management co-operation in the Rocky Mountain Fuel Company. On the whole, the workers in the beginning were opposed to the law, and at no time can they be said to have been wholeheartedly for it. They always fear a limitation upon the right to strike, since their organized withholding of their labor is their one control in a situation where the employing group determines who shall be employed and who shall be discharged. Whatever else may be said of the law, however, it has given a public hearing to both sides.

Meanwhile, it is not to be forgotten that in the history of the act, workers have been jailed for its violation, but there is no instance of a jail sentence for employers, though they also have violated it. For instance, in the strike of

[1] For a study of the operation of this act, particularly in its bearing upon the coal industry, see Selekman, Ben M., Postponing Strikes: A Study of the Industrial Disputes Investigation Act of Canada. Russell Sage Foundation, New York, 1927.

[2] See Chapter VI, Competition and Wages, p. 118.

1927 of the I. W. W., the Commission declared that the strike was illegal and several leaders were sentenced to jail.

The Industrial Commission may also make investigations; and it administers the labor laws of the state, including workmen's compensation, which represents public opinion on behalf of the men employed in the mines. Here again conflict arises when the insurance companies oppose the claims of workmen for compensation. In the Rocky Mountain Fuel Company, it has become one of the obligations of the union officers to protect the rights of the miners in compensation cases and the spirit of the company's policy has often been shown in its insistence that compensation shall be paid rather than resisted.

Another state body related to mining is the Coal Mine Inspection Department which was established by legislation in 1913. It is charged with the duty of maintaining safety for the miners. It is supported by a tax on tonnage of coal in the state, and in times of declining production its budget suffers accordingly. But its administration is generally regarded in Colorado as marked by effectiveness and integrity. Its reports on accidents are the source of comparative material to gauge the safety programs of the various companies and their relation to their labor policy.

The Physical Environment

Here, then, are the forces at work more or less directly influencing the carrying out of the labor agreement between management and the union. The scene of action is the mining industry, with its special characteristics and their bearing upon human relations. That mining is a hazardous employment, carried on in darkness below ground, is too obvious to need description, but all of these features have created a greater temptation toward exploitation of workers. The very dangers of mining require authoritative control by supervisors, and the superintendent and the mine foremen acquire thereby dictatorial power which the union has sought to curb through the operations of the pit committees. Moreover, mining communities are often isolated and the whole property is owned by a company. This gives the company authority over employes in their community life as well as in their workplace and links the management with political activities. State police, for example, called into an isolated mining community act on behalf of the company to a degree which would be impossible in a town in which the company was only one of the property owners.

Underground there are special causes of grievances and disputes which are to be found in coal mines the world over, under whatever political or economic system. The mine has an underground network of roadways laid out in the form of entries to the rooms where the coal is dug. The workplace changes as the work advances and unexpected conditions are encountered. These can be standardized only within certain limits. A wage rate, for example, may become quite unfair to the miner if he is in a workplace where there is a large amount of rock mixed with the coal, or where the condition of the roof requires much timbering. It may take twice or three times longer to dig a ton of coal under these circumstances than in a clear vein of coal with high seams and little danger from the roof. A wage scale must be applied locally; and if the final word is the foreman's or superintendent's, it represents the interest of the company and not of the workers. Hence the importance of some form of joint decision.

On the other hand, the miner has many opportunities to lower costs of production and in general to keep the output good for the market. The shot firer and the miner together may determine whether the coal breaks up into very small pieces or whether it is kept at a desired size. Innumerable causes of waste may be remedied by co-operation of the men. It is an industry in which labor's participation in management may have a continuing and substantial influence upon costs and in general upon the quality of coal and its serviceability to the consumer.

CHAPTER III

THE COLLECTIVE AGREEMENT

THE declaration of principles which forms the preamble of the collective agreement signed by the Rocky Mountain Fuel Company and the United Mine Workers of America acting through and with District 15 in Colorado gives distinctive character to the contract. The rest of the agreement has many forerunners in contracts signed between the miners' union and operators in other sections of the country. Its main provisions represent the basic purpose and idea of the orthodox organized labor movement of the United States, namely, "collective bargaining" between the employer and the union. The union accepts the economic system as it is and enters into a businesslike contract for hours of work and wages and for regulation of such conditions as directly affect the earning power of the workers. It also provides for the day-to-day adjustment of grievances which in turn relate largely to the wage scale.

The Company's Responsibility for Management

In this Colorado agreement, as in contracts in other parts of the country, responsibility for management rests with "the Company": "The right to hire and discharge, the management of the mines and the direction of the working forces are vested exclusively in the Company, and the U. M. W. of A. shall not abridge this right."[1]

[1] Appendix III-A, Declaration of Principles and Agreement, sec. 6, p. 253.

In "the right to hire and discharge" is to be found a burning point of conflict, which has played its part in the history of industrial relations in all industries. While the terms of the collective agreement place this vital function in the hands of the management as a responsibility of the company, a phrase immediately follows which limits it by declaring that it is "not the intention of this provision to encourage the discharge of employes or the refusal of employment of applicants because of personal prejudice or activity in matters affecting the Company and the U. M. W. of A."[1] This statement is followed by provision for adjustment of any dispute arising under this declaration, which, as will be seen, involves all the difficulties of what constitutes discrimination on the ground of activity in the trade union or other potential areas of difference between the company and the workers.

Closely allied with this declaration of the right of the company to manage the mines, is a section of the agreement headed "Discipline." It requires employes, individually and collectively, to come regularly to work. There can be no strike until a dispute has been disposed of by the regular machinery for administering the contract.[2] An individual employe may not absent himself "from duty two days or more, except on account of sickness, without giving advance notice when possible to the Mine Boss or Superintendent"; the penalty is loss of his job.[3] If he is a machine runner or an employe "upon whose work other employes of the mine are dependent," he may not be absent at all without this advance notice. It is, moreover, agreed that in a strike all employes who are needed "to

[1] *Ibid.*, sec. 6, p. 253.

[2] This is a contract provision, not related to the law for the State Industrial Commission, which restricts further the right to strike. Cf. p. 63.

[3] Appendix III-A, Declaration of Principles and Agreement, sec. 8, p. 254.

keep the mine in shape," such as engineers, firemen, pumpers, and the like, must continue to work.

This effort to secure regularity of attendance is reflected in a section headed "Deaths and Funerals," which permits the miners to cease work after an accident in the mine; but there must not be general suspension of work for a funeral, though individuals may attend.[1]

The agreement lays upon the employes certain responsibilities for the quality of the work which relates to management in a broad sense. Miners, loaders, and shotfirers are "to exercise reasonable care in placing their shots so as to produce the largest amount possible of marketable coal." Individually and in the mine committee and the United Mine Workers of America, they "pledge their full cooperation to create and maintain efficiency in mining, shooting, and loading with a view to producing a maximum of large sized marketable coal."[2]

The coal is to be kept free of impurities. Here is a point where, in the absence of a union contract, the miner's earning power is jeopardized. He is paid by the weight of the coal which he digs. If there be many impurities in the strata of coal in his workplace, he must separate these out, and without a rate for handling rock he cannot count as tonnage some of the material which takes his time. This gives rise to disputes over earnings and the temptation to load impurities onto mine cars. For this a penalty is provided in the collective agreement, graded from the first and second offenses, which permit a warning, through to the possibility of discharge "for any aggravated or malicious case";[3] but, most important for the miner, a rate is set for handling rock.

[1] *Ibid.,* sec. 11, pp. 255-256.
[2] *Ibid.,* sec. 17, p. 258.
[3] *Ibid.,* sec. 18, p. 258.

Wages

A general agreement establishes a basic day wage, and daily rates are then set for different mines and for various occupations, based upon differences in mining conditions and in the requirements of the particular job. In 1928 the Rocky Mountain Fuel Company accepted the basic day wage of $7.00, which was little less than the $7.50 formerly prevailing in mines working under the national agreement, the so-called Jacksonville Agreement adopted in 1924. The operators throughout the country declined to renew any agreement on a nation-wide scale in 1927. This resulted in district agreements, but below the Jacksonville scale. By accepting almost that scale in 1928, therefore, the Rocky Mountain Fuel Company not only advanced its own basic day wage, which was then $6.77 (having been raised by 50 cents in 1927, a year before the collective agreement was signed), but committed itself to the highest rate anywhere in the country, except in Montana.

Moreover, it assumed the obligation to maintain during the period of the agreement a wage higher than that paid by other companies in the counties where its mines were located. If, on the other hand, competing companies should reduce the wage scale so as to affect 51 per cent or more of the tonnage in those counties, the Rocky Mountain Fuel Company could reduce its scale, always maintaining, however, the higher differential of 23 cents in Boulder and Weld Counties and 10 cents in Gunnison County.[1] It will be seen later that, though there was no action to raise wages during this period, there occurred a reduction during the life of the agreement.[2]

[1] *Ibid.,* sec. 25, p. 262, and sec. 27, pp. 267-268.
[2] See Chapter VI, Competition and Wages, p. 118.

The intention of this differential was to create a stimulus for organizing the union in other companies in Colorado in order to secure a correspondingly favorable wage scale; and in accepting it the company must have expected the United Mine Workers to institute an active campaign for organizing, at least in the northern field, in order to protect the company against the disadvantages of its competitors' lower wage scales. Unhappily, that protection was not achieved, and up to 1933, when this study goes to press, no other company in the state had entered into an agreement with the miners' union. In the beginning it was even suggested that it might work the other way, since the union members, who would naturally take the lead in organizing, are for the most part employed by the Rocky Mountain Fuel Company, and have already attained the advantages of organization. Moreover, the first agreement contained the following provision: "No such differential shall be paid when operators, including the Company, producing 65 per cent of the tonnage in such district are operating under union contracts."[1] Thus if organization had taken place in the other companies, regardless of the wage scale which the union was able to obtain, the Rocky Mountain Fuel Company might have eliminated its differential. This provision was omitted from the agreement signed in 1930, but there still remain the other provisions noted which gave an advantage to employes of the Rocky Mountain Fuel Company, but a possible disadvantage to the company in competition with the non-union mines.

In other ways, however, the union undertook to give a *quid pro quo*. They accepted the following provision: "The parties hereto mutually agree to justify the payment

[1] Appendix III-A, Declaration of Principles and Agreement, footnote to sec. 25, par. 4, p. 263.

of the differential in the wage scale by co-operative effort and increased efficiency."[1]

All occupations in and about the mines are included in the agreement, except supervisory officials such as "mine bosses (mine foremen), superintendents and all other employes having supervision over two or more other workers," together with teamsters hauling any material for construction work or for any other work not directly connected with the production of coal. Those engaged in construction or repair work are also excluded.

Protection of Earnings

The miner must not only have an assured basic wage scale, but he must be protected against those changing conditions in his work or practices in management which may prevent his getting the full value from the rate. The presence of impurities has already been noted. Closely connected with this condition of the coal or the workplace is the necessity for timbering the roof and putting up props for safety in mining. This is called "dead work," and in the old days, before trade-union organization in the mining industry there was generally no payment for it. Even under the union contract it becomes a matter of frequent dispute and in itself is a reason for provision for day-to-day negotiation.

The agreement in the Rocky Mountain Fuel Company adopts a more or less standard provision on the subject of dead work, declaring that "a miner or tonnage worker shall not be required to perform unusual dead work for which no scale is provided or perform work in deficient places that reduce his earnings."[2]

The company is to keep the mines as dry as possible

[1] *Ibid.,* sec. 25, p. 263.
[2] *Ibid.,* sec. 14, p. 257.

and to provide the miner with the material which he needs for putting up props and the like, delivering it "as close to the face as practicable in pit cars."[1] Moreover, the company must lay all permanent track in the entries, limiting the miners to the laying of track in their workplaces and temporary track in the entries, but all track is to be maintained and repaired by the company.[2]

Sometimes in the process of cutting the coal by machine or when a pillar left to support the roof or a stump is taken out as coal, the place may cave in and the coal be lost. The machine men are to be paid for this lost coal. But on the other hand, if, having removed posts or timber which they are required to reset, they have failed in that duty, they receive no pay for lost coal. Moreover, they must cut the coal "level and close to bottom"; and if they fail to observe the specifications, they must correct the condition at their own expense.[3]

In addition to the physical conditions in the mine, the miner's earnings are affected also by the direction of the working force, the assignment of men to workplaces, and the providing of needed supplies and mine cars. This provision of mine cars is particularly important and has been recognized for a long time in agreements in the industry in provisions for "an equal turn."

To understand this phrase it is necessary to realize that a mine must maintain an underground transportation system. The coal which is dug from the earth must be carried to the shaft and then to the surface. When the miner has finished his work on the coal, he or his buddy must load it on a mine car; and if a car is not available,

[1] *Ibid.*, sec. 15, p. 258. This provision regarding delivery of material, cutting props to suitable length, and the like did not appear in the first agreement but was included in 1930. It was, however, covered by the State Mining Law.

[2] *Ibid.*, sec. 16, p. 258.

[3] *Ibid.*, sec. 13, p. 257.

the men lose time and earnings. If the mine management is not closely enough in touch with the progress of the work in different parts of the mine, too many cars may be concentrated in one area where the miners are not ready to fill them, while men who have dug the coal in another region are idle. Therefore "an equal turn shall be kept as far as practicable."[1] However, it is also provided that this must not interfere with "development" or "necessary work" having to do with the extension of the mine area, repairs, or other tasks.

Likewise of great importance to the miner is the provision for a "checkweighman," a representative of the miners, paid by them and responsible to them for watching the weighing of the coal when it is brought out from the mine. The checkweighman must see to it that the company "weigh boss" credits the miner with the full amount of coal. So vital is this considered, that the law[2] requires mining companies to permit the men, if a majority vote for it, to select a checkweighman. Obviously, however, where there is no organization of the miners they are not likely to avail themselves of this privilege. The findings of the Industrial Commission, already quoted, with reference to the strike of 1927, show that absence of checkweighmen and unscrupulous practices of mining companies in cheating the men in the weights of their coal were among the causes of the strike.[3] Here emerge in the effects upon the wage scale not only managerial methods but the ethics of human relations in industry and the basic struggle over the division of the product between labor and capital. It happens that the miner is working far below ground when the company weighs his output outside the mine; and at

[1] *Ibid.*, sec. 2, p. 250.

[2] Coal Mining Laws, Colorado, enacted 1913; amended 1917, 1919 and 1929. See Sessions Laws of 1929, chap. 68, sec. 10, p. 253.

[3] See p. 41.

that point pressure is put upon the weigh boss, who is employed by the company, to increase the company's profits at the expense of the miners. Unhappily this is a practice which every official investigation dealing with these subjects in the coal industry in the United States has sooner or later revealed, and naturally the union undertakes at this point vigorous defense of the miner's rights through the appointment of his representative to watch the management.

Finally, among the provisions affecting wages is the agreement of the company to pay twice a month at all its mines. Moreover, itemized statements must be issued to the employes two days before payday (which covers the period ending two weeks prior to payment), thus giving the men opportunity to protest if they claim more payment. This again reflects the constant conflict in mining which is, moreover, affected by the custom of making certain deductions.

Deductions from Earnings

The miner pays for supplies used in his work, such as powder, fuse, caps, and mine supplies.[1] Some day the industry must face the question as to why the miners should pay for powder and materials which are necessary to the company's operations. The best that the union has been able to do for him in its contract is to require that these "be furnished at a reasonable price" based upon "the cost plus a reasonable charge for handling."[2] Moreover, the mine worker must pay for the coal that he uses in his own home, even though he occupy a company house, and again

[1] For further details regarding these deductions, see Chapter VIII, Measurable Results, p. 161.

[2] Appendix III-A, Declaration of Principles and Agreement, sec. 20, p. 259.

the best that the union can do is to require that the price be agreed upon by the local union and the company.[1] Likewise, the men who use the bath house pay a portion of the expense, not to exceed $1.00 per month per man, while the company agrees to provide this facility if a majority of the employes at a mine request it in writing, and to maintain it in a sanitary condition, heated, and with warm and cold water.

Finally, as is also the custom in mining, the men pay part of the expense of medical service for themselves and their families at a charge of $1.00 per month for unmarried men and $1.50 for married men, payable whether they use the service or not.

In many other companies if a miner trades at a company store it is the practice for his bill to be charged and deducted from earnings, together with the rent of his house. His actual cash receipts may be considerably reduced thereby, and here again is a frequent cause of grievance in the mining industry. The Rocky Mountain Fuel Company makes no such deductions, nor are company stores mentioned in the agreement, except that their conduct is regulated by the State Mining Law. In 1933 in joint conference the whole price problem was discussed between the company and the union and a cash basis established.

A deduction for the convenience of the union, as distinct from deductions made by the company, relates to the so-called check-off. The company deducts from wages, after a signed order by each miner, his dues to the local union of the United Mine Workers, together with initiation fees, fines and assessments and also the fees for the checkweighman.[2] Naturally this is a convenience for the union.

[1] *Ibid.*, sec. 21, p. 259.
[2] *Ibid.*, sec. 10, p. 255.

Mechanization

The policy of the miners' union has been not to resist the introduction of machinery but to try to secure for the miner a fair proportion of the increased productivity. It has been noted that in the Colorado agreement the union and the Rocky Mountain Fuel Company have declared "that increased productivity should be mutually shared."[1] In the contract the necessity for further extension of mechanization is recognized. The union undertakes not to "obstruct or hinder in any way the operation" of "loading machines, conveyors or more modern cutting machines" which may subsequently be installed. As a protection of the miner's share in the results, the contract provides that "day wage rates shall prevail during the installation and experimental stage. After passing the experimental stage a conference between the parties to this agreement will be held to determine a schedule of permanent rates for such work."[2]

Hours of Labor

The first agreement of the United Mine Workers with coal operators in Illinois, Indiana, Ohio, Pennsylvania, and West Virginia, signed in Illinois on January 28, 1898, won the eight-hour day, to take effect April 1, and every year on this date that victory is celebrated. The present contract of the Rocky Mountain Fuel Company carries provision for eight hours, which is defined as "eight hours' work, at the usual working place, exclusive of one-half hour for mid-shift lunch, six days a week when required

[1] See p. 35.
[2] See Appendix III-A, Declaration of Principles and Agreement, sec. 24, pp. 261-262.

by the company."[1] It provides for certain holidays, and requires the company to pay for two hours' work if it has given the customary signal for work which has brought the men into the mine in the morning, regardless of whether the mine works the full two hours.

Observance of Mining Laws

It would seem unnecessary for the contract to provide for observance of mining laws, but it is so provided, and "both parties agree to co-operate"[2] in their observance. By including this in the agreement, a violation constitutes not only a legal offense, but a grievance to be dealt with by either party under the union contract.

Administration

More important than the particular conditions specified in the contract is the provision for its enforcement and for the day-to-day adjustments which may arise under its interpretation.[3] In common with agreements signed elsewhere by the United Mine Workers, the Colorado contract provides for a Pit Committee consisting of not more than three men. They are selected by the miners and must be employes of the mine in which they serve as committeemen. They must be able to speak English. They may not hold a meeting during working hours, except by mutual agreement with the superintendent. Their duties are to adjust disputes arising out of the agreement, involving the pit boss or the foreman and any member of the United

[1] *Ibid.,* sec. 1, p. 249.
[2] *Ibid.,* sec. 9, p. 254.
[3] See study of this subject in the mining industry of Illinois, where collective agreements and their administration have had a long history: Labor Agreements in Coal Mines, cited in footnote, p. 15.

Mine Workers of America employed in and around the mine. The Committee takes jurisdiction if the miner and his foreman have failed to agree, and if an agreement is then reached between the foreman and the committee it is put into writing.[1]

In the agreement for the two years beginning September 1, 1932, the Pit Committee was no longer limited to a complaint made by the employe affected but was expressly permitted to take up, "on its own initiative, any grievance."[2] This is a wider extension of the Pit Committee's functions than appears in the wording, since it permits the Committee to deal with any question affecting workers in the mines, whether or not it has become a personal grievance.

The procedure of the Pit Committee is carefully arranged. First, complaint has to be made to the foreman, and if they agree it is adjusted accordingly, always, of course, in conformity with the contract. If they disagree, it is referred to the mine superintendent and the Pit Committee. In the agreement of 1928 it was not the Pit Committee which was specified at this point, but "the District President of the U. M. W. of A. or his representative."[3]

If the mine superintendent and Pit Committee fail to agree, the next step is to refer the matter under dispute to the district president of the United Mine Workers or his representative, and the mine superintendent or his representative. If it continues to be a disagreement, it is next referred to the manager of mine operations or his representative, and the district president of the United Mine Workers or his representative, and finally to the president of the company or his representative, and the international

[1] Appendix III-A, Declaration of Principles and Agreement, sec. 4, p. 251.
[2] Appendix III-C, Memorandum of Changes in Agreement, sec. 4, p. 278.
[3] Appendix III-A, Declaration of Principles and Agreement, sec. 5, footnote, p. 251.

president of the United Mine Workers or his representative.[1] Work must be continued pending investigation and adjustment, and no discrimination shall be practiced against any employe during that time.

The agreement contains no further reference to the form of organization either of the union or of the company. But naturally in a study of union-management cooperation it is necessary to have as clear as possible a picture of the organization on both sides in relation to administering the agreement. The United Mine Workers' organization has been described in the preceding chapter. A local union at each mine includes in its active membership all employes other than supervisors, and it is in the union that all matters affecting employment are discussed. Its members elect officers, including the Pit Committee and the checkweighman, and choose delegates to the district convention. Its representatives are called together by the district president when special matters are to be settled.

At the time of the study the local unions of men working in the mines of the Rocky Mountain Fuel Company made up the active organization of the district in Colorado, because no other company had a trade-union agreement. Therefore the district, aside from its responsibilities for organizing the employes of other companies, had practically as its exclusive task the work involved in administering the collective agreement of this company.

Responsibility for wage-scale conferences rests with the district, and with the international officers. The local unions send representatives to the district conferences and file their demands if they wish to make any. If at any time the former custom of a basic agreement for the so-called Central Competitive Field[2] should be resumed,

[1] *Ibid.*, sec. 5, pp. 251-252.

[2] The Central Competitive Field included Illinois, Indiana, Ohio, and western Pennsylvania. For a fuller description of the procedure of a scale conference, see Labor Agreements in Coal Mines, cited in footnote, p. 15. See also p. 51.

District No. 15 would send representatives to a scale conference which on the side of the union would include representatives of all districts, and on the side of the operators representatives of the states in the Central Competitive Field; after the adoption of this basic agreement, district agreements would be made to apply it to regional conditions. For the moment, however, each district is acting separately, though the international union is a party to the contract.

On the side of the company the form of organization, as briefly indicated in the preceding chapter, is departmental rather than functional. The Board of Directors, representing the stockholders, is the governing body which elects the officers, and they become the higher managerial officials. In 1932 one vice-president had the title of executive vice-president and general manager, and was responsible for mining operations. The president took the lead in general policy-making, in financial problems and in general public relations, involving speeches on various occasions, radio broadcasting and the like, to let the public know and understand the company's policy. Another vice-president was primarily responsible for relations with the union, though the other officers also participated. In this and other functions there was apparently no clear-cut division of function between officials.

In the autumn of 1932 a manager of operations was appointed to fulfil the functions of general technical supervision. For three previous years, responsibility for mining operations, which devolved upon the executive vice-president and general manager, had been delegated to the mine superintendents, who became thereby the officials to administer the union contract and the company's labor policy in general, including the right to hire and discharge. This was in line with a managerial concept of decentralizing responsibility. With the new policy in 1927 a new accounting system was introduced, calculated to reveal the significant facts in carrying out such a policy. As part of this system, each superintendent receives each month a report of his own mine and of the total operations, thus enabling him to check his work by its results.

Probably this delegation of responsibility is good practice in the technical aspects of mining, and in human relations the procedure laid down in the contract protects the miners against the arbitrary exercise of the superintendent's authority. Certain dangers arising under such a plan, particularly in discharges or "lay-offs," will be discussed in Chapter VII, Adjusting Grievances. Decentralization has been safeguarded further by the direct responsibility of the mine superintendent to the highest officers.

Time alone will tell whether some of the miners were justified in their fears in 1933 that the new system of handling mining operations endangered the full protection of the mine workers. They wished their disputes handled directly by a higher officer, especially by the president, when they could not be settled by the mine superintendent. Though they did not express it as would an expert in scientific management, they saw in the administration of the collective agreement on the side of the company a "function" inhering in higher management.

In general, as has been said, the company has the departmental rather than the functional type of organization. Its departments, as listed by the president in 1933, are: Mine Operations, Sales, Accounting, Credits, Stores,[1] Farms,[2] and Retail. The general auditor handles the departments of accounting, credits, and stores. Wholesale selling is separated from retail. The duties of the general

[1] Referring to company stores where the miners purchase if they wish.
[2] The Farms Department manages the rentals and other business connected with the farming properties owned by the company.

counsel and the chief engineer are sufficiently indicated in their titles.

This was not a study in the administration of the company. Certain statistics obtained for other phases of the inquiry revealed the progress made in reducing the cost of "overhead administration,"[1] and these suggested some effective work on organization problems. Nevertheless, study of adjustments in administering the contract seemed to indicate that certain officers had too many duties and others too few, and that the "loads" could be equalized with advantage for the organization as a whole. There seemed to be need for a careful and expert analysis looking toward setting up, on the company's side, a plan of administration with the aim of fulfilling most effectively all the tasks and relationships involved in the new policy. Without such a well-considered plan of organization of the management, the problems of union-management cooperation are more difficult. Spirit and motive are expected to do the work of basic organization, and at times this puts too great a strain upon both the spirit and the motive, as will appear in discussing experience under the collective agreement.

[1] Table 10, p. 362; also p. 171.

CHAPTER IV

LABOR'S PRODUCTIVITY

THE collective agreement lays upon the company complete responsibility and authority for management of the mines and "direction of the working forces." The union, in return for the "differential" in the wage rate, accepted its share in the obligation of the following provision: "The parties hereto mutually agree to justify the payment of the differential in the wage scale by co-operative effort and increased efficiency."[1]

The first of these provisions seems, on the face of it, to conform to traditions of American trade unionism in laying upon the company responsibility for management, leaving to the union, by implication, the mere struggle to advance wages and improve conditions of employment. The second, however, commits the union to concern itself with "increased efficiency" and the company and the union together to develop "co-operative effort." The effect of this co-operative effort has led to the activities of the men in selling coal through the Coal Sales Committee, as also its repercussions upon the motives of the men have increased efficiency in production. It brings the workers in direct contact with consumers, and ties the interest of the men for maintenance of their wage scale with the success of the company in widening its market by improving the quality of its coal.

[1] These provisions have been cited in Chapter III, The Collective Agreement, pp. 71-72.

This interest of the Coal Sales Committee in efficient production was reflected in the suggestion to organize the Joint Advisory Board, to be described in this chapter. It has also been reflected in special committees besides the activities of the Pit Committee in settling grievances. Frequently a grievance arises from some defect of supervision or management, and the settlement of it may be a suggestion for improvement.

The Company's Mines

At the time of this investigation the company was operating six mines: Vulcan, Industrial and Standard in Boulder County; Columbine and Grant in Weld County; and Alpine in Gunnison County. Alpine has bituminous coal; the others, lignite. In 1928 two mines were discontinued: Acme in Boulder County and Forbes in Las Animas County. Together they had produced in that year approximately 28,000 tons, the smallest output in any of the company's mines.

The total production of coal in Colorado in the period from 1928 to 1932, varied from the high point of 9,934,064 in 1929, to the low output of 5,616,525 in 1932. The tonnage of the Rocky Mountain Fuel Company for that period ranged from 602,386 in 1928 to 803,844 in 1929, or from 6.5 per cent of the state's tonnage in 1928, to 8 per cent in 1929, and to the maximum proportion of 11.5 per cent in 1932.[1] The number of coal miners in Colorado was 7,523 in 1928 and 5,521 in 1932, in a total force in and about the mines of 11,474 in 1928 and 8,786 in 1932.[2] The average number of workers, including miners, in the

[1] Table 2, p. 351.
[2] State Mine Inspector, Annual Reports (printed through 1930; mimeographed 1931 and 1932).

Rocky Mountain Fuel Company's mines is approximately 600, varying, however, from 623 in 1930, to 531 in 1932.[1] On the whole, without increase in the number of mines, and indeed after the discontinuance of the two small mines in 1928, the Rocky Mountain Fuel Company has increased year by year its share of the total tonnage of the state.

In 1929 Industrial, Vulcan, and Standard produced 52 per cent of the output in Boulder County; in Weld County, Columbine and Grant produced 24.5 per cent; and in Gunnison County, Alpine produced 6.5 per cent.[2] This also represents an increase for Boulder and Weld Counties as compared with 1928, the proportion produced in that year by the three mines in Boulder County having been 39 per cent (with Acme producing 3 per cent more), and in Weld County, Columbine and Grant having produced 20 per cent.

The comparative size of the company's mines is shown by their output in 1929, which was as follows:

1. Columbine	365,699	tons
2. Grant	163,508	"
3. Industrial	103,873	"
4. Vulcan	87,655	"
5. Standard	58,097	"
6. Alpine	33,891	"

These figures do not necessarily correspond with capacity, as output varies with the market (as well as with mine capacity and miners' productivity). For example, Columbine produced only 275,072 tons in 1931 and Grant 195,757. Alpine's production in 1928 and 1929 was more than

[1] Table 9, p. 361.
[2] Table 3, p. 352.

33,000 tons, the lowest production of 6,563 in 1930 and the highest, 37,276 in 1932, being due primarily to the factor of sales.

Increased Output per Man

Production per man per day was 5.27 tons in 1928; 5.98 in 1929; and in 1932, it was 6.3 as compared with 4.7 for the state. In 1932 the tonnage per miner (exclusive of the rest of the working force) was 10.5 per day as compared with 7.5 for the state as a whole. Naturally this means lower costs of production per ton, and is evidence that the men are carrying out their agreement to increase efficiency. That it is a common task, however, is evident to anyone who has observed coal-mining. The conditions affecting output are not exclusively or even mainly in the miners' control. "Co-operation is all very well," said a leader among the miners, "but it is good technical supervision which makes the difference to the digger." No one is more conscious than the miner of the difference between superintendents or foremen who know their jobs technically and understand how to plan the work to make possible the highest output per man; and those who try to increase production chiefly by authority and by "driving" the men.

An Example of Joint Investigation of Efficiency

In the technical work of miners, suggestions which are not usually asked for or welcomed by supervising officials would appear to be a valuable source of ideas for mine management. An interesting example in the experience of this company was the work of a joint committee of management and labor to improve output at Vulcan Mine.[1] The company was represented by one of its officers, Mr. Lawson, and by the superintendent of the mine; the miners, by the acting president of the local union, who was employed at the time in Industrial Mine, and by two other miners, together with a member of the Vulcan Pit Committee during the period of inspection. The problem was first formulated by getting the production figures from the mine clerk for the last two and a half months. On the day of inspection the average tonnage per loader was 9 1/3, which was considered thoroughly satisfactory, "if maintained," but there had been days of less production. This is a mine which will soon be finished. It is "on retreat," which means that the entries have been carried through to the farthest possible point and the force is working back, taking out the coal which was left to sustain the roof. Therefore the Pit Committee observed:

Owing to the restricted territory available for the mining of coal (the mine is on the retreat everywhere) this is in some degree to be expected, but with mutual co-operation, these bad days can be reduced and the good correspondingly increased, making possible quite an aggregate gain. All of the men without hesitation expressed a willingness to co-operate and gave their opinions of things in general, freely and unafraid.

The report then proceeds to set down the causes of unsatisfactory output, as follows:

(1) "Haphazardness was present in all of the places as men cross-shifting each other were not working to mutual advantage.[2] Each man was getting through his shift without giving

[1] See report prepared by one of the miners, John Green, acting president of the local union, later local representative of District No. 15, U. M. W. of A., Appendix V, p. 295.

[2] "Cross-shifting" refers to the fact that the week's work was divided among several pairs of miners so that two or more "shifts" were digging coal alter-

consideration to the oncoming shift and a rough estimate of the time thus lost, coupled with other matters which were brought out, caused almost the loss of a full shift of loading in a week's time." As a remedy, it was declared that "reorganization of the working force is necessary" and the report adds "a thorough discussion developed feasible plans that yet remain to be worked out."

(2) "Hours of labor were lost by men (almost all of them) at some time or other," due to (a) finding that the machine men had not cut the coal ready for the miners or (b) if the coal was ready there were no cars to load. (c) When men changed from one workplace to another (in the process of rotating work) they were losing half a working day each week. (d) Some loaders, according to the superintendent, were quitting before three o'clock "while they yet had coal and cars to put the coal in." (e) At times the machine man had nothing to do because the places were not ready for cutting and "then three or four places would be ready simultaneously." The recommendation covering all these losses of time was that change of workplaces be made every three weeks instead of weekly, and the joint committee agreed unanimously. It was also suggested that "eight men should cross-shift another eight men, always retaining the same buddies," and it was considered "worth a trial" to solve the difficulties of "cross-shifting."

(3) Time is lost if loaders are not able upon entering the mine to begin loading at once; that is, the coal must be cut and ready for them. At this point the miners suggested that there was an added consideration in enabling them to get to work promptly, namely, that "there is quite a volume of cold air in this portion of the mine and every opportunity to keep at productive labor is certain to be appreciated by the men and of great benefit to the general cause, as it would result in an increase of production." To carry out this idea of saving the

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nately in the same places. This was due in part to an effort to share the work—a subject which will appear as a crucial problem later in this report. Generally in mining a man would be permitted to have his own workplace with his buddy so that he finds it in the same condition as when he leaves it.

loaders' time it was stated that a workplace should be cleaned up at the end of a shift and the coal cut before the next shift, while an empty car should be placed in each work room, ready to start.

(4) Physical and structural differences were found, in one place "water and heaving bottom being extremely troublesome." Moreover when the mine was laid out "entries were driven too close together, leaving a small chain pillar of 26 feet between the entries when twice that would not have been sufficient, considering the nature of the roof and bottom, which are of a soft nature." It was pointed out that "the problem here is one entirely of how to keep the place dry and the roadways open."

The Vulcan Pit Committee recognized the comparatively large overhead necessary in production of coal in this mine, with its limited number of workplaces in its present advanced state of development. This was used as an argument that there should be "no waiting for anything on the part of the loaders." The results of the inspection were summed up by saying: "All of the places were timbered in good shape" (a tribute to the miners) and "the coal being extracted with a minimum of loss" (a tribute to both the men and the management). "The state of the workplaces proves the efficiency of the men, all of whom, without exception, are first-class miners." Finally,

> No criticism was made. As a matter of fact criticism is a superfluity when the difficulties of this operation are considered. We venture to assert that if this mine had been worked under the present union co-operative management plan during its entire producing life, it would yet have been a valuable property.

Thus concretely is revealed the way in which labor and management together can influence the efficiency of the whole operation.

Joint Conference on Columbine Mine

More formal was the Local Scale Conference at Columbine Mine in August and September, 1930.[1] Its work, as reported in the minutes, is an example of careful procedure and exchange of suggestions between representatives of the management and of the men on an equal basis.

It is unnecessary to review here the 33 points listed in the agenda as subjects for discussion. They ranged over questions of organization of the work, such as provision of more cars for a low coal district; questions of pay for dead work; questions of wages to be paid for service to the miners, such as the work of the bath-house men and more particularly the interesting problem of a rate for loading coal which had been set some years before the agreement, when strikebreakers were brought in and the job of loaders reorganized to permit unskilled men to do the work at a scale of 44½ cents, compared with the regular rate of 72 cents a ton.[2]

Underlying the discussion was the agreement of the general wage conference that the management would countenance no change which would materially increase costs. In this connection full information was given to the men about competitive conditions and the economic situation as the company experienced it. The minutes say: "The miners' representatives on the joint scale committee understand this, they have understood it, and it represents an acute problem to us as well as to the Company," particularly, as was pointed out, in view of the additional burden of the differential which the company pays over the wages of its competitors. Those questions which are involved in

[1] See Appendix VI, Report of Local Scale Conference, p. 299.
[2] See reference in Chapter VII, Adjustment of Grievances, p. 138.

the union contract were not considered here, the conference having been called rather to deal with questions not covered by the agreement but affecting the day-to-day work of the mine, the miners' earnings, and the company's cost of operation under the conditions prevailing in this mine.

Joint Advisory Board

Early in 1932 a new organization was set up in the form of a Joint Advisory Board. Its purpose was

> to promote closer co-operation through an enlightened mutual understanding of the problems confronting and affecting the miners and the company; and specifically to recommend ways and means of putting more effectively into practice, in the management and operation of the company's business and in work in and about the mines, the declaration of principles contained in the contract.

Grievances and incidents arising under the contract were specifically excluded, and the declaration of principles became the program on which the Board was to advise. The draft of the form of organization, which was prepared by a committee representative of the management and the employes and adopted February 11, 1932, provided that "the Board shall consider, discuss and in an advisory capacity make recommendations to the company and its employes respecting policy, management, methods of mining and work, production, employment, marketing, finance and related subjects."

The Board consisted of two members at large from each mine, with an additional member from every 50 employes, selected by locals of the United Mine Workers of America; with an equal number of representatives of the company.

It was to hold regular monthly meetings and certain special meetings.

This Joint Board and its purposes were not to be found elsewhere in unionized mines. It arose out of what might be called the "plus" of the union agreement in Colorado, namely, that part of its declaration of principles which commits the union to co-operate in the policy of the company, in increasing production and in general in serving the public. It had its origin in a discussion at a meeting of the coal sales committees of all the local unions, held on November 29, 1931. One of the miners who has facility in writing reports prepared a statement on the "Advisory Board and Its Possible Functions." He gave examples of the subjects on which the miners would have ideas worthy of consideration by the management. These included, for example, the possibility of increasing the output of certain mines by a larger supply of mine cars and by more available material for timbering and the like; the utilization of energy which is wasted by "just hanging around when there are too many loaders for a driver to keep in cars and also too few loaders for a driver, in both cases causing waste of time"; keeping the coal clean, preventing its being broken up by shoveling it twice, keeping the track and haulage ways in good condition. "These and many other things could be taken up and ideas interchanged and thereby many Pit Committee cases avoided."

A number of the men feared that "some of the superintendents wouldn't pay any attention to suggestions coming from the rank and file. But sometimes we of the rank and file are mistaken, and let's hope we are in this." It would be necessary to overcome the fears and hesitations of the miners. "A man ground down through the long years of the 'damn you now' policy of the operators is slow to thaw out; his bitter experiences make him that way."

It would be necessary to assure such an advisory board of "freedom of thought and action," and this assurance would have to be given "by both the United Mine Workers of America and the Coal Company, and suggestions welcomed in the spirit given."

But not only would suggestions be given by the miners. It would be helpful for the miners to have information from the company.

> From the company we could learn their standpoint, something of the cost of running a mine—possibly what it costs to sink the shaft, the amount spent in the putting up of the tipple, the machinery, the many buildings on the surface, the scales, boilers, etc.—the pit cars, the cost of one new, the cost of repairs, cables, motors and the Lord knows what not—mules, their feed and care; airways, airshafts, stubbings, ventilation, gob fires, gases, the need of mine examinations and of looking for the fire boss's marks.

These assuredly are practical questions, and it is interesting to reflect that coal companies generally make no provision for giving this information to employes. In addition:

> We could learn something of the entire workings of the company—their finances, prices of coal, their sales department's workings, their auditing and the necessity of it; how their supplies are purchased, what they amount to per ton, etc.; how their Board of Directors functions.

Here followed the claim of practical experience:

> In general it would be interesting to know how much it costs per ton to put this coal on the trucks or railroad cars, and the various classifications of costs and how they are arrived at. Possibly when we know these things we may notice something they have missed. Anyway, we believe practical coal miners with their experience gained from hard physical labor are

likely to have suggestions to offer more valuable than those offered by men with nothing but theory back of them.

Here, then, was a miner's statement of the case for union-management co-operation—for workers' participation in management—and it is interesting to note that the idea of the Joint Advisory Board grew out of the Coal Sales Committee in which the local unions become promoters of the company's product and attain a view of distribution which ordinarily is a closed book to workers in production. "Thus equipped," wrote this miner, who is an active union leader, "we will yet confound those who would bust up our joint relationship, a joint relationship that held the wage cutters of last summer [1931] from putting their wage reductions in effect in this lignite field of northern Colorado."

Discussions in the Board

In this Joint Advisory Board, which began its work early in 1932, such questions, which were not directly covered by the union agreement, came up for discussion, but with much less precise approach than was shown in the work of the joint committee for Columbine Mine, previously described. At the board meetings, with representatives of all departments of management present and with superintendents and foremen, the men seemed to be at some disadvantage, since their suggestions were made more or less without preparation and victory was apt to go to the best talker. In any event, the power was only advisory and the discussions were therefore not vivified by the necessity for taking action. Some of the technical questions brought up were as to methods of shotfiring in order to conserve the size of the coal; other aspects of the general subject of "preparation of coal" to affect its quality for the market, including size, freedom from impurities, and the like, and the comparative advantages of hand drilling and electric drilling. In general, as will appear later, the Board's time during the first months of its organization was occupied with problems of human relations such as were involved in the laying off of men in the spring of that year,[1] rather than with technical matters; and there emerged difficulties in relations between miners and superintendents which led to the abandonment of the Board.

Safety Committees

An important part of the management of a mine and supervision of the working force relates to safety. Here the desirability of winning the co-operation of the men is well recognized, though in non-union mines their service on committees suffers from lack of recognition of their right to act as a group. In the mines of the Rocky Mountain Fuel Company representatives of the men, sometimes the Pit Committee and sometimes a special safety committee, accompany the state mine inspector on his rounds and take part in making recommendations. It is the custom for the state inspector of coal mines to make written reports in letters to the company after these inspections.

That the company's safety record, in comparison with that of the rest of the state, has steadily improved since 1928, is shown in Table 15.[2] In two years, 1930 and 1932, no fatal accident occurred in the company's mines, and since 1929 the number of non-fatal accidents has been less for a given number of tons produced than in other Colo-

[1] See Chapter VII, Adjustment of Grievances, p. 136.
[2] See p. 365.

rado mines. The chief mine inspector attributes this to the greater scope given to the miner in protecting himself and others under a collective agreement than in a non-union mine.

The Place of the Technician

Those who hold that the appointment of committees in workplaces is merely time-consuming and useless, for the reason that problems of management are wholly technical, might seem at first sight to have ample justification in the particular characteristics of the mining industry. In the dangers of opening mines and taking out the coal, handling machinery, and all the problems of ventilation and organization there would seem to be scope only for the technician. Much depends, of course, on the authority of the superintendent and foreman. The state has recognized the importance of technical experience by requiring that these officials be licensed for their work after examination, almost like a civil service appointment.

Yet the miner's experience and indeed his independent action may vitally affect the operation of a mine. Supervision over the workplaces is not easy. The miner may have to act when the superintendent is above ground and the mine foreman a mile away. It is the miner often who can tell the foreman what special conditions in the quality of the coal may be developing as the mining advances along the seams of coal.

Moreover, the best instructions given by technically trained superintendents and foremen will come to naught if the miners either wilfully or ignorantly disregard them. The very scattering of the working force over a wide area in separate workplaces means that in a sense every miner must be also a manager. In this situation there is indeed ample scope for co-operation, if the economic structure were such as to make it possible. Antagonisms between management and miners have undoubtedly put large obstacles in the way of conservation of coal. On the other hand, *a changed economic system might release among the miners motives and resources, as yet unrealized, for a great increase in efficiency in managing the nation's coal industry.*

CHAPTER V

MARKETING AND PRICES

LABOR'S share in management in the Rocky Mountain Fuel Company has gone beyond the efforts described in the preceding chapter to increase the rate of output and to decrease costs of production. The miners have also undertaken, in co-operation with the State Federation of Labor and other workers' groups, to sell the coal of this company. Their motive has been to give support to the policy of union-management co-operation and to try to sustain the higher wage scale by increasing sales.

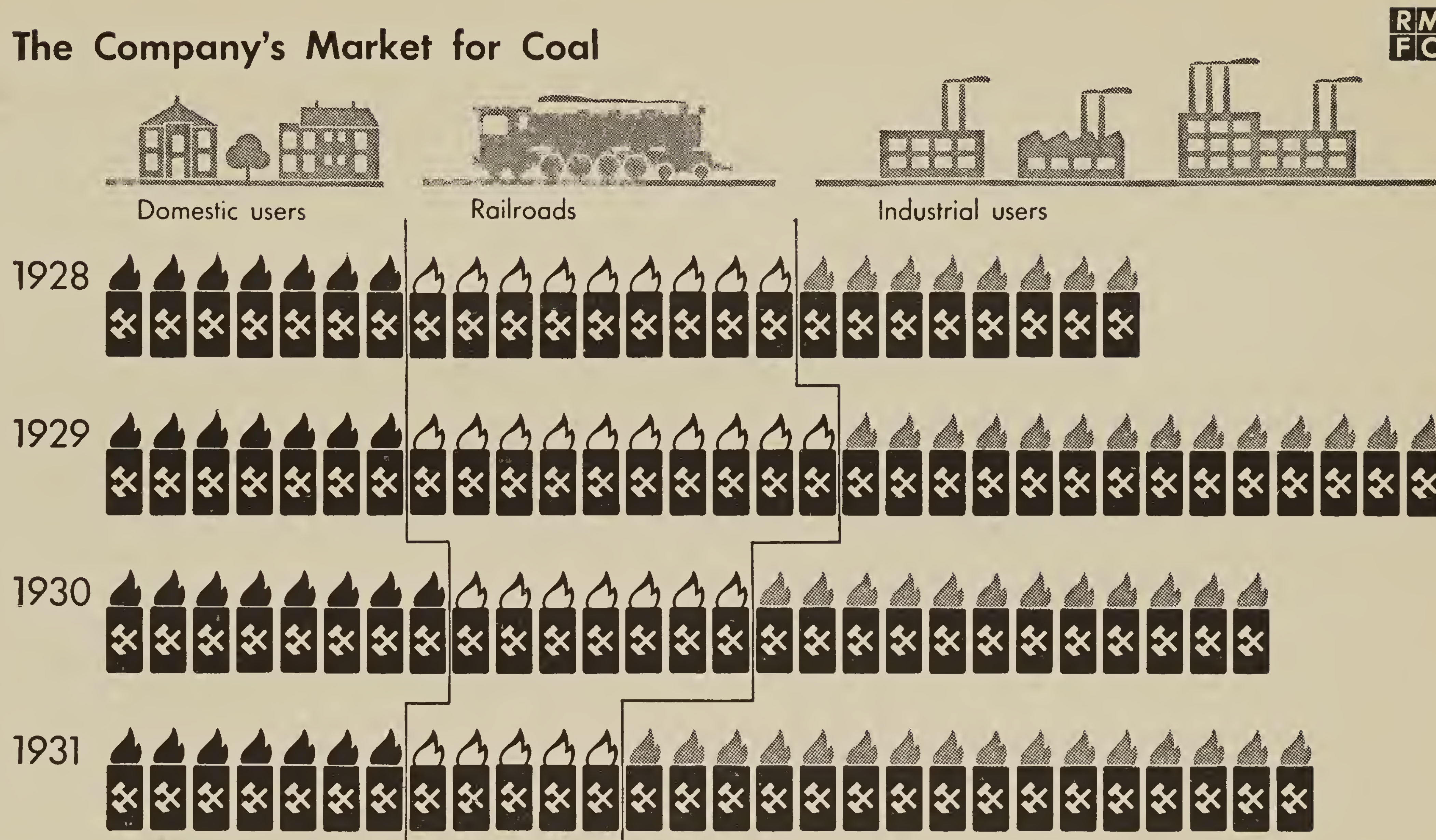
The Company's Market

As has been seen, the Rocky Mountain Fuel Company is the largest producer in the so-called northern field of Colorado, lying north of Denver, mainly in Boulder and Weld Counties. A more or less self-contained domestic market is to be found in that area, particularly when Denver is included. But, as Table 11[1] and the pictorial chart show, the domestic market (home consumption) is small compared with sales to industries and to the railroads.

Table 11, compiled in the spring of 1932, is an estimate, as it would have been too time-consuming to make a complete analysis of orders, nor did it seem necessary to include figures for 1932. In general it classifies the purchasers with sufficient accuracy to show what is involved in the problem of sales.

[1] See p. 362.

The Company's Market for Coal



Each symbol represents 25,000 net tons of bituminous coal sold

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It will be observed that the largest purchasers are the industries, including public utilities, and that together with the railroads they have made up nearly three-fourths of the market for this company in the period since 1928. There have been shifts, however, in relative importance during that period. For instance, sales to domestic users in 1931 were larger than purchases by railroads. Both the industrial and the domestic sectors gained markedly in 1931 as compared with the railroads. This may have reflected some of the difficulties of the railroads in the decrease in their business in that year, though it may also have indicated a shift in purchasing. The significant point in the table is that domestic users, who are most open to the appeal of the miners and other members of trade unions to support the company's policy by purchasing coal, constitute now somewhat less than one-fourth of the market. Potentially its extension depends upon the purchasing power of the consumer, and is therefore exposed to the difficulties of a period of depression which has resulted in unemployment and decreased purchasing power. This is particularly true in an agricultural area such as northern Colorado.

Sales to industries and the railroads, while affected by the purchasing power of these companies and therefore influenced by the depression, are also open to the problems of discrimination in rates which have characterized dealings of industries with each other in this country.

The Company's Sales Policy

In describing the collective agreement, it has already been noted that the declaration of principles signed by both the union and the company included a policy with reference to prices, in the paragraph which assured to consumers "a dependable supply of coal at reasonable and uniform prices."[1] In the annual report of 1928 this policy was further elaborated. It was pointed out that "labor and market conditions are too closely related to be separately treated." The coal industry in the United States has been "financially demoralized by overproduction, labor conflicts, and a chaotic market condition." Analysis had convinced the new management that "profitable operations could not be expected until labor conditions were settled and market conditions were remedied in part at least." As a result, the twofold policy affecting labor and the markets had been adopted.

How the wage-scale agreement was set up has already been described. The steps taken with reference to the business policy were outlined in this report. First, sales to local coal-brokers and agents were discontinued because of their tendency to cut prices; and refusal to deal with them protected "retail dealers and consumers, upon whom we depend in marketing the larger part of our lump coal production and part of our steam coal." Sales to truck drivers at the mines were at first discontinued but later restored with a differential in price above car-lot loadings.

The so-called "steam coal" will appear as a recurrent problem, especially in describing the reductions in wages put into effect in competing mines. Coal used for making steam and in general for public utilities is so-called "slack coal," which in the early days was largely a by-product as only the larger pieces of coal were salable. With the development of public utilities, electric plants and the like, slack coal came into its own. The state mine inspector in Colorado reported for 1931 that it constituted 46.9 per cent of the state's production. No longer could it be treated as a by-product to be sold at a loss. Yet, on the

[1] See Appendix III-A, Declaration of Principles and Agreement, p. 249.

part of the majority of operators, the practice of selling below cost of production and making special bargains with special purchasers continued, with obvious effects in disorganizing production.

In this situation it was a brave act on the part of the Rocky Mountain Fuel Company to undertake to carry out the promise just quoted, to make prices "reasonable and uniform." The application of the policy required in 1928 immediately the refusal to renew certain large contracts, "for the reason that terms and conditions were neither satisfactory nor reasonable and prices were too low." The immediate result was "sharply to reduce production, which in turn increased per ton cost of our remaining production, a condition which affected the entire season's operations, because the same regular general administration and mine overhead expense would have produced a larger tonnage." Nevertheless about one-half of the loss was overcome by increasing local sales to the extent of approximately 100,000 tons, and later some of the large contracts for steam coal were recovered "upon terms which mark a decided and constructive change in market conditions." The more favorable outlook at the beginning of 1929 was attributed in part also to "the assurance of uninterrupted production afforded by this company's labor policy." Moreover, the annual report points out that "there are evidences that some large industrial users recognize the necessity of stabilizing conditions and that there will be some co-operation from that quarter."

In a letter dated April 9, 1928, to its competitors who were cutting prices, the Rocky Mountain Fuel Company declared that there was no legitimate reason for the cut. Surely it would not benefit the consumer, who in the long run pays for the inefficiency of this wasteful system whereby strikes interrupt production, "for the operators must and do make their men pay for the large part of the loss resulting from lowered profits," and "the sooner the dealers and the public know these facts, the better both will be prepared to meet them effectively." The letter concluded with the following paragraph:

> This letter is to inform you that it is our intention to fight these practices which result in injustices to the consuming public, to the labor and capital producing the coal, and to distributors. We are convinced from careful study of the situation that the public is thoroughly dissatisfied with the prevailing methods and will respond to an intelligent and fair sales policy insuring it a regular supply of fuel at reasonable prices and the laborer and investor and distributor a fair income.

The appeal, however, did not meet with response. In 1929 the company reported that prices were "steadily declining." This, of course, reflected a world-wide condition of declining prices for wholesale commodities, but it was also involved with local practices.

Northern Colorado Coal Producers' Association

In this report of 1929 the company announced that it had joined with other operators, including all in the northern field, in a producers' association which had adopted a code of trade practices[1] "based upon standards set up by the Federal Trade Commission for the elimination of the trade abuses which have been one of the chief factors in demoralizing our markets." This action, while encouraging as a pledge for the future, was at the same time a tacit admission by all who signed the code that unfortunate practices had prevailed, such as false statements in advertising; the inducing of a breach of contract between a

[1] This code is printed in full as Appendix IV, p. 290.

competitor and his customer; cancellation of contracts; giving of a reward for discriminatory or unequal service; "selling of coal below cost for the purpose of injuring a competitor" and "the granting by any producer of prices and terms of sale not extended concurrently to all his customers under like conditions."

In the 1930 report the section on market practices governing the sale of slack coal was repeated from the report of 1929; and although the same improvement in the price level was reported, it was stated that "slack coal does not yet yield production cost." Again the company's policy and the reasons for it were summed up, as follows:

> A sound public market policy requires a proper relation between prices charged the public for domestic fuel and the prices charged industrial users of slack coal which is as indispensable to industry as domestic fuel is to householders. Prices to industries and to the consuming public should be reasonable both from a production cost and consumers' standpoint and should be non-discriminatory. In the establishment of this market policy we are making gradual progress.

By 1931, however, market conditions had become more unsettled. There ensued in the summer an era of severe price-cutting, and it was reported that by July 15 "prices were down to the lowest level in years." This affected also the domestic coal market, though by autumn the Rocky Mountain Fuel Company was able "partially to restore its domestic coal prices in northern Colorado markets," but a restoration of steam coal prices was impossible and in consequence "steam coal sold and is selling below production cost."

That year marked also the failure of the company's hopes for its competitors' adherence to a code of practices. On March 24, 1931, the Rocky Mountain Fuel Company addressed a letter to the Northern Colorado Coal Producers' Association, withdrawing from membership on the ground that "the Association obviously is unable to make its code of trade practices effective." The letter pointed out that the principle on which the Association was organized was "to encourage and effect a practical standardization of coal products, in the interest of both the coal industry and the public." Toward that end, sizes of coal were defined in the code of rules, and for a time, the letter continued,

> there was a manifest effort to make the Association's rules effective. The results were admittedly beneficial to every member and to the coal industry. With the development of a slow market in the fall of 1930, certain members returned to some of the former abuses and practices. This fact was discussed and agreements to observe the code rules were renewed. Nevertheless certain members have continued to disregard these obligations. At the same time, more than one of the Association's trade practice rules which are vital to the integrity and effectiveness of the Association are being daily violated by some members. These facts are known and discussed among members. The disregard or violation of code rules by any member can have but one object: to profit at the expense and injury of other members.

Colorado Fuel and Iron Company

The largest coal-producer in Colorado is the Colorado Fuel and Iron Company, but its properties are located mainly in the south and it was not included in the Northern Colorado Coal Producers' Association. It has offices in Denver, however, and is directly competitive with northern producers. In the price cuts of 1931 it played its part, as its advertisement in the Rocky Mountain News of May 1 showed. The headline was "C. F. and I. Coal Prices Slashed to Lowest Level in Twenty Years."

Price Wars and Wage Cuts

Reduced prices below cost of production naturally result sooner or later in cutting wages. The Industrial Commission of Colorado was kept busy in 1931 investigating wage reductions. The experience of that year will be described in Chapter VI, as will also other petitions for wage reductions which were before the Commission. Again in 1932 the northern coal producers, with the exception of the Rocky Mountain Fuel Company, announced their intention simultaneously to reduce wages, and in the subsequent hearings before the Industrial Commission in May, 1932, the history of the price cuts in 1931 was read into the record. This was in the form of a letter dated September 18, 1931, addressed to the northern Colorado coal operators, on behalf of the Rocky Mountain Fuel Company, by Merle D. Vincent as executive vice-president. The steps listed in the letter were as follows:

April 1, 1931, the Rocky Mountain Fuel Company mailed to the retail trade its usual wholesale spring storage price of $4.50 per ton for bituminous lump coal, effective May 1st.

In April bituminous operators held a meeting and fixed a price of $4.00 for Walsenburg, Crested Butte and Routt County lump and $3.00 for Trinidad lump.

May 1st the Colorado Fuel and Iron Company advertised in Denver papers a delivered retail price of $7.65 for Walsenburg lump in Denver, and stated their coal prices were "slashed to lowest level in 20 years."

May 13th a group of Northern Colorado operators, not including the Rocky Mountain Fuel Company, cut the price of lignite slack coal 20 cents per ton.

During the winter and spring some operators had been making discounts below quoted market prices of lignite lump and nut coal to retail dealers and to trucks. July 15th the Rocky Mountain Fuel Company, forced by competitive conditions, sent to the retail trade a price list openly meeting these discounted prices.

July 17th Northern Colorado operators, not including the Rocky Mountain Fuel Company, reduced prices 75 cents per ton on lignite lump and nut in the Lafayette and Frederick districts, and 50 cents per ton in the Louisville district, and removed the 50 cents per ton differential to trucks.

July 18th the Rocky Mountain Fuel Company, acting again under the compulsion of competitive conditions, met these prices in an open price list to the trade.

July 29th Northern operators, not including the Rocky Mountain Fuel Company, reduced the price of slack coal another 20 cents per ton on car lots.

The Rocky Mountain Fuel Company met these prices.

These excessively low prices are still in effect and are the lowest in years.

A continuation of these prices can bring only destructive results to the coal industry.

The letter then denied a report which had been in circulation, that the Rocky Mountain Fuel Company had taken the lead in some of these cuts, and went on to say that the company was ready to take the first step in re-establishing normal prices. It announced a wholesale price list to take effect September 22, 1931, and declared that it was to be one price on all sizes of lump coal in each district, thus endeavoring to "remove the incentive of certain dealers to indulge in unfair practices." Finally, the letter declared: "We reserve of course the right to change our prices, but in accordance with our uniform practice changes will only be made by open price quotations mailed in advance to the trade and to other operators."

How the workers of the Rocky Mountain Fuel Company responded to the price cuts of 1931, seeing in them danger to the maintenance of their wage scale, will be described later in this chapter.[1] At this point the emphasis is upon the price policies of the operators, though it is impossible, as the Rocky Mountain Fuel Company has repeatedly stated, to disconnect labor policy from marketing policy, since price cuts are usually followed or preceded by wage reductions.

That the record quoted was an agreed statement of fact, was indicated by the reply on the letterhead of the Northern Colorado Coal Producers' Association, which answered on behalf of the 13 principal operators in the northern field to whom the letter had been individually addressed. Nine of these were members of the Association. The letter said:

> We agree with you that the futility of coal price wars is again being demonstrated. We also agree with your general summation of the price cuts and their dates, with the exception that you have failed to note that the first open price cut of this past season was made by your company on its Industrial coal[2] March 1 or 2, 1931, amounting to 50 cents per ton.

In reading this letter to the Industrial Commission, Mr. Vincent by implication admitted this cut, but pointed out that it referred to lump coal, not slack. Moreover, it was an "open" price cut, not a secret discrimination. The point of interest as revealing the problems of the coal industry, however, is not in fixing responsibility upon one company or another, but in showing what happens in the process of selling coal. The remainder of the letter referred to the loan of half their wages by the miners of the Rocky Moun-

[1] See p. 114.
[2] Referring to coal from Industrial Mine.

tain Fuel Company, which will be taken up presently, and declared that it was "in effect a wage cut," giving an unwarranted advantage to the company and hence having a bearing upon whether the northern Colorado coal operators would also adopt the prices announced for the autumn in Mr. Vincent's letter to them.

Industrial Practices

Further details of the contracts of the Rocky Mountain Fuel Company for large sales to industries were read into the record of the Industrial Commission by Mr. Vincent in connection with these hearings.[1] He stated that when he came to the Rocky Mountain Fuel Company the second largest user of steam coal was obtaining it "for 75 and 86 cents per ton." The company succeeded in canceling the old contract and advancing the price to $1.25 per ton. This was an advance of 50 cents per ton for an amount which the company was obligated to deliver up to 100,000 tons. Simultaneously another operator in the northern Colorado field made a contract with the same purchaser, cutting the price 5 cents a ton.

Experience in connection with the contract for the Great Western Sugar Company was similar. Mr. Vincent described this as "the largest piece of steam coal business in northern Colorado." He said that in 1931 the contract for 132,000 tons of coal for that company, signed by the Rocky Mountain Fuel Company, represented the market price; hitherto an advantage had been given to the Great Western Sugar Company. In the same week, Mr. Vincent testified, "a contract was made, needlessly, I believe, by

[1] Industrial Commission of Colorado, Hearings at Lafayette (unpublished). Copy of testimony of Merle D. Vincent, executive vice-president of the Rocky Mountain Fuel Company, April 29, 1932.

the other operators in the northern field for 260,000 tons, or about that, at less than the market price."

By way of further illustration, Mr. Vincent stated that the contract for the coal requirements of the University of Colorado during the past season had been obtained by one of the operators who at the hearings of the Industrial Commission in 1932 had petitioned for a decrease in wages. He was selling coal to the University at $1.90 per ton, which was below the market, according to Mr. Vincent, who declared that

> if that market practice in selling that grade of coal should become general among operators it would lead to a state of slavery for every miner working in this field; it would demoralize the coal market of the operators, and I venture to say that before the end of the second season this would bankrupt every coal operator in Northern Colorado.

Discussing further the problem of slack coal and the paradox involved in regarding it as a by-product when it constitutes about half the total production in the northern field, Mr. Vincent pointed out that lump coal actually has to be crushed to meet the demand of large consumers of steam coal, and therefore a policy which results in selling slack coal below cost of production is obviously demoralizing to the whole industry.

Labor's Promotion of Sales

Reference has already been made to the Coal Sales Committee under the auspices of the State Federation of Labor and other organizations of workers in Colorado. Every mine of the Rocky Mountain Fuel Company has its coal sales committee. On days when the mine is idle, the men go out to canvass for buyers. Their arguments are indicated by one of the handbills which they use for advertising purposes. It is headed "Notice!! To the householders of Northern Colorado." It announces that "certain people want another strike in Colorado" and "you know what that means to you. If they can get one, coal will be $10 a ton again as in 1927. How can you help it?" The answer is: "Get coal mined by union miners—members of the U. M. W. of A., from the Rocky Mountain Fuel Company mines. We have a contract[1] for two years."

By way of further use of the argument that unionization avoids strikes: "If you get coal from any of these mines you will help us keep our union and keep gunmen and bloodshed out of the Northern Field. We don't want another strike like that of 1927 and you don't want to pay the cost of another one either for in the end it is the taxpayer who pays the cost. So let's co-operate."

As an appeal to the public's interest, the notice declared: "We are fighting the public's battle—the miner's battle—the farmer's battle. Good wages make good markets." This plea for good wages and good markets is used by the local coal sales committees in approaching business men in small shops in their communities. Even if the coal sales committees of the trade unions of Colorado did not succeed in increasing sales for the Rocky Mountain Fuel Company, they would be serving to educate the public in "the doctrine of high wages," which was so favorably discussed by publicists and business executives in the United States during the ten years before the present depression.

It is, of course, impossible to measure the actual effect of this campaign upon sales. As has been suggested, it has more weight with domestic users than with industrial buyers. The large industries and the railroads are less in-

[1] Referring to the union contract with the company.

fluenced by this kind of appeal, if not quite opposed to it, since in their capacity as employers they are not inclined to endorse labor's efforts to gain a new status and to raise wages. But it is clear that the effort gives the miners a new insight into the problems of management and the relation of the efficient mining of coal to the sale of it. It also serves as a rallying point for co-operation of all the labor groups in Colorado, including railroad men and farmers. Meetings of this inclusive Coal Sales Committee have brought these groups together in a cordial co-operation which might easily extend to a wider program than the selling of the product of the Rocky Mountain Fuel Company. In fact, it is because that company stands alone in a long history of opposition to trade unions in Colorado that it has come to symbolize there a significant success for the workers in a series of defeats.

One of the miners of the Rocky Mountain Fuel Company prepared a report of the meeting of the miners' coal committee held at Lafayette on August 4, 1931. All the local coal committees of the company's mines were represented, but not the management. The director of Organized Labor's Central Coal Committee, J. O. Stevic, outlined his suggestions. "It used to be said," said the miner who prepared the report, "we have no business selling coal; all that we get paid for is digging it." But the relation of selling coal to maintenance of the wage scale was squarely brought out from the point of view of the miners:

> It is now more apparent than ever that an intensive effort is being made by the non-union interests of the state to put both the Rocky Mountain Fuel Company and ourselves out of business so they may revert back to the old non-union conditions of low wages, short weights and "damn you now" business methods of a few years ago.

Moreover, the miners believed that a "slush fund was being raised," in which "the first item was a donation of $100,000 from one of the coal operators who openly brags of his intentions of squashing all of us." This, in the miners' belief, had been supplemented by other donations and was

> now being used to lower the price of coal at the mine and then, having put the Rocky out of business, reduce our wages to possibly $3.00 per day, knowing that when the R. M. F. and U. M. W. of A. contract is busted they can easily get this money back out of the miners' hides. However, we are not going to be beat without a fight. The miners, particularly the union miners, have always been classed as down fighters and backed by a fair coal company and organized labor will surely give the selfish wage cutters a run for their money.

The way out, the Committee believed, was to secure a larger proportion of the coal business.

The Miners Lend Their Wages to the Company

This meeting of the coal sales committees of the Rocky Mountain Fuel Company was held at the moment in the summer of 1931 when price-cutting was imperiling the position of the company. The immediate danger ahead was that if it continued through the summer the company might not be able to pay the interest due October 1 on its bonded indebtedness. Reference has been made, in an earlier chapter,[1] to the heavy burden of debt which this company carries. The interest has to be paid out of the increased efforts of the miners to produce more at lower cost. The miners realize that they must also sell more at fair prices. When in 1931 they were faced with price cuts which might wipe out the results of all their efforts to

[1] See pp. 49-50.

increase productivity, they began to discuss how they could meet the challenge. Their militant spirit at this point is shown in the miner's report just quoted.

Out of the discussion emerged a plan which is probably without precedent in the history of the mining industry in this or in any country. They decided to offer to lend half the wages of five payroll periods, or two months and a half, to the company, without interest and with no fixed date for repayment.

Their procedure was, first, to discuss it in the coal committee, then to carry it to a local union meeting, and then to submit the plan to individual miners, securing their signatures and explaining that they were free to refuse. Some declined, either because they were not interested or because for personal reasons they were unable to forego so much of their income.

The management of the company accepted this help, offering interest which was refused, at the same time entering into an agreement whereby any miner requesting payment of the wages which he had lent would receive it at once on recommendation of the Coal Sales Committee of his mine, this committee being composed entirely of fellow-miners and responsible to the local union.[1]

It was to this loan of wages that the secretary of the Northern Colorado Coal Producers' Association referred in his reply to Mr. Vincent's letter, quoted from the hearings of the Industrial Commission. The writer implied that this loan was an indefinite postponement of wages which constituted a wage cut and hence created unfair competition for the other operators. He neglected to note that the unfair competition would have been a resulting cut in prices, whereas the point under discussion was whether the northern operators would adopt the open and fair price

[1] By 1933 the company had paid back 75 per cent of this loan.

scale just being announced by the Rocky Mountain Fuel Company. Be that as it may, the loan of wages was, in the first place, managed by the workers and, indeed, could not have occurred as a truly voluntary act on their part without their organization which permitted joint action. It differed from a wage cut in that it was for a temporary period and that the amount was returnable at a later date. Indeed, the very reason why the men entered into it, as many of them told the investigator in this study, was that it held their wage scale at the higher level. Otherwise wages would have had to be reduced to the level set by competitive prices of other companies. Had it constituted a reduction in wages, the men would not have thus put their energies into the campaign to make the plan succeed. One miner, stirred by the challenge of the non-union operators, declared: "We were ready to put coal into Denver for nothing, rather than to let them injure the company and thus destroy our union."

The work of the Central Coal Committee, however, is not all militant. While making an appeal for a fair policy, its work is based on businesslike methods of approach to the public. We have seen the credit given by the company to this kind of intensive sales campaign. The selling cost of the company has been excessively low, perhaps too low for effective results. But it is probably due to the fact that the sales department has so many volunteer helpers. In a remote railroad station in Gunnison County, at the time of a visit to Alpine Mine, the investigator talked with the local station agent, who described the great importance of the Rocky Mountain Fuel Company's policy from the point of view of railroad men, and declared that he, for one, was pushing this coal for sale and believed that all railroad men should do likewise. Here, in its task of distribution, the Rocky Mountain Fuel Company has again tapped a new source of co-operation, directly to be attributed to its collective agreement and to the principles upon which it is based. It has, moreover, opened the way to workers' participation in management in relation to the market and not merely in relation to wages, hours and working conditions. *The workers are demonstrating that they see the significance of the coal industry's competitive struggle to sell its output, in the resulting insecurity of livelihood for the miners.*

CHAPTER VI

COMPETITION AND WAGES

BESIDES the collective agreement which sets the basic wage, the miners' earnings in the Rocky Mountain Fuel Company are necessarily influenced by the wage policy of competitors, and in turn all the operators are working under the law establishing the Industrial Commission of Colorado. The actual earnings of the men will be analyzed in Chapter VIII, Measurable Results. The process of establishing them in the agreement and its administration have been described. There remains the important question, which is the subject of this chapter, of the competitive influence on the wage scale; and here the Industrial Commission gives an official record. The wage reductions of 1931 and 1932 which were brought before the Commission are not only important for the miners immediately affected, but reveal in turn practices and policies in the human relations of this industry.

The Industrial Commission

Reference has already been made to the establishment of the Industrial Commission as a step taken under the influence of John D. Rockefeller, Jr., following the strike of 1913-1914.[1] The enactment of the law, modeled on the Canadian Industrial Disputes Act, was vigorously opposed

[1] See p. 63.

by the trade unions of Colorado, on the ground that it interfered with the right to strike and that it would therefore be a greater advantage to employers than to labor.[1] The arguments in favor of the law centered about the importance of giving publicity to the causes of a strike or lockout before it should occur and thus rallying public opinion to prevent it by a just settlement.

The essence of the act is the requirement that "employers and employes shall give to the Industrial Commission, and the one to the other, at least thirty days' prior written notice of an intended change affecting conditions of employment or with respect to wages or hours."[2] Closely related is the provision that "it shall be unlawful for any employer to declare or cause a lockout or for any employe to go on strike on account of any dispute prior to or during an investigation of such dispute by the Commission or the board under the provisions of this act."[3] In practice, the combination of these two provisions means that notice of any change in the wage scale shall be given to the Commission and published at the works thirty days in advance and that if the change is disputed the Commission is to take cognizance and no strike or lockout is to occur until the Commission has made an investigation. If, however, there is no dispute, that is, if the intended change has been accepted by both sides—if the employer has agreed to pay higher wages or the employes have accepted a wage cut—the matter is considered settled without the intervention of the Commission.

If the Commission takes jurisdiction and renders an award, it has no legal power to enforce it. Its effect is

[1] See references to the Industrial Commission in Employes Representation in Coal Mines, cited on p. 15. See also Postponing Strikes: A Study of the Industrial Disputes Investigation Act of Canada, by Ben M. Selekman, Russell Sage Foundation, New York, 1927.

[2] Colorado, Laws of 1921, chap. 252, sec. 10, p. 838.

[3] *Ibid.*, sec. 11, p. 840.

merely the power of public opinion, and the intended change may be put into effect even though it be condemned by the Commission. Freedom is then given to declare a strike or lockout.

The Commission is given wide powers of investigation and may extend its scope beyond the particular operations presenting a case. For instance, when a number of operators petitioned for a reduction in wages in May, 1931, the Commission announced that " as a reduction in wages or change in working conditions in the southern field will affect the entire coal-mining industry in Colorado, the Commission has decided to hold a hearing in Denver." This statement occurred in the letters inviting the coal operators of Colorado to be represented at these hearings.

Reductions in 1931

The hearings just mentioned resulted from the notification to the Commission, under the law, by 12 producers of bituminous coal in Las Animas and Huerfano Counties that they intended to reduce wages. Shortly thereafter, seven of these companies filed petitions signed by their employes, purporting to waive the thirty days' notice required by law before wages could be reduced and "requesting the companies to resume operations at the reduced scale of wages."[1]

As already pointed out, this alleged agreement on the part of the employes, if accepted as bona fide by the Commission, would have relieved the Commission of the necessity of taking cognizance under the law, but the Commission announced that under its general powers it had

[1] Industrial Commission of Colorado, Investigation of the Coal Industry in Colorado. Report on the hearings at Walsenburg and Trinidad, September 3, 1931. Unpublished copy of Commission's records.

decided to make an investigation, because "if wages were reduced in the bituminous coal fields of southern Colorado, it would probably lead to a reduction in wages in the entire coal-mining industry of this state."

At these hearings the charges were made that eight operators in the northern field had reduced wages and rates of pay without any notice to the Commission and, hence, in violation of the law. Moreover, from Crested Butte, a mine of the Colorado Fuel and Iron Company, had come a letter from an employe, Tony Rozman, dated May 1, addressed to the Commission, as follows:

> The C. F. and I.[1] mine closed down about the first of April and they were paying the men 90 cents per ton for mining coal in pillars. Now they have opened up again, giving contracts to a few men and want the men to load coal for 73 cents per ton. Should the Company or the contractor according to the state mining laws give the miners thirty days notice? The men are working and there has no notice been posted who the contractors are or anything about the 73 cents per ton. It seems to be a secret between theirselves. Please let me know personally about this and I will take it up with you later.[2]

Under date of June 5, another letter was filed with the Commission, as follows:

> We, the machine men of the C. F. and I. mine at Crested Butte, Colorado, have a grievance to make in regards to our wage scales. Since the machines were installed in July, 1930, we have been paid by the following scale:
>
> [Here follow detailed rates for cutting, loading, entry per yard, entry cross cut and room cross cut, and for these items comparative figures are given to show higher rates in the C. F. and I. mines in the southern field.]

[1] Colorado Fuel and Iron Company.

[2] Industrial Commission of Colorado, Hearings at Crested Butte, June 26, 1931. Unpublished copy from Commission's proceedings.

The letter concludes, from comparison of rates, that the rates set at Crested Butte were unfair, and declares finally: "We would appreciate it if you would look up this matter and adjust it. Also advise us if we could collect back pay." It was signed by 10 men.

The Commission held hearings at Crested Butte on June 26, at which the men were represented by O. F. Nigro, president of District No. 15 of the United Mine Workers of America, and John E. Gross, secretary-treasurer of the State Federation of Labor. The company had its representatives, and a number of employes appeared to testify. In the course of the testimony it was brought out, in answer to the question as to how this letter happened to be prepared, that it originated when the president of the Colorado Fuel and Iron Company had made public a statement in a letter to the Industrial Commission to the effect that the company would make no reduction in wages. The machine men at Crested Butte believed that there had already been a reduction, and petitioned for a hearing on that ground.

The letter referred to was dated June 1, 1931, and read as follows:

THE INDUSTRIAL COMMISSION
STATE OF COLORADO
DENVER, COLORADO

GENTLEMEN:

I desire to confirm to you my recent statements in regard to a reduction of wages of our employes in coal mining within the state.

The Colorado Fuel and Iron Company is unqualifiedly opposed to any reduction of wages of mine workers at this time. It is our conviction that a reduction of wages and its consequent lowering of costs of coal would not materially improve the output of Colorado coal mines. Consequently there would be no benefit to the operators, to the mine workers, to the state, or to the communities largely dependent on mining operations.

The Colorado Fuel and Iron Company does not want to reduce wages, nor does it want to be forced to reduce wages.

ARTHUR ROEDER, *President*

The Colorado Fuel and Iron Company was not one of those originally announcing a decrease in pay, and the hearings at Crested Butte were not commented upon in the Commission's award. Whether the case for reduction of pay which was said to have taken place prior to Mr. Roeder's public letter, was approved is therefore not a matter of official record. Careful analysis of the lengthy proceedings, however, showed that actual pay statements of employes were put into evidence by Mr. Gross and that they indicated a rate of 73 cents instead of 90 cents, thus confirming the complainants' statements to the Industrial Commission. Many other topics were discussed at these hearings, including the lack of a checkweighman at Crested Butte and the reasons for it, the company's marketing difficulties, and the fact that in the setting of wages the employes' representatives under the Industrial Representation Plan—the company union—took no part.

This study was not planned to cover the operations of the Colorado Fuel and Iron Company. It is concerned with them only as they bear upon the operations of the next largest coal company in Colorado, the Rocky Mountain Fuel Company. But as the Department of Industrial Studies of the Russell Sage Foundation had previously made a thorough-going report on employes' representation in the Colorado Fuel and Iron Company, it is fitting to make reference at this point to those findings[1] and to say of them that in general these hearings at Crested Butte

[1] See publications cited on p. 15.

confirm them as true of the present. There is the same habit on the part of the company of putting forward the Industrial Representation Plan as a form of collective bargaining, while the miners testify either that they do not know of the existence of employes' representatives or that it does not occur to them to take up grievances as provided in the Plan. Nor is its machinery used by the company as a means of negotiating wages. This fact is important in its effect upon the Rocky Mountain Fuel Company. The Colorado Fuel and Iron Company is free to reduce wages without reference to any collective agreement with its employes,[1] and can, therefore, by cutting prices undermine the wage standards which the Rocky Mountain Fuel Company seeks to establish; this happened in 1931 and 1932. Incidentally, the testimony showed that when complaints about reduced wages were made public, the original scale was restored. But meanwhile there had evidently been a violation of the law requiring thirty days' notice of change, to say nothing of the strange position of the president of the Colorado Fuel and Iron Company, who publicly promised not to reduce wages after a reduction had been privately made.

Reporting on the request of the other companies to lower wages, the Industrial Commission declared such reduction to be against the public interest. It cited the fact that "the average coal-miner only worked 164 days last year, and only a trifle over 183 days per annum as an average for the last ten years."[2] Moreover, "coal-mining is

[1] The adoption of the code for the coal industry under the National Recovery Administration in September, 1933, set minimum basic wages and required observance of certain "fair practices." This code was expected to have an effect upon the competitive price-cutting in the industry. As to its effect upon the Industrial Representation Plan of the Colorado Fuel and Iron Company, see note at end of Appendix VIII, p. 324.

[2] Industrial Commission of Colorado, Report on Hearings at Walsenburg and Trinidad, September 3, 1931. Unpublished copy of Commission's proceedings.

one of the most hazardous and dangerous employments in the state of Colorado." And finally the Commission mentioned the conference called by President Hoover on November 21, 1929, which resulted in a statement made by the President and authorized by employers

> on their individual behalf, that they will not initiate any movement for wage reduction, and it was their strong recommendation that this attitude should be pursued by the country as a whole. They considered that, aside from the human considerations involved, the consuming power of the country will thereby be maintained.

A similar statement on behalf of representatives of labor, issued also by President Hoover, gave "their strong recommendation to the country as a whole that no movement beyond those already in negotiation should be initiated for increase of wages and that every co-operation should be given by labor to industry in the handling of its problems."

The Commission declared that, in line with this national policy, it had refused a number of applications for increase in wages and that it now believed that it would be a serious mistake if the operators in the bituminous coal fields of southern Colorado were to reduce pay, leading probably to similar reduction in other parts of the state. A factor involved in this conclusion was that the Interstate Commerce Commission had recently rendered a favorable decision in freight rates, which should be of assistance to the coal companies.

The rest of the award was taken up with discussion of a moot point, namely, whether the employes had actually agreed to this reduction of wages. The Commission called attention to the fact that "with one exception in this state the coal-miners have no method of collective bargaining."

The one exception was, of course, the Rocky Mountain Fuel Company. The Commission then went on to argue in favor of collective bargaining, and implied that the petitions signed by employes of these companies asking for reduction of wages did not constitute an agreement.

The chairman of the Industrial Commission wrote the Attorney General of the state on this point, asking whether petitions circulated by superintendents or other officials of a company were to be regarded as "signed by coercion and intimidation" and whether, therefore, it was illegal to waive the thirty days' notice. The Attorney General held that "the right of the Commission to assume jurisdiction and to hold a hearing upon such subject depends upon whether or not there is in fact a dispute between the interested parties relative to the proposed change." Therefore in the absence of proof that an agreement had been made through methods which were coercive, it was to be assumed that there was an agreement—a questionable interpretation of the law.

Reference was made by the Commission and by the Attorney General to precedents established in 1922. These precedents were supposed to have been set in cases of wage reductions followed by strikes which were fully analyzed in our study of the Colorado Fuel and Iron Company.[1] The alleged agreement of the employes was secured by petitions carried by superintendents or other representatives of the company through the mines, and by the statement to the miners that the mines would be closed unless wages were reduced. This was held in 1922 by the Industrial Commission to constitute an agreement, and it may be regarded as a change that the Commission questioned a similar procedure in 1931 and submitted the question to the Attorney General; but the Attorney Gen-

[1] See Employes' Representation in Coal Mines, cited on p. 15.

eral's reply does not give trade unions a clear status as instruments of collective bargaining, and in fact seems not to insist upon organization of any kind for employes to enable them to be parties to an agreement; in the absence of evidence to the contrary, an agreement is assumed!

A vigorous dissenting opinion to the Commission's award was entered by one of the three commissioners, W. H. Young, on September 10, 1931. Mr. Young represents labor on the Commission. He cited the Commission's report for the biennial period ended November 30, 1930, stating its opinion that circulating petitions by superintendents or other officials should not be regarded as the proper method of coming to an agreement and certainly should not make possible waiving the thirty days' notice to the Commission, and that indeed such petitions should not be circulated by company officials for any purpose.[1]

Meanwhile on July 31, more than a month before the Commission's opinion was made public, the Colorado Fuel and Iron Company announced that it would reduce the basic daily wage from $6.52 to $5.25, despite the policy announced in President Roeder's letter of June 1 to the Commission. Thereupon the president of the Rocky Mountain Fuel Company, Miss Roche, decided to address to John D. Rockefeller, Jr., a telegram urging him to use his influence against wage reductions in the state. Her telegram, dated Washington, D. C., August 1, 1931, was as follows:

> One word from you can prevent a recurrence of the human and economic waste which will result from the action taken by your company, the Colorado Fuel and Iron Company, in cutting miners' wages twenty per cent. For forty years industrial

[1] Industrial Commission of Colorado, Dissenting Opinion on the Report of the Commission in the Cases of the Alamo Coal Company, etc., September 10, 1931, signed by W. H. Young, Commissioner. Unpublished copy from Commission's records.

conflict has periodically broken out in Colorado as a result of similar attempts to secure operating profits at the sole expense of workers. Following the Colorado loss of life and property in nineteen fourteen which culminated in the Ludlow massacre you widely advertised a new industrial program by public assurances which now take on fresh importance, to the effect that conditions leading to industrial upheaval in Colorado would never recur. But the causes of industrial unrest were not removed, and the traditional and anti-social methods of the past are being again employed by your company. The disorganization and chaos of the coal industry cannot be corrected by forcing labor to take lower and lower wages, and by sidestepping the responsibility for correcting operating and marketing abuses which prevail in the industry. This responsibility rests finally and absolutely upon those who own or control holdings in industrial concerns, not upon executive officers. As you know, the Rocky Mountain Fuel Company ranks second in production among the Colorado coal producers, your own company being first. I am sending you this wire personally because the Rocky Mountain Fuel Company, in which I have majority control, has demonstrated in the past three years that fair wages and recognition of labor's rights are a sound business policy as well as a humanly just one. Our company, operating under a union contract and paying the highest miners' wages in the state, has had its operating costs substantially reduced, its production per man greatly increased, and with state coal production decreasing about twenty-five per cent this year below the same period last year our company's tonnage has not suffered a decline. For weeks our company has been protesting in hearings before the State Industrial Commission against the ruinous policy of wage cuts and price wars in the coal industry. We early pointed out in these hearings the disastrous consequences which would follow the lead taken by your company May one of this year in cutting prices of bituminous coal in Denver to what your company stated was "the lowest price in twenty years." It is common knowledge that your company, the Colorado Fuel and Iron Company, dominates the non-union coal situation in Colorado. One word from you can prevent needless suffering and injustice. General public welfare as well as the welfare of miners and their families demands that you speak this word.

An acknowledgment but no reply was received to this telegram. The wage reduction presumably took effect, though no official investigation was made to show what happened to wages after the Commission's award. The experience demonstrated, however, that neither the policy agreed to at a conference with the President of the United States nor the declared policy of the president of the largest coal company in Colorado nor the official award of the Industrial Commission could prevent reduction of wages in non-union mines of southern Colorado, including the largest company itself, though it is owned in part by such powerful interests as the Rockefellers.

Reductions in 1932

On April 1, 1932, there appeared in the Colorado papers the news that 13 companies in the northern field, comprising practically all the operators of any size there except the Rocky Mountain Fuel Company, had given notice to their employes and to the Industrial Commission of a proposed wage reduction of approximately 25 per cent. Immediately thereafter petitions against the reduction were circulated by employes of these companies, assisted by the members of District No. 15 of the United Mine Workers of America, to be filed with the Commission, thus bringing the case within the law as a dispute between the companies and their employes. Beginning April 28, 1932, and lasting for two days, the Commission held hearings in the Union Hall at Lafayette, a center accessible to the mines of the companies involved. Each of the companies had its representative, and the secretary of the Northern Colorado Coal Producers' Association attended all meetings. The employes, 634 of whom had signed the protest, were represented by O. F. Nigro, president of District No. 15, and John E. Gross, secretary-treasurer of the State Federation of Labor.

The proceedings were summed up in the Commission's award.[1] The testimony on both sides brought out clearly the relation of wages to prices and market practices and once again brought to public attention the disorganized state of this industry. At the same time, the Rocky Mountain Fuel Company and its policy appeared in the record, and the statement of its executive vice-president, Mr. Vincent, was quoted with approval in the Commission's award.

Employer after employer testified that it was impossible to resist the sale of slack coal at less than the cost of production. Therefore it was necessary to reduce wages in order to meet this competition. But what would happen after wages were reduced and competition once again reduced prices, was a question which none of the operators could answer. Competition of oil and gas was brought out as one of the difficulties of the coal industry. But again it was not clear how reduction of wages could fundamentally remedy this situation.

On the other hand, employes testified to earnings which were below an endurable standard of living. Numerous violations of law were described, overtime in the midst of irregular employment, and, running all through the proceedings, the difficulties of the workers in non-union

[1] See Appendix VII, Industrial Commission of Colorado, Award in the Matter of Proposed Reduction of Wages by Operators in the Northern Field, May 7, 1932, p. 310.

mines where indeed any effort of employes to form an organization is resisted.

As a remedy, the representative of the Rocky Mountain Fuel Company explained the purpose of that company's voluntary agreement, and these remarks were quoted in the Commission's award:

> What we are trying to do is not to maintain a battle with other operators, but to maintain peace under circumstances that will permit everybody connected with the industry to live; to create living conditions for operators, for investors, and for the men working in the mines. It is perfectly possible to do so if the operators in this district were put on the same voluntary contractual basis, upon the same negotiated wage scales arising out of a conference in which both sides were represented through their own chosen representatives and sit there with co-equal rights until a voluntary agreement was arrived at; you would stabilize costs.

If no one had a cost advantage over another and if the principle were adopted that no class or grade of coal should be sold below cost of production,

> this field alone, regardless of the economic conditions prevailing in other parts of the United States, in one season can be put on a stable economic basis which will yield an income to permit men to live under a proper standard of living and operators to make a reasonable margin of profit. In my judgment, the barrier that stands between the present demoralized condition and such a stabilized condition as I have described is simply an ancient hang-over prejudice or closed mind.

Commenting on this testimony, the Commission declared that it wished "to recommend the suggestions of Mr. Vincent to the favorable consideration of the other operators in the northern field." The Commission pointed out that, according to the evidence, employes had not been consulted regarding the proposed reductions in wages. This, it held, was absolutely unfair to the wage-earners.

The considerable reduction required of the employes would, according to the testimony, lower the cost of production only 30 to 35 cents a ton. No assurance was given that the price of coal would be reduced, following such wage reduction. Moreover, "the northern coal field seems to have a monopoly upon the coal business of Denver and northern Colorado," and the comparatively small proportion of 10 per cent shipped outside the state seemed to the Commission to depend largely upon freight rates and not upon wages.

The Commission gave this advice:

> It would seem to the Commission that it might be well if the coal operators would stop price-cutting and not sell any kind of coal at a price less than the cost of production; get into closer touch with their employes; talk over matters of common interest with them; give them the same rights they claim for themselves; remember that labor should be the first charge against industry; that men are entitled to a living wage. These are a few things that should not be forgotten by the employers of labor.

The Commission's final conclusion was "that there is no justification for the reduction in the wage scale as proposed by the above-named employers, and it is the decision of the Commission that the reduction be not approved."

Nevertheless in due course the reduction was put into effect. The United Mine Workers evidently considered it inadvisable to organize a strike. The cut in pay was accepted without further protest, and in accordance with the agreement between the United Mine Workers and the

Rocky Mountain Fuel Company its wage also was reduced, since practically all of its important competitors had adopted the lower scale. The Rocky Mountain Fuel Company did not go as low as its competitors, maintaining its differential of 23 cents but reducing the basic day wage from $7.00 to $5.25. This reduction was not made arbitrarily by the company, but in conference with representatives of the union, acting in accordance with the agreement. In the new wage scale adopted shortly afterward, effective for two years from September 1, 1932, the differential above competitors' wage scales was even increased to 25 cents.

Reduction by Colorado Fuel and Iron Company, 1932

Shortly after these hearings in connection with the northern field, the Colorado Fuel and Iron Company on May 11, 1932, wrote to the Industrial Commission, advising it that all employes of the company (including the coal mines and the steel works, but excluding the Colorado and Wyoming Railway, whose employes are members of the railroad brotherhoods) would receive a reduction of 15 per cent in wages and salaries, effective June 16. Notice had been posted in the general office and sent to the outlying districts. In due course 695 employes signed petitions, protesting against the reduction, and the Commission held a hearing in the courthouse at Trinidad on June 13. The miners were represented, as usual, by Mr. Nigro and Mr. Gross.

The Commission, in its award, emphatically disapproved the proposed reduction.[1] The company had con-

[1] Appendix VIII, Industrial Commission of Colorado, Findings and Award in the Matter of the Colorado Fuel and Iron Company *vs.* Its Employes, June 17, 1932, p. 320.

tended that it must meet competition of steel mills in the eastern part of the United States which ship their products to the Pacific Coast through the Panama Canal; that 50 per cent of its coal is used in its steel plants; that Denver offers no market for southern Colorado coal, because lignite coal is cheaper and has the advantage of lower freight rates; that it has lost its market in other states through the competition of non-union coal fields; that "it has more employes than jobs" and "that it is necessary to make the proposed reduction if it is to continue to operate its mines."

On the other hand the employes testified, many of them, that they earned $25 to $55 a month under the present scale, and their testimony was confirmed by the Commission's examination of wage statements. Many were married with children. They were in debt to the company's store. Incidentally, some who testified were representatives of the men under the Industrial Representation Plan, or company union.

In denying the award, the Commission said that there might be some reason for reducing wages in the steel mills, but that it could not

> see any reason or justice in the proposition to reduce the wages of the employes in the coal mines 15%, when the evidence shows those men are not receiving a living wage under the present wage scale. We cannot understand how they can live if the proposed reduction in the wage scale is put into effect. The Colorado Fuel and Iron Company is the first company to propose this fifteen per cent reduction in wages. . . . Since this notice was filed with the Commission by this company we have received several proposals for wage reductions from the large producers of bituminous coal. . . . Slowly the coal miner is being driven into industrial slavery.

Once again the Commission's award called attention to the basic disorganization of the coal industry: "If the coal companies would make an effort to stabilize coal prices and would discontinue the cutting of prices, it would seem to us that they could pay a living wage to their employes and in a measure lighten the human price of coal."

But the Commission's words were not matched with power to enforce such an award, and the reduction was made.

CHAPTER VII

ADJUSTMENT OF GRIEVANCES

IT IS not the existence of grievances but the method of handling them which is significant in industrial relations. Coal mining, by its very nature, gives rise to questions requiring settlement. These sometimes represent conflict between the worker and the management, and they arise even in mines which are operating under a written contract. No written agreement can foresee all the changing conditions in a miner's workplace. Its day-to-day administration requires a habit of joint conference between representatives of management and of workers for the settlement of claims or grievances on either side.

The procedure as set up in the written agreement has already been fully explained in Chapter III, The Collective Agreement.[1] In the provisions of the contract a basis is provided for action through the Pit Committee, the local union and the district organization of the miners, and the national president, on the one hand; and the various grades of management on the other—the mine foreman, the superintendent, and the president of the company.

A glance at the findings of the Industrial Commission regarding the causes of the strike of 1927, already quoted,[2] shows, if compared with the union contract, the extent to which these have been removed in the collective agreement in force in the Rocky Mountain Fuel Company. The "lack of an organization of their choice" has been rem-

[1] See p. 68.
[2] See p. 40.

edied by recognition of the United Mine Workers of America, and the signing of a contract with that organization. "The prevailing opinion among the miners that they were not receiving correct weights for the coal mined" is met by the appointment of a checkweighman in every mine, elected by the men in their local union. And, as the local union is in control, there is no risk of "the interference of some of the superintendents or mine officials in the election of checkweighmen." These difficulties are all removed at the source by the policy of the company in admitting the union to a share in all decisions affecting employment.

Causes of Dispute as Affected by the Contract

The charge of "intimidation by some of the superintendents and mine bosses," while it never can be fully removed so long as these officials representing the higher management have the power of discharge, is, nevertheless, prevented as far as possible by the right of every miner to a hearing, not merely as as individual, but with the full protection of his organization. Likewise, dissatisfaction with wage cuts is lessened by the safeguard of a written agreement on wage rates, and by the custom of renewing this agreement at regular intervals, thus eliminating unannounced wage cuts determined by the management without conference with employes.

Characteristic Grievances in Coal Mining

The other difficulties outlined by the Industrial Commission[1] as causes of the strike of 1927 are of a kind that might occur even under a union agreement. Under union-

[1] See p. 40.

management co-operation there may be some lack of understanding as to payment for dead work if new conditions arise in the mine; it may be necessary to wait for material, or to bail out water; there may be difficulties with ventilation; and, above all, there may be time lost waiting for tools when entering the mine, or waiting for the man-trip when coming out. The difference under the union contract is that all these subjects may be matters of joint conference, and that the management, which is seeking to live up to the full spirit of its agreement, will do everything in its power to remedy them.

Types of Cases Handled

The material was not available in written form to study exactly what individual cases of dispute have been handled under the agreement during the period since its inauguration, nor the decisions reached. In addition to the kind of grievance which arises out of special mining conditions, there were, for instance, instances of accidents requiring compensation in which the workman needed some help from the union in the handling of his case before the Industrial Commission. The company is insured in an insurance company organized on a mutual basis, and therefore it has no part in compensation hearings, the insurance company being the party concerned. There are instances where the insurance company would be less liberal than the Rocky Mountain Fuel Company, and the representatives of the union have been alert to defend the miner's rights in such cases.

Some grievances have affected a large group of miners, and have required for adjustment a definite supplementary agreement, and not merely the settlement of an individual dispute. Such an instance was the change in the rate of pay at Columbine Mine, already mentioned.[1] Indeed, although the particular point at issue was to revise the scale of payment for loaders, which was considerably below the rate in other mines of the company, due to differences in the job, the work of the Joint Committee extended over some 33 points listed in the agenda for discussion, and thus it became a kind of local joint scale conference. The notable point was that it was possible to reach this kind of supplementary agreement even during the life of a contract, and to modify the basic rate already agreed to, when the injustice of the local situation was brought out in the joint meeting.

Attitude of Superintendents and Foremen

Superintendents and foremen are not always ready to welcome the procedure of adjustment of grievances when this involves overruling their judgments, or revealing defects in management. This attitude and the way the higher management dealt with it was brought out in a situation in one of the mines in which a number of disputes were handled together in a conference between the local pit committee, the superintendent and foreman, and the vice-president and general manager. At that time, for example, machine men complained that they were held up in moving the cutting machine from one work place to another because the tracks were not free. One of the representatives of the men described the grievance and was quoted by the superintendent as having indulged in the following "colorful style": "Cars, mules, drivers, machines, machine men, motors and motormen: all in a jumble, suggesting a lack of system."

To this idea that the machine men's complaint showed

[1] See Chapter IV, Labor's Productivity, p. 85.

"a lack of system," the superintendent, who is, of course, responsible for system, made the following defense:

> The facts are as follows: There are three men involved in the jumble—the driver pulling on to the parting, the motorman pulling from the parting, and the machine man or machine men who have to pass through the parting *once* during the shift.
>
> The only person who has any idea when he wants a clear road through the parting is the machine man himself. It would be no trouble for him to arrange with the motorman to clear the track for him at a certain time, or arrange with the driver to pull a few cars out of the road for him to go through.

The superintendent, complaining of the way in which the representative of the men placed the blame for this condition, said, "There was no suggestion of lack of cooperation on the part of driver, motorman or machine man; it was due to the inefficiency of the management." Other grievances brought out at that time seemed to the superintendent and the foreman to be "not so serious that any two fair-minded men could not come to an agreement as to the proper solution in a short time." But it seemed to them that the men made "an effort to stress the inefficiency of the local management," and this greatly distressed the superintendent and foreman, and led them to ask the general manager whether, if they could not combat such a spirit, they had not outlived their usefulness at the mine.

To this the general manager replied with a clear statement of the importance of this kind of conference. It did not affect at all the higher management's estimate of the local handling of the mine, but,

> even so, problems will continue to arise. . . . Grievances need not be treated as reflections. They are facts to be dealt with.

When a man or group of men are willing, frankly, to complain or kick, and talk about a grievance, whether it is real or imaginary, the problem is half-settled. . . . When, however, for any reason, there is a reluctance to make a complaint or discuss a condition, the problem is much more difficult, and will remain difficult until it is faced, discussed and settled.

In this document the general manager reviewed the topics which had been considered in this conference—the possibility of a more satisfactory division of work between miners; the necessity for keeping materials "at the face" (the part of the mine where the coal is being dug), and making prompt delivery of these materials when they were needed; and other similar questions. In particular, the general manager told the aggrieved superintendent and foreman that exaggeration—such as the "colorful style" of the miner's statement—should not be characterized as falsifying since the coloring of statements is sometimes inevitable when a man's feelings are involved.

Moreover, the general manager pointed out, the fluctuations in employment in the mining industry must not be forgotten in their effect upon contentment in the working force. "Complaints and discontent multiply when work is short, and diminish when work is regular." To this condition, indeed, he ascribed the attitude of the men toward lack of materials or delay in delivery, and what they regarded as inequitable division of work, all of which assume importance in a period of inadequate work and inadequate earnings, since all of these delays affected miners' wages.

Changes under the Agreement

It was of this same mine, under past management, that one of the miners involved in this conference described in writing the conditions and attitudes which had been corrected under the company's new policy. He wrote:

> One afternoon in early September, 1923, I applied for work at the mine, then being worked under non-union conditions. There was an even dozen of us there, all told, looking for work this day. The Superintendent, whose duty it is to hire the men, looked us over. Some of the men were just from the old countries of Europe, unable to speak our language. These were given work immediately, not asked if they were miners, but the simple statement was made to them, "Board in the company boarding house." Our turn came next, my own last of all. Asked was I a miner, was I married, did I own my own home, would I trade at the company store, etc.? Informing me at the same time, the orders from his superior were to "Fill the boarding house and the company-owned dwelling houses with men who will trade at the company store. If you need more men hire men who will trade at the company store, and above all, don't hire union men." Looking as dumb and vacant as possible, I was given work. Commencing work, I made the acquaintance of many men who were renting company houses, and living in them, too, while the homes they owned themselves were left empty.
>
> All this is changed. A miner of the Rocky Mountain Fuel Company, under this new plan, lives where he pleases, boards where he pleases, spends his money where he pleases, votes as he pleases, and has an equal voice in the making of the conditions under which he works. No longer is it necessary for him to cultivate a wooden cast of countenance to hold his job. He looks and feels like an American citizen, the equal of any man in all the world. Working conditions are improved out of all semblance to the old conditions.

He then went on to elaborate some other causes of difficulty which have been corrected under the collective agreement and his statement is quoted because it happens to be a clear expression of conditions which many miners have described. He explained that the workings of this mine are extensive and that they are a long distance from the bottom of the shaft.

Formerly, the miners had to walk these miles, straggling and shaggling along the darkened roadways, carrying picks, shovels and miscellaneous other tools, and also the blasting powder for the day's work, in addition to the measly lunch pail they were able to afford. Thus heavily burdened, they toiled along, arriving at their working places tired out before the day's earning work began.

Now, this is changed. The men ride *to work* in mantrips and ride *from work* in mantrips. The tools they carried are delivered to them, as also their blasting powder. A conservative estimation of the number of miles of walking saved to these weary men, since this union contract was negotiated and signed, places the figure at one hundred and twenty-five thousand; five times the circumference of the earth. The cost of thousands of shoes has been eliminated. The wear and tear on the bodies of these Industrial miners is beyond any estimation.

After a discussion of the importance of the checkweighman provided for under the union agreement, and the way in which they save earnings otherwise stolen from the men through false weights, he took up the problem of discharge which always threatens a man in a non-union company.

Again, we point with pride to the fact that in all of the nearly four years this plan has been in effect, not a single employe has been discharged, and only one man quit of his own accord, and he one whom the non-union operators were using as a spy. Under the non-union conditions, men were fired daily; the numbers depending upon the degree of inaccessibility of the boss on the particular day involved. Standing at the bottom of the shaft one morning, a man upon whom a wife and eleven children were dependent, was fired for no reason whatever, and this while the state coal mine inspector was standing by, indignant but helpless.

While under the union contract the management has the right to hire and discharge, nevertheless, in the event of discharge, the man has the right to have his case reviewed by the Pit Committee, and thereafter up the line, for a settlement. Happily, as he has pointed out, there have been practically no cases of discharge, hence, no such appeals. Finally, as another change since these former days, he declared that the difficult question of dead work has become a matter of agreement.

Dead work was never paid for. Dead work is work falling to the lot of the piece-work paid miner for which no scale of wages was fixed, although consuming time that should have been used as earning power. Rates for this work have now been established.

Laying Off Employes in the Summer of 1932

Probably the outstanding grievance of the miners during the history of this agreement has been the "lay-off," as they call it, of 1932. In the spring of the year, early in March, at the close of the winter season, approximately 125 men, chiefly in three mines of the company, Grant, Columbine, and Industrial, were dropped from the payroll under circumstances which led some of them to believe that they could not be re-employed when the busy season began again in September or late August. It has been the custom in the mining industry to lay men off in the spring, or they have voluntarily left to find other jobs for the summer. But in 1930 a policy was adopted at the request of the men employed whereby they shared their workplaces and therefore their opportunities to earn during the dull months. The change was reflected in the statistics of number of men on the payroll.[1] In 1930 the maximum number was 811, in January, and the minimum 569, in May. In 1931, a policy of rotating work was established and the range was reduced: the maximum was 776, in December, and the minimum 612, in July. Total earnings, and naturally, average earnings went lower in the summer of 1931 than they had been in 1930, but the job was more secure, not only because a larger proportion were on the payroll, but because all were assured of employment. Such decrease as there was could be traced, presumably, to voluntary quitting for other jobs, or for personal reasons, and not to the usual laying off of men by the company when orders for coal decreased.

The establishment of this plan of rotating work, which was the miners' response to the need for relief in the industrial depression, was the outcome of a suggestion made in connection with the wage-scale conference in the summer of 1930, when the new contract was to be adopted. It was agreed that this was not a subject for the contract, but should be taken up in joint conference. As the result of this conference, the management sent letters to its superintendents, dated July 26, 1930, containing the following statement:

> It will be the policy and rule of the company hereafter to alternate work, as work and production decline in the spring and summer, to avoid seasonal lay-offs. This rule went into effect this season at the Industrial, Vulcan, Standard, and Alpine Mines, but was not put into effect at the Columbine and Grant Mines.[2]

At the time when this new policy was under consideration, some of the men had suggested that if during the

[1] See Table 1, pp. 336 ff.

[2] Later these two mines were included.

summer a man should quit on account of slack work and find employment elsewhere, he should be considered as an absent employe and be given work in the autumn, without the formality of the doctor's examination and other arrangements for new employment. The company declined to make such an arrangement, holding that it would constitute what is called a preference for work, which is contrary to the company's policy. In declining this permission, however, the management affirmed the new policy of "division of work," or, as it is called, "rotation of jobs."

In the first meeting of the Joint Advisory Board, held on February 25, 1932, a worker from Grant Mine, whose workers, by the way, had declined to commit themselves as yet to participation in the Board, brought up the question of lack of co-operation between the miners under the plan of alternating work or rotating jobs. Little attention was paid to what he said, but at the following meeting, on March 10, the whole matter was thoroughly thrashed out. The chairman, a miner, had suggested that if men wished to take other jobs in 1932, they be permitted to return to the mine when their other jobs were finished, and to be assured of their regular turn at the work, instead of being taken on again as new employes. As a *quid pro quo* for the company, these men would be on call if the management needed them at any time. His argument in favor of the idea was that under present conditions of sharing their work, the total earnings are "a family affair." If any men could work elsewhere, it would leave so much more work and earnings for those who remain, and should therefore be encouraged.

It was evident in the course of the discussion that the management saw difficulties in the suggestion, and that the men were not united in favor of it. It led, indeed, to a statement by the general manager of the whole difficulty of rotation of jobs. It involved, in his opinion, a slightly higher cost of administration, with the danger of accidents for the miners, since one shift did not always leave the workplace in proper condition for the next.

The meeting, however, was scarcely able to arrive at any satisfactory disposition of the suggestions because the group from Grant Mine, who announced that they were there not as members but as observers, brought up several complaints of lack of rails and material, and declared that the men did not carry their grievances to the Pit Committee, but complained to each other. The significance of the situation lay in the fact that this kind of discussion of disputes did not belong in the Joint Advisory Board, which expressly limited its discussions to matters not covered by the trade-union contract. It was evident that the Joint Board itself was, perhaps, making a bad start if it became involved in these disputes, and was unable to deal in effective ways with subjects not covered by the union agreement. Indeed, this subject of the lay-off which, as has been seen, was not covered by the contract, became the Waterloo of the Joint Advisory Board, for, though the subject had thus been discussed at two successive meetings, it had not been thrashed out to a joint decision, or to any formulation of opinion.

Meanwhile, to the consternation of some members of the Joint Advisory Board, it was revealed, two days later, that already on March 7, a memorandum had been sent to superintendents from the Denver office, abandoning the policy of alternating work from that date. The statement was as follows:

MEMORANDUM FOR SUPERINTENDENTS:

For two seasons the Company has followed a policy of alternating work instead of laying off men when work is short. This policy was adopted in the hope that a more equal division of work and income might be given all men in and about the mines.

The policy has developed, however, a gradual increase in working forces at peak seasons of production, and the result is a surplus of men at other seasons as market demand and production of coal declines. This overload of men is carried at an added cost which is not justifying itself. The alternating of work between a surplus of men has shortened working time, and the resulting dissatisfaction and lack of cooperation among the men has increased working hazards.

For these reasons, the policy of alternating work this season will be discontinued and as demand for production slows down working forces will be reduced to the number required for the work at each mine.

This rule will be effective from this date.

THE ROCKY MOUNTAIN FUEL COMPANY

By MERLE D. VINCENT
Executive Vice-president and
General Manager

In accordance with this order, on March 12, 40 men were laid off at the Grant Mine. The men immediately declared that they were being discriminated against, and a special meeting was called by the president of the local union and the Pit Committee, with a representative of the district president present on invitation of these local officers. This group decided to consider the lay-off as a grievance to be taken up as provided for in the contract. Examination of the list, with reference to the loan of wages to the company in the preceding autumn, resulted in the following analysis: Of the 40 laid off, nine had been hired after the period of lending wages. Of the remaining 31, six had lent the full portion (that is, half their earnings); two had lent part, and 23 had lent nothing.

Here emerges a factor in this lay-off which was not part of the written record, but which gave it a special significance. It has been noted that following the strike of 1927, the company announced that it would re-employ all the men without discrimination. In this working force which had been employed under the company's old policy, there were strike-breakers of the past, and men with neither experience in unionism nor in sympathy with it. There were also men who preferred the I.W.W. to the United Mine Workers. Under the agreement, however, all became members of the union and all shared in the advantages of the contract; while, on the other hand, there were loyal union men in the state of Colorado who had lost their jobs and had never secured others in their industry because they had participated in past strikes. This situation was the cause of much irritation on the part of some of the union men, who, while ready to make sacrifices themselves, resented the attitude of fellow-workers who cared only for their selfish interests and did not co-operate in the new policy, nor were they interested in trade-union affairs, and yet were getting the full benefit of the efforts of the company and the union to maintain higher wages.

When the whole question of lending wages came up, as already described,[1] and the members of the local coal sales committees in the various mines, after discussion in the local union, individually asked the consent of each member of the working force, there naturally developed on the part of these leaders an attitude of eagerness to se-

[1] See Chapter V, Marketing and Prices, p. 100.

cure a hundred per cent co-operation; at the same time, there were men in the force who were disinclined to such a sacrifice. To some of the leaders there seemed to be in this experience a "separation of the sheep from the goats."

To some extent this same classification worked itself out in the process of sharing work, and again some complained of lack of co-operation on the part of those who, while nominally members of the union, were not wholeheartedly sharing in these efforts. Therefore, there were workers who were urging the company, in the interest of the success of the enterprise, to get rid of those employes who were not co-operating, either in efforts to increase efficiency, or to help each other by rotation of work, or to enter into their enthusiastic efforts to assist the company in resisting the effects of ruinous price cuts.

Naturally, the management refused to assume the task of discharging these less co-operative workers. There were members of the management who held that the union must learn to discipline its own members. On the other hand, the union, with its tradition of protecting every man, was hardly in a position to exercise its disciplinary powers, particularly in securing discharges, which are repugnant to unionism. In the midst of these complications there was the further fact, which the general manager had explained to the Joint Advisory Board, that the difficulties involved in sharing work, and the somewhat higher administrative costs, were interfering with the productive efficiency so vital to the company's success. Moreover, the management explained, particularly at Grant Mine, an excessive force had been employed at the peak season in the winter of 1931-1932, and this made sharing work more difficult in the following summer. Yet it must be added that the payroll did not show a higher peak of employment in that year, compared with the two preceding years, though the larger force was continued longer; that is, there was a higher average.[1]

For all these reasons, the decision was reached to abandon the policy of alternating work. It had not been a matter of the union contract, but a policy announced by the company, adopted by it voluntarily, though the suggestion had been made by the men. And it was withdrawn without joint action, or advance notice to the men. This procedure later was stated by the general manager at a meeting of the Joint Advisory Board to have been a mistake; the whole matter might well have been a subject for discussion at the Board. Obviously, it was to have its effect upon the success of this new mechanism, the Joint Advisory Board. The fact that the lay-off occurred first at the Grant Mine, and that it was there that it first became a matter of local union action, was a further disadvantage for the Joint Advisory Board. From the first moment when reports had reached them of the complaints of one of their fellow-employes made at the organizing meeting, they had been reluctant to co-operate, and some of the most experienced trade unionists among them had warned the others that this kind of thing was "company union" practice rather than straight trade unionism.

But it is of some importance to describe exactly what happened in the process of taking up the complaint. The local pit committee, with the representative of the district, and the president of the local union, having decided that the lay-off was a local grievance to be taken up under the contract, met with the superintendent. At once, however, they were told that he had acted under orders from the Denver office; hence, it was no longer a local matter, but had to be handled on behalf of the men in the district office of the United Mine Workers. A written statement

[1] Table 1, pp. 342-343.

was laid before the president by the mine committee and by the superintendent, with the list of men laid off, and their status as already analyzed. And the next step was a meeting of the representative of the district president, with the local mine committee and the superintendent, in order clearly to formulate the statement.

The representatives of the miners declared in this statement, dated March 16 and addressed to the president of District No. 15 of the United Mine Workers of America, that

> many of the suspended or discharged men contend they are being discriminated against, some insisting the agreement is being violated, asserting the company had agreed to rotate work amongst all of the men, compatible with the various classifications of labor involved.

The superintendent, on his side, while disclaiming any responsibility, as his orders had come from the Denver office, declared that "the reason for the lay-off was an overload of men was being carried" in a period when orders for coal were not commensurate.

At this point the important question for the miners' representatives was whether the policy of rotation of work was merely a memorandum of a local agreement subject to change by mutual consent; or whether it was part of the contract itself; or whether it was simply a policy of the company, subject to change at any time by the company alone. On the whole, this last was considered by the management to be its status. And there was nothing in the history of its adoption which enabled the union to claim the right to its enforcement under the contract.

There followed a general conference of the local unions involved, called together by the district president on March 17; and one of the locals, Columbine, held a special meeting, pledged co-operation of all its members in eliminating any difficulties caused by the men's own failures, promised disciplinary action against non-co-operating members, and appealed to the company to restore rotation of work and to re-employ men who had been laid off. At Columbine and Industrial Mines, also, it was commonly believed that the superintendents had chosen for the lay-off primarily those men who had not lent their wages to the company, and that the general lay-off had given opportunity for the superintendents to get rid of men who had given them trouble. To the men, this was discrimination. There were, in addition, sporadic lay-offs of this kind at Alpine (with only one man involved), and at Vulcan and Standard.

As a result of the general meeting of union officers, the president of the district took the matter up with the general manager of the company to try to have the lay-off order rescinded, particularly in the light of the fact that the United Mine Workers of America, nationally, was trying to deal with the unemployment of its members by sharing work. The management, however, declined to change the announced policy or to restore the men, except that a number of those laid off at Columbine and Industrial were re-employed, and, though there was no announced policy, naturally, more or less cross-shifting or rotation of work occurred with the decline in orders.

In this whole situation it is necessary to point out that although the orders to lay men off when production declined came from the Denver office, the choice of men who were to go was made wholly by the superintendents, and at no time is there any evidence that the management laid down any guide in the selection of these men. As one of the superintendents said to the investigator, "Of course, we chose the men who had not co-operated with the company by lending their wages. We could not lay off first those who had lent their wages, could we?" It was difficult for this superintendent or others to see the effect of such a decision, not only on the men in the mines, but on the whole policy of relationship and on public opinion. By a retroactive influence, it made the action of the miners, in working out the plan for lending their wages in 1931, appear, in the light of these later events, to have had in it an element of compulsion. It placed both the Coal Sales Committee and union leaders in a position of having appeared to encourage the laying off of fellow-workers and fellow-members of the union, and it was the kind of information which enemies of the plan among the general public and in other companies are always ready to seize upon in criticism of the Rocky Mountain Fuel Company's new policy.

Moreover, in the beginning men thus laid off seemed to be deprived of the protection which ordinarily would have been assured them under the union contract. Usually if the superintendent had seemed to show bias in laying a man off, the latter could have had his case heard before the Pit Committee as an individual; but when the orders had come from the Denver office, and when they affected other men in several mines as a general policy of the company, individual complaint had to await decision on the general policy. Thus the whole machinery of the local union for the moment was weakened in the eyes of the men laid off, and the confidence of those who remained was also shaken since they feared that their turn might come. Neither the change in the policy of rotating work nor the lay-off was prevented by the contract.

There followed, naturally, much discussion throughout the communities in which these miners lived. Finally, at a meeting of the Joint Advisory Board on May 12, expression was given to the many varied aspects, and the main outlines of the suggestions made are here sketched.

At the meeting on April 13 it had been decided, after a statement by the general manager, that the whole question of rotation of work belonged legitimately to the Joint Advisory Board as a subject for discussion and advice; and ought to be made a special order of business for the next meeting. It was noteworthy first, as the meeting on May 12 opened, that there were no representatives, nor even "observers," from Grant Mine, and that only one superintendent (and he from Vulcan Mine, which was least affected by the lay-off) was in attendance, despite the fact that it had been clearly understood by them all that this would be a topic for discussion. Their absence seemed to indicate that the Advisory Board could certainly not accomplish its purpose of bringing about a full and frank discussion between representatives of the miners and the mine officials.

The procedure followed by the chairman was to call in rotation around the circle for statements of opinion. The important points made by the men were as follows:

The first miner considered it a serious mistake to change the policy regarding rotation of work. It had taken two years after the signing of the agreement in 1928 to get the company to consent to abandon the old seasonal lay-offs. Now, what had been gained then was taken away. It was probably true, as the management contended, that the cost of production and risk of accident had increased with so many men working in the same working places, but these were all matters open to adjustment by conference. He thought that the men should now be taken back. He quoted the general manager as having said, in another connection, that certain policies make cowards of men, and he declared that the lay-off had done just that.

An active union leader of long experience declared that the effect was noticeable. Very little interest was now taken in local union meetings. The last meeting at Columbine Mine had adjourned in fifteen or twenty minutes.

A miner who had been one of the pioneers in the development of the union agreement in other parts of the country declared that it had been a mistake, though he maintained that this was the best company he had ever worked for.

Several others stated, without comment, that the men should be taken back. One by one, others added to the reasons already brought out: The recent failure of the local bank was an argument for restoring all the men to work, since there would be added difficulty now in securing credit, and already men laid off found it impossible to get any. On a deeper level the lay-off had affected the whole joint relationship. There was no proof of greater cost of production or more accidents. And to lay men off at this time would seriously affect the attitude of labor and the public toward the company. A blunder had been made which could be rectified only by restoring all the men to work. It was affecting even the settlement of grievances by the pit committee, since the superintendents were asking that no cases should be brought up until this matter had been disposed of.

One miner declared that the lay-offs had "put a knife in the hands of the superintendents."

Only one man disagreed. He declared that lay-offs always came at this season, so why expect any more of the present company? Rotating work results in much loss of time in moving tools from one work place to another, and the men fail to timber their places properly.

Of the representatives of the company, several from the accounting and sales departments declared that as this was an operating problem it was not their responsibility. One who had had trade-union experience raised the question why the miners themselves had ever started the idea of laying men off.

Some of the foremen present stressed the difficulties already discussed concerning higher costs. Finally, the general manager suggested that a joint committee be appointed to consider the whole question of procedure involved in rotation of work, though he added that he could not see how any of the men could be restored.

The chairman, a miner, summed up his impression by saying that a basis for discrimination had been laid by this action.

At the close of the meeting the men representing each mine conferred together and selected their representatives for the proposed joint committee to go more thoroughly into the whole difficulty. The subsequent history was that this committee did not function. Instead the union officers recommended to the management that the Advisory Board be abandoned. They believed that it was better not to have this kind of fifth wheel. When the power of discharge is in the hands of superintendents, it is important to maintain the local union organization as the machinery for handling disputes. The lay-off convinced the men that they should hold definitely to the recognized trade union procedure under a contract.

The Joint Advisory Board thereupon ceased to exist. The grievance in the matter of alternating work was carried through the various steps of joint conference by the district office of the union, and when production began in the autumn the men were taken back, including all those who, for their radical opinions or for other reasons, had believed that they had been laid off because of the prejudice of the superintendents. In the mine where the grievance had been greatest, namely, Grant, the men were not restored, because, as has been said, the management found that there had been too many employed during the preceding winter. Rotation of work was in effect at every mine in the spring and summer of 1933.

Significance of the Power of Discharge

The whole dispute revealed a problem which recurs again and again in industrial relations. Its background in the coal industry must never be forgotten. Sharing work in the mine has been the men's effort to adjust themselves and their group to the fluctuations in the industry. Adjustments to a badly functioning mechanism can never be wholly satisfactory. Hence, the record, while showing differences of opinion and probably mistakes in judgment, points definitely only to one conclusion—that even though both management and men are wholly in earnest, as they are in this collective agreement, they cannot escape the influences of a disorganized, unstable industry which threatens security of employment. Fluctuations in production defy any ethical agreements which attempt to guarantee a worker the right to his job. These fluctuations and the disputes over the right to the job have been the root-cause of the breakdown of more good agreements between management and labor than can be charged to men's tempers, or to unsatisfactory "human nature."

The situation also brought to light a paradox in union-management co-operation: that if the union be completely co-operative, it surrenders some of its right to function in protection of its own members against the inevitable conflicts which arise with management.

It is clear that if the union, in its efforts to make a success of such an agreement as is described, throws itself completely into an attempt to help the company in all its difficulties, it will tend to silence discontent or cease actively to present grievances. At least, this is the danger, and it has led active union men to say that union-management co-operation, even in this company, may easily become a mere company union. The facing of the difficulty involved in this lay-off of 1932, brought these union men face to face with their own problem in maintaining the strength of their organization. The lesson was the more effective as they realized that they themselves, by their complaints of non-co-operative fellow-members, had helped to bring about the situation.

On the side of the management, the problem revealed also some weaknesses. It has been noted that, as in most companies in the coal industry, there has not been developed a functional scheme of organization with procedures which would harmonize with the best experience of scientific management. For example, instead of a functional control of employment and discharge, which would be vested in the higher management rather than in the mine superintendent, the work of carrying out policies of industrial relations, as well as managing the mine technically, rested upon the local mine superintendent. This is a condition in the coal-mining industry which has been revealed over and over again as leading to serious abuses; the superintendent's power over a miner's working conditions is inevitably large anyway. In the absence of functional organization and control, it is the more astonishing that so great a success has been achieved in the establishment of right relationships, but it is hardly fair to strain human nature so greatly. It would be better to clear the ground of avoidable grievances by a method of organization which would forestall any suspicion of prejudice on the part of the superintendents. It should be emphasized that this is no personal criticism of superintendents. It is the office and the function which must be so organized as to give no reason for fear of discrimination.

In short, it is clear that the success of union-management co-operation depends on the one hand upon a strong union, and on the other hand upon a thoroughly efficient management. The significance of this particular incident is that the agreement between the United Mine Workers and the Rocky Mountain Fuel Company weathered even this serious issue, and that both sides came to see weaknesses that could be corrected. In other parts of the country a similar issue has terminated many a good experiment. And this might, indeed, have happened if it had been merely a local enterprise without the leadership and experience of the trade-union men, who are versed in the policy of the United Mine Workers. On the other hand, of course, was the complete sincerity of the company, which was reflected in a willingness to admit mistakes and to submit the results to joint conference.

To those who are today looking more deeply into the status of human rights in industry, the observation is inescapable that *the power to discharge rests inevitably with owners of industry—that is, it is an outgrowth of property rights. Human rights can never be guaranteed when the right to the job itself is thus beyond the workers' control.*

CHAPTER VIII

MEASURABLE RESULTS

THE purpose of the Rocky Mountain Fuel Company in its joint agreement with the United Mine Workers, as shown in the preceding chapters, has been to assure adequate service at fair and uniform prices to the consumer; security and fair wages to the miner; and a profit for the investor as an expected result of sound management. To a certain degree, achievements in all these directions are measurable, first, in the response of buyers, as reflected in the company's sales in comparison with that of its competitors; second, in statistics from the payrolls, showing regularity of employment and earnings; and third, in the company's operating and financial record.

The Company's Share of the Market

In Chapter IV, Marketing and Prices, the company's policies and their results have been discussed. Here it is desirable to emphasize again the facts about production, especially the company's share in the Colorado market.

In the years from 1928 to 1932 the tons sold varied from 602,386 in 1928 to 781,768 in 1929.[1] These variations reflect no basic changes in the capacity of the mines. In fact, two small mines[2] were closed in 1928, and yet there was a

[1] Table 10, p. 362.
[2] See p. 86.

great increase in output in 1929. The variations are due mainly to fluctuations in the market, which in turn are traceable, in part at least, to changes in the general industrial situation. Yet the company more than held its own in the markets of the state, as shown by comparison with the output of competing mines.

In 1928 the mines of the Rocky Mountain Fuel Company produced 6.5 per cent of the total tonnage of the state, but in 1931 this percentage had increased to 11 and in 1932 to 11.5.[1]

In relation to the coal companies which are its immediate neighbors, corresponding gains are shown. In Boulder County, where most of the mines of the company are located, in 1928 the Rocky Mountain Fuel Company mines produced 42 per cent. By 1930 this percentage had risen to 49 and in 1931 it was 44. In 1932 it suffered some loss in the production of the county, its proportion being 39.5 per cent. But a gain was made in Weld County, production increasing to 25.5 per cent as compared with 20 in 1928. In that county is located the company's largest mine, the Columbine. In the combined tonnage of the four counties in which its mines have been located, Boulder, Gunnison, Las Animas[2] and Weld, amounting to 5,783,324 tons in 1928, the proportion mined by the Rocky Mountain Fuel Company was 11 per cent in 1928 as compared with 18 in 1931 and 19 in 1932.[3]

It seems clear that the company was able to keep in advance of its competitors. This result is evidence that purchasers approved a price policy which avoided, as far as possible, cuts below cost while maintaining a higher wage scale.

[1] Table 2, p. 351.
[2] The only mine in this county was Forbes, which was closed in 1928.
[3] For figures in detail see Table 3, p. 352.

Wages

The basic wage scale, as shown in previous chapters, is set in the collective agreement between the company and the United Mine Workers. In the agreement[1] in force during the main period of this study the basic day wage was $7.00. Reductions in wages paid by competitors in 1931 to $5.00 a day resulted in a decrease of this basic rate to $5.25 in the agreement between the Rocky Mountain Fuel Company and the United Mine Workers for the two years' contract period beginning September 1, 1932.[2] In both agreements detailed rates were set for different occupations and for different mines to correspond with different local conditions, but the general measure from which to work toward these variations is the basic day wage.

Actual earnings, however, are by no means identical with the rates. What the miner receives in his pay envelope depends upon a variety of factors, such as, the ease or difficulty of mining in his workplace, which changes as the coal is taken out; and the facilities insured by managerial efficiency in supplying mine cars when the coal is ready for hauling, and in making sure that props and timbers and materials for laying track are available when the miner needs them. The miner's own skill and speed affect his earnings, and between individuals the range is wide. Voluntary absenteeism is a personal factor of which operators often complain in the rush period, and the agreement, in fact, sets a penalty of forfeiture of his position

[1] Appendix III-A, Declaration of Principles and Agreement, sec. 25, par. 1, p. 262.

[2] Appendix III-C, Memorandum of Changes in Agreement, sec. 25, pars. 1, 2, 3, p. 279.

if an employe absents himself from duty two days or more without advance notice, except on account of sickness.[1]

Most of all, the income of workers in mining is affected by the irregularity of operation of the mines. A full working year of 308 days, allowing for 52 Sundays and five holidays, with a basic day wage of $7.00, might be expected to yield a potential annual income of $2,156. How far below this figure even the most skilled and most regularly employed men fall in their earnings, will appear in the following analysis.

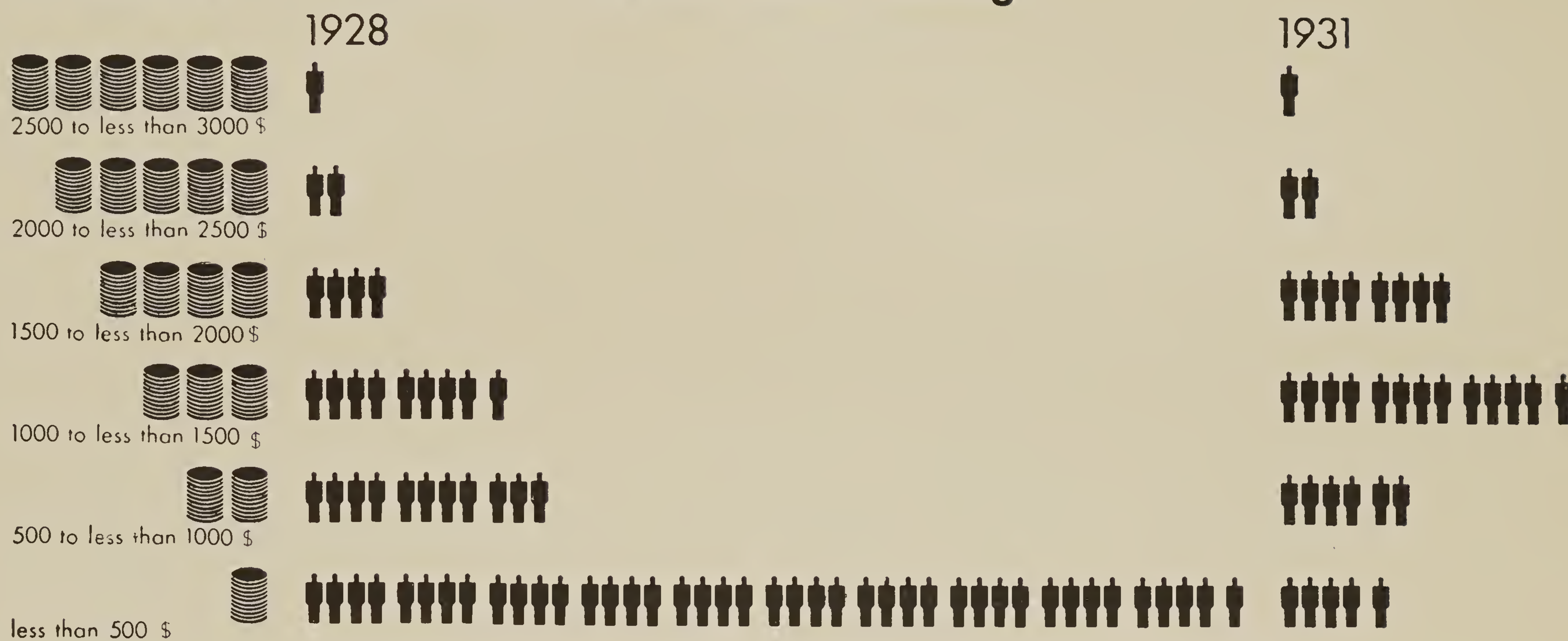
Because of the many factors affecting earnings, the actual income of men in mines can be discovered only by analyzing payrolls and drawing off the figures for individuals. This we did for miners in the Rocky Mountain Fuel Company for the years 1928 and 1931. The year 1928 was chosen as marking the beginnings of the new policy; the collective agreement took effect September 1, 1928. For the preceding year, 1927, which was still part of the old regime, the data would have more exactly shown earnings before the agreement, but the records were not comparable, and so 1928 was chosen as the first year of the new relationship. For comparison 1931 was selected as the most recent completed period at the time when the field work of the study began. The facts about the entire period from 1928 through 1932 will be shown, however, in the statistics of total earnings and number employed in each payroll period.

For individuals in 1928 and 1931 the data secured showed (1) the total gross earnings[2] from the company during the year; (2) the number of months in which the individual's name appeared on the payroll.

In the statistics of wages in this study, "gross earnings"

[1] Appendix III-A, Declaration of Principles and Agreement, sec. 8, p. 254.
[2] For a discussion of deductions from gross earnings, see pp. 76-77.

Distribution of Workers by Annual Gross Earnings



Each figure represents 25 workers other than superintendents and foremen

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Table 5[1] gives gross earnings in 1928 and 1931 for miners only and for all other workers exclusive of superintendents and foremen, and Table 4[2] summarizes these details. This table takes no account of differences in length of employment, merely showing total payments to individuals appearing at any time on the payrolls. The salient facts shown are these:

(1) The percentage receiving less than $500 in gross earnings was 59.8 in 1928 and only 15.7 in 1931.

(2) The proportion receiving less than $1,500 was as high as 89.2 in 1928, while in 1931 this proportion in the lower income group was reduced to 69.8.

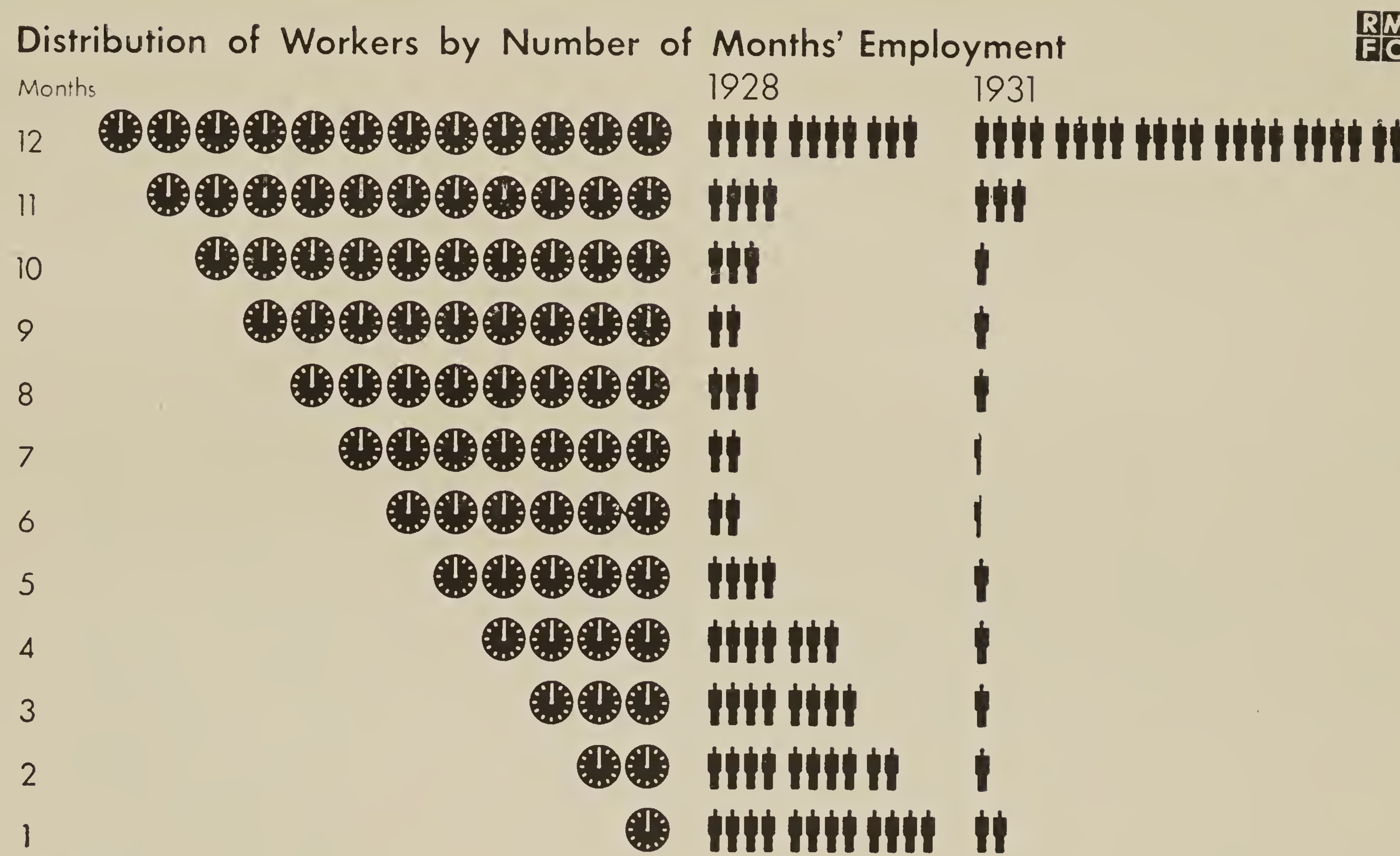
(3) As a corollary, the proportion in the higher income group, receiving more than $1,500, had risen to 30.2 per cent in 1931, as compared with 10.8 in 1928.

(4) That the income to be expected from a basic day wage of $7.00 in a full working year of 308 days is a rare experience, is indicated by the fact that in 1931 when that rate was in effect the whole year, the proportion receiving $2,000 or more was only 8.8 per cent. The gain, however, was substantial as compared with 1928 when only 4.6 per cent attained what might be described as the standard annual income.

Employment for very much less than the full working year is the factor which cuts the miners' annual income so far below its potential level. Table 6[3] shows that in 1928 only 16.6 per cent of the workers were on the payroll 12 months. The gain in stability was great, as the 1931 figures show, but even in that year, when 63.2 per cent were on the payroll for 12 months, the corollary must be noted that 36.8 per cent were off the payroll a month or more. Moreover, as will be shown later, earnings decline seasonally, and lost days of mine operation are distributed

[1] Table 5, pp. 354-357.
[2] Table 4, p. 353.
[3] Table 6, p. 358.

Distribution of Workers by Number of Months' Employment



Each figure represents 25 workers
other than superintendents and foremen

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through the months, so that few even of those on the payrolls in all the payroll periods of the year have full-time employment. Table 7[1] shows the earnings of those who received pay in all months. The median, half receiving less, in 1931 was $1,415 and the upper quartile, 25 per cent receiving more, was $1,777. Both these figures were slightly higher in 1928, when the median was $1,504 and the upper quartile $1,918, but the essential point is that only a select few, 16.6 per cent, were 12-months' workers in 1928 and 63.2 per cent in 1931, so that for the force as a whole certainly a higher level of earnings had been reached. Both the higher wage scale and greater steadiness of employment were factors in raising this level, and both factors were definite parts of the new policy, which had as one of its objectives "to stabilize employment."

Measured by earnings, it would appear that even in the period of declining economic activity following 1929 in the United States, by 1931, a bad year, the Rocky Mountain Fuel Company had raised its level of earnings for the workers as a group, and some indication has been given of stability of employment, but that subject needs fuller analysis.

Stability of Employment

Additional evidence of increased stability of employment in the first four years of the agreement is shown in Table 6. In 1928 the number of individuals on the payroll at some time was 1,701[1] to maintain an average force of 748,[2] whereas in 1931 the number of individuals had been reduced to 867[1] for an average force of 728. The reflections of these figures, which show turnover, in the

[1] Table 7, p. 359.
[2] Table 1, p. 336, and Table 6, p. 358.

longer employment of individuals during the year, has already been described.

A picture of fluctuations in employment and in earnings of the workers as a whole can be drawn from facts from the payrolls, showing month by month for each payroll period for the years 1928 to 1932 the total earnings and the number employed. Table 1 gives the details for the company as a whole and for each mine.[1] Seasonal fluctuations are clear.

The variation in employment and earnings in these years may be expressed in terms of the averages for the payroll periods of each year. Employment varied in 1928 from 80 per cent of the average for the year, in the lowest payroll period, to 123 per cent, in the highest. In the next four years the variation was:

1929,	from	70	to	133	per cent
1930,	"	82	"	116	" "
1931,	"	84	"	107	" "
1932,	"	83	"	115	" "

The years 1930 to 1932 show very material reduction of the spread between the trough and the peak of the yearly operations, compared with 1928 and 1929.

Fluctuations in earnings are generally wider than in employment. Many of the workers find no other jobs in dull season, but remain on the payroll, working part time. Earnings correspond with tonnage production, and therefore change with variations in the demand for coal. As has been pointed out, there was a change in wage rates beginning September 1, 1928, and again in 1932, and these changes would affect the fluctuations in those two years. The figures are as follows, expressed in percentages of the average payrolls for the respective years:

[1] Table 1, pp. 336 ff.

1928,	from	42	to	139	per cent
1929,	"	51	"	154	" "
1930,	"	62	"	192	" "
1931,	"	52	"	165	" "
1932,	"	45	"	169	" "

It is evident from all the data that the whole level of earnings was lifted in 1930, both the minimum and the maximum being higher. In 1932 the minimum went almost as low as in 1928 in relation to the average for the year, but the maximum went higher.

To show daily earnings, without allowing for idle days, the company has figured the average earnings per shift.[1] A "shift," as used here, means one man's work in one day, or a "man-day." The statistics on this basis are as follows, the figure not being available for 1928:

1929,	average	earnings	per	shift,	$7.90
1930,	"	"	"	"	7.99
1931,	"	"	"	"	7.86
1932,	"	"	"	"	6.79

Measured thus, the achievement of the company with respect to miners' earnings was to hold the earning power steady from 1929 to 1931 when wages were declining in the coal industry generally. Moreover, the earnings per day were well above the basic wage of $7.00 as adopted in the agreement. In 1932, with the lower scale of $5.25 forced by competitive conditions, the average per shift declined to $6.79. Only a comparison with the payrolls of competitors could bring out the full measure of this result of the company's new policy, but no such study has been made. It is possible to say only that at hearings before the Industrial Commission, as already described, the Rocky Mountain Fuel Company opposed the reductions asked

[1] Table 9, p. 361.

for by its competitors in 1932, and did not put a cut into effect (less than in competing mines) until the competition in lowering prices made it necessary. In this as in other phases of its operations, the Rocky Mountain Fuel Company is affected at every point by prevailing conditions in the industry.

The Company's Operating and Financial Record

Examination of the published annual reports and the more detailed material on which they are based reveals the facts about the company's operations as a whole, year by year.[1] For the attainment of its objectives, it is necessary to produce coal efficiently enough not only to serve the consumer and give a fair return to labor, but also to pay interest on debts and other financial costs and to take care of the property by proper reserves.

In the years from 1928 to 1932 the tons sold varied, as has been shown, from 602,386 in 1928 to 781,768 in 1929. This tonnage reflects only partially the capacity of the mines; its variations are due in the main to fluctuations in the market, which in turn are traceable, at least in part, to changes in the general industrial situation. That the company more than held its own in the markets of the state and thus suffered less than its competitors through the industrial depression, has been shown in Chapter III, Labor's Productivity, and in Chapter IV, Marketing and Prices. In Chapter III the tonnage per man per day has been indicated as rising from 5.27 tons in 1928 to 6.30 in 1932. Naturally this does not reflect only the efforts of the miners, since supervision, mine equipment, mechanization and the like affect output; but there were no great changes in the use of machinery during that period, and the com-

[1] Table 10, p. 362.

pany has attributed the increase primarily to the response of the miners to the new agreement.

The year 1929 was the first full year of operation under the new agreement, which took effect September 1, 1928, and involved a higher wage scale. As Table 10 shows, it was a year of considerable increase in tonnage and also in receipts from sales, though the price per ton was lower, \$2.09 in 1929 as compared with \$2.36 in 1928. At the same time the cost per ton at the mine fell from \$1.97 in 1928 to \$1.78 in 1929. This reduction in cost made the reduction in profits, due to lower prices for coal, less than it otherwise would have been. The mine operating profit was 31 cents in 1929, compared with 46 cents in 1928.

The wage scale remained the same through 1931, and yet the mine operating profit steadily increased from \$244,697 in 1929 to \$292,799 in 1931, or from 31 cents a ton in 1929 to 42 cents in 1931. Officers of the company in published annual reports have said repeatedly that this increase in mine operating profit is due in large measure to union-management co-operation in production.

Analysis of unpublished data shows how the profit at the mine is dispersed not only for overhead administration, which is of course a direct mine charge, but for financial items chargeable to the methods of private ownership and to the particular capitalization of this company.

Every ton of coal must bear its share of general administrative expense; wholesale advertising and selling; and compensation insurance, which might in a sense be grouped with expenses in the mine. The efforts of the higher management to cut down general and administrative expenses were successful, as shown by a steady reduction year by year from \$247,611 in 1928 to \$179,719 in 1932 in the item covering those expenditures and other lesser charges.

But after these expenses have been met there are claims of capitalization, most of which do not decline as does the wage bill, through laying off workers when production declines. To some extent these claims are met through so-called "extraneous revenue," such as payments (royalties) for leasing the company's coal lands to others to operate, or returns on the company's investment in securities and rents on farm lands. But this extraneous revenue has steadily declined between 1928 and 1932, and it is the increasing profit on mining operations which has been a primary factor in lifting higher the "profit available for bond interest and other financial items."

Besides taxes, each ton of production must pay for royalties, for interest on the bonded debt and other financial items. The bonded indebtedness, which has already been described,[1] makes a heavy claim upon the mine operating profit. As recorded in the annual reports, the interest on the bonded debt has changed from $221,882.50 in 1927 to $211,216.25 in 1932. This with certain other financial costs added to general and administrative expense, and not offset by extraneous revenue, turned the profit on wholesale operations into a loss before anything was set aside for reserves, each year until 1931, when for the first time reserves were available.

By 1932, which for industry generally was a worse year than 1931, the mine operating profit of the Rocky Mountain Fuel Company was $345,831 as compared with $292,799 in 1931. The annual report for the year ended December 31, 1932, declares that the "operating cost for 1932 was 15.2 cents per ton below that of 1931, making an operating cost reduction of 41.2 cents per ton since the company's present policy became effective in 1928." There should, however, be balanced against this statement the fact that, as already explained, a wage reduction took

[1] Chapter II, Support and Opposition, p. 47.

Bituminous Coal Production 1928 to 1932

effect in the summer of 1932 and was incorporated in the agreement for the two years beginning September 1, 1932.

The important points in this record are that the company has more than held its own in the markets of the state; that its mine operating profits have increased; that it has been able to pay every cent of interest on its bonded indebtedness on the dates due; and that it has maintained for the miners a wage scale set by agreement, and has increased their stability of employment. Its strength lies in its internal relationships and in what ought to be regarded as the most important phase of its operations, the productivity of labor and the goodwill characterizing relations between workers and management. Its weaknesses are the weaknesses of the industry of which it is a part; its burden of indebtedness is characteristic of the present economic situation in America, in which debts are pressing heavily upon producers and industrial enterprises; and the wastes of short-time operation are its heritage of the evil results of overdevelopment of the productive capacity of the soft coal mines of the United States.

Instability of the Coal Industry

It was a brave act for a comparatively small company to undertake "to stabilize employment, production and markets" in the unstable soft coal industry in the United States. The method was "through co-operative endeavor and the aid of science." Table 16[1] shows the percentage of change in production for the Rocky Mountain Fuel Company as compared with the industry as a whole in Colorado and in the United States.

The table shows for the country as a whole and for

[1] See p. 366.

Colorado, first an increase in production in 1929 as compared with 1928, and then a steady and large decline. The Rocky Mountain Fuel Company made an extraordinarily large gain in 1929—nearly 30 per cent—followed by a loss in 1930, but the loss amounted to less than half of the previous gain. In the next year, 1931, the company made a slight gain of 2.6 per cent while the state as a whole declined 19.8 per cent and in the nation the decrease was 18.3 per cent. Finally in the year 1932, the company lost 11.2 per cent of its tonnage of the preceding year, while the state lost 15 per cent and the nation, 20 per cent. Though the company more than held its own "through cooperative endeavor," the problem of stabilization was too big to be solved by one unit of an unstable industry in a period of depression.

It is not to be assumed that the present instability of the coal industry began in 1929. In the twenty years from 1913 to 1932, for which data are available, production fluctuated with general conditions of business, from the low levels of 1914 and 1921 when it was somewhat over 400 million tons annually to the high points of 1918 and 1926 when it exceeded 570 million.[1] Yet always its capacity exceeded its production so that from 1890 to 1931 the average number of days in a year that the mines were open for work never exceeded 249 (in the war-year of 1918)[2] and the average for all those years was 205. The average number of days lost of possible mine operation, based on a potential full working year of 308 days, was never less than 74 except in the war years of 1917 and 1918, and in nineteen years of the period of forty-two years it was more than 100. With a calculated developed capacity of 970 million tons in 1923,[3] production in that

[1] Table 12, p. 363.
[2] Table 13, p. 364.
[3] Table 14, p. 364.

year was only 564 million.[1] By 1931 production had declined to 382 million tons, with an average of 160 days of mine operation. In 1932 the days of operation were only 145.

This is the tragedy of coal, with its waste of a non-restorable natural resource, its failure to serve the public economically and without interruption, and its insecurity and irregularity of employment for the workers. The United States cannot achieve "economic recovery," toward which its new legislation is directed in 1933, without grappling with this problem of stabilization in its basic natural resources.

Toward the solution of this problem the Rocky Mountain Fuel Company has made a notable contribution. It has set forth fundamental principles for the conduct of human relations in the industry, and in response the workers have demonstrated their capacity for co-operation in increasing productive efficiency. The demonstration could be widely applied if it were not for the forces of disorganization and of inevitable conflict between human rights and property rights, which afflict the industry. The experience of this one company is most useful if it be regarded as *a challenge to the people of the United States to remove the obstacles which stand in the way of substituting "reason for violence" and stabilizing "employment, production and markets through co-operative endeavor and the aid of science."*

[1] Table 12, p. 363.

PART II

THE PROBLEM OF COAL IN THE UNITED STATES
A RECORD OF FAILURE AND A FORECAST
OF THE SOLUTION

CHAPTER IX

INSECURITY AND WASTE
A PROBLEM FOR WORKERS' ACTION

FOR nearly half a century insecurity and waste have characterized the coal industry[1] in the United States. From 1890 to 1932 the bituminous coal mines were open for operation an average of 205 days in a year; and the maximum year's employment in those four decades was 249 days, in 1918, during the World War period.[2] The idle days, continued year after year, reflect overdevelopment. This fact of overdevelopment is emphasized by the statistics of calculated capacity or possible production of the bituminous mines during the same period.[3] Assuming 308 working days a year, the calculation shows that capacity has far outstripped actual production,[4] so that, for example, in 1913 the annual output was 478 million tons (round numbers), while the capacity—that is, possible production—was 635 million tons. The highest capacity, as pointed out in Chapter VIII, was in 1923, 970 million tons, but the actual production in that year was only 564 million tons. By 1931, production was 382 million tons as against a capacity of 736 million tons.[5]

Overdevelopment causes loss of earnings for the miners through underemployment; wasteful processes of pro-

[1] This study has been confined to bituminous coal, which represents by far the larger supply in the United States.
[2] See Table 13, p. 364 and frontispiece.
[3] See Table 14, p. 364.
[4] Actual production is shown in Table 12, p. 363.
[5] See pictorial charts, facing pp. 179 and 184.

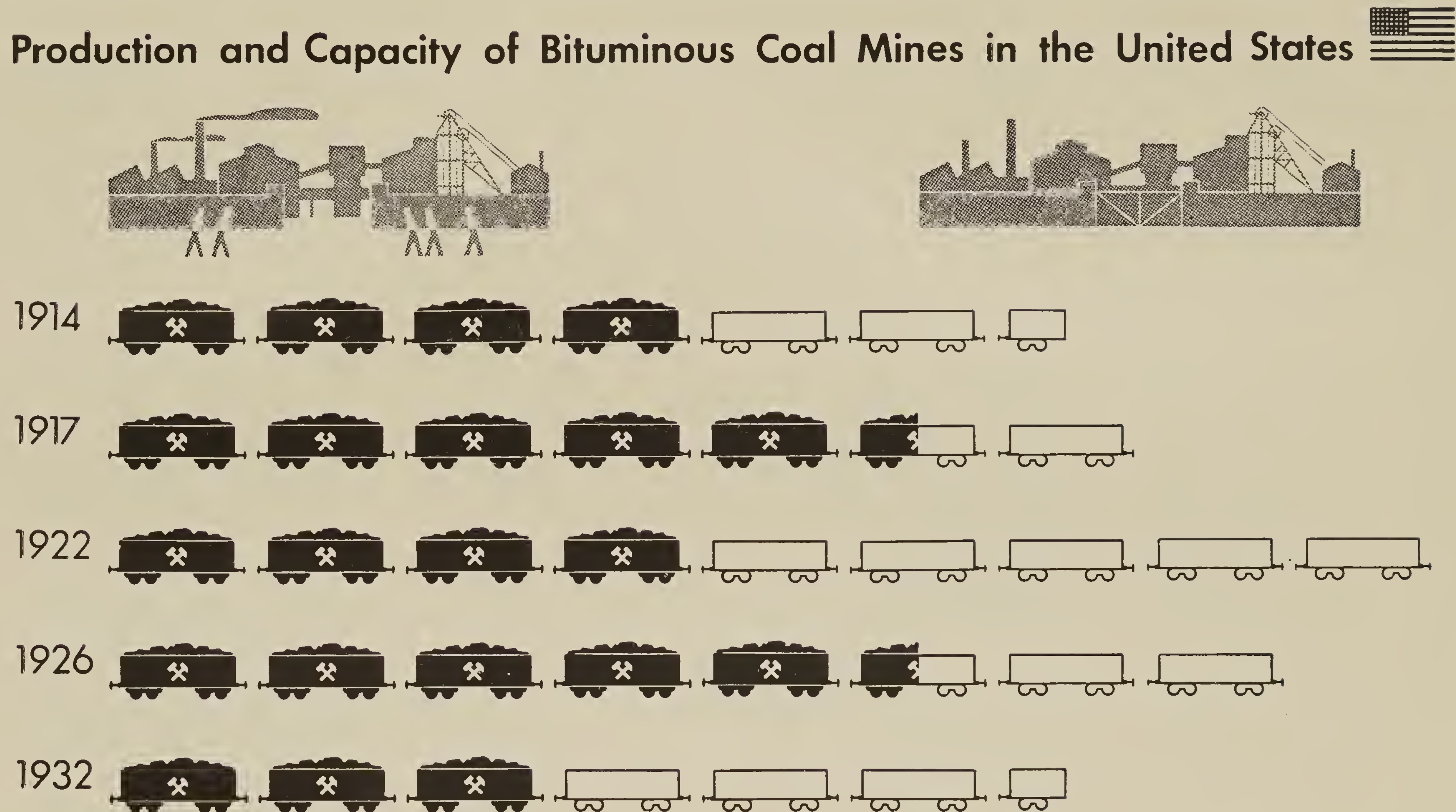
duction; higher prices to domestic consumers than their proportionate share in costs of production as compared with prices to industrial consumers, combined also with the uncertainties of fluctuating prices; and similar disorganizing effects upon all industries into which coal enters directly or indirectly as the source of power to move machinery or as a means of providing warmth and comfort in workshops and in public places; not to mention the waste of chemical by-products which this thriftless industry has grievously neglected. Thus overdevelopment of this non-restorable natural resource results in irretrievable, continuous loss to the people. Such continuous loss undermines standards of living, which obviously depend in the first instance upon the efficiency with which the nation's natural resources are utilized in production.

Both the age of steam, which is passing, and the age of electricity, which is coming, utilize coal; and whether or not there be substitutes, the fact remains that it is one of the important gifts of nature which is both non-restorable and indispensable in an industrial system dependent upon iron and steel and chemicals. Here, then, is a problem of major economic and social importance, yet neglected for years.

An Old Problem

Three quotations will show that the problem is not new and that its characteristic symptom, overdevelopment, is as far from effective treatment in the early 1930's as in the eighties and nineties of the last century. The first quotation is from a circular drawn up by a committee of coal operators and miners who met in Pittsburgh in October, 1885, to discuss their common problems. They thus described the economic state of the industry, after referring

Production and Capacity of Bituminous Coal Mines in the United States



Each black symbol represents the actual production of 100 million net tons of bituminous coal
Each white symbol represents the potential excess production of 100 million net tons of bituminous coal

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to the lamentable conditions among the miners through reductions of wages:

> The widespread depression of business, the overproduction of coal and the consequent severe competition have caused the capital invested in mines to yield little or no profitable returns. The constant reductions of wages that have lately taken place have afforded no relief to capital, and, indeed, have but tended to increase its embarrassments.[1]

Again, in 1914, before the entrance of the United States into the war, which is generally blamed too exclusively for overexpansion of the industry, the coal operators' associations of Illinois and Indiana submitted to the President of the United States A Statement of Facts Concerning the Conditions in the Bituminous Coal Industry in the States of Illinois and Indiana. The following quotation shows the plight of the industry through overdevelopment:

> They have opened three mines where only two were needed; they have employed three men where only two were necessary. These mines and men can find productive work only during 175 instead of a possible 300 days in a year. . . .
>
> This idle time of the miners is not confined to one season or period during which they can find employment elsewhere. To the contrary, the men are always subject to call, for which reason they urge a greater daily wage that their annual income may be sufficient for their needs.[2]

The third quotation is also to be attributed to owners and operators, with the approval of the United States Supreme Court. In 1931 a group of operators formed a regional sales agency under the name of Appalachian

[1] Evans, Chris, History of the United Mine Workers of America. United Mine Workers of America, Indianapolis, 1920, vol. 1, pp. 148-149.

[2] Illinois Coal Operators' Association and the Indiana Bituminous Coal Operators' Association, A Statement of Facts Concerning the Conditions in the Bituminous Coal Industry in the States of Illinois and Indiana. December, 1914, pp. 2, 6.

Coals, Inc., with the object of regulating and stabilizing their market. Because of its uncertain status under the anti-trust laws forbidding combination in restraint of trade, the corporation was brought before the highest court of the land. The defendants, the companies involved, had prepared a brief, outlining facts about the industry and describing the injurious practices of its managers and owners. The Supreme Court summarized this information in the following paragraph in a decision dated March 13, 1932:

> The evidence leaves no doubt of the existence of the evils at which defendants' plan was aimed. The industry was in distress. It suffered from over-expansion and from a serious relative decline through the growing use of substitute fuels. It was afflicted by injurious practices within itself,—practices which demanded correction. If evil conditions could not be entirely cured, they at least might be alleviated. The unfortunate state of the industry would not justify any attempt unduly to restrain competition or to monopolize, but the existing situation prompted defendants to make, and the statute did not preclude them from making, an honest effort to remove abuses, to make competition fairer, and thus to promote the essential interests of commerce. The interests of producers and consumers are interlinked. When industry is grievously hurt, when producing concerns fail, when unemployment mounts and communities dependent upon profitable production are prostrated, the wells of commerce go dry.[1]

Thus the Supreme Court finds the industry "in distress" from "over-expansion," from the rivalry of substitutes, and from "injurious practices within itself," all resulting in drying up "the wells of commerce," because this industry is "grievously hurt," and as evidences of the hurt "pro-

[1] Supreme Court of the United States, No. 504, October Term, 1932, Appalachian Coals, Incorporated, *et al.*, Appellants, *v.* The United States of America (March 13, 1932), pp. 13-14.

ducing concerns fail, . . . unemployment mounts and communities . . . are prostrated."

The Supreme Court, viewing this distressed industry, found it legitimate for the defendants to combine to regulate their market. But the decision presented a paradox. Competitive practices had produced disorganization, as the Court recognized, and yet the combination was held to be legitimate because it would not eliminate competition. For, said the Court,

> in addition to the coal actually produced and seeking markets in competition with defendants' coal, enormous additional quantities will be within reach and can readily be turned into the channels of trade if an advance of price invites that course.[1]

Thus the corporation was declared to be lawful, but the decision left grave doubt as to whether it could be effective. Naturally the purpose of organizing a sales agency is to maintain a price level to insure profits; yet success in maintaining or raising prices apparently is self-defeating, since besides the competitors' coal already seeking markets "enormous additional quantities will be within reach and can readily be turned into the channels of trade if an advance of price invites that course."

In this decision the United States Supreme Court has summed up the old problem in its present form, and sketched by implication the possibility of still further overexpansion in the future, if in the present a group of operators should succeed in the effort to regulate production to fit the market and thus maintain prices and profits, with the resulting temptation to others to try for a similar success. Apparently the recognized objectives of private ownership in coal are doomed to defeat if the United States Supreme Court is correct in its analysis of the facts.

[1] *Ibid.*

On the one hand, the possibility of developing the large remaining supply of a non-restorable natural resource is to be the regulator of a combination which might otherwise restrain trade. In other words, the possibility of increasing the overexpansion, which in the whole history of the industry has produced unemployment, insecurity and economic waste, justifies court sanction to a group of the present private owners to try to regulate their production. If they should succeed and if a period of renewed prosperity should come, apparently the distress of the coal industry would once more be magnified by fresh accessions to excess productive capacity. And if, even for a time, they should succeed so well as to establish a measure of monopolistic control, they would subject the nation to the danger of "combinations in restraint of trade."

In reality the probable failure of any group of operators to establish such a monopoly when the resources are as large as in this country is really the ground of the Supreme Court's approval of the efforts of Appalachian Coals, Inc., to save its members from the evils of competition.

Coal in the Economic Crisis

Meanwhile in the deepening crisis of this decade coal presents a problem of grave and perplexing import. The dimensions of the problem were growing in the preceding decade of supposed prosperity. To the days of idleness of employed miners in operating mines must be added the unemployment as the numbers at work declined. In 1923 the number of men employed in and around the bituminous coal mines of the United States was 704,793. By 1925, which was generally regarded as a fairly prosperous year, the number had shrunk to 588,493, remaining at approximately that level in 1926 and 1927, but declining in 1928

Seasonal Fluctuation in Typical Years

Each symbol represents 5 million net tons of bituminous coal, monthly produced

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to 522,150.[1] These, of course, were the years before the stock market crash of 1929. Decline in employment was probably due partly to increased mechanization; partly to the use of substitute fuels, such as oil and natural gas; and partly to the inevitable reaction from the opening of too many mines during the war and immediately thereafter, when industries using coal likewise expanded and then declined from the peak while still carrying the burdens of overequipment and still inspiring the hope of re-employment on the part of workers laid off as excessive demand for their labor declined. Then came the general shock to capital in the autumn of 1929, with its immediate check upon production. In 1931 the number employed in soft coal mines was 450,213.[2] In 1932 it was 398,715.[3]

Thus whether due primarily to increased mechanization, or to use of substitute fuels, or to other factors, the industry began long before 1929 to increase the general volume of unemployment[4] to which, after 1929 it also made a large contribution. In 1932 the bituminous mines averaged 145 days of operation and 163 days of idleness.

The Problem Officially Defined

The present state of knowledge of the coal industry and the bearing of this problem upon the economic crisis was summed up by the economist of the National Recovery Administration, Dr. Alexander Sachs, at hearings on a code for the bituminous coal industry in Washington in August, 1933. He began by quoting Justice Holmes, that "there are times when education in the obvious is far more

[1] U. S. Dept. of Commerce, Bur. of Mines, Coal in 1930, p. 653.
[2] U. S. Dept. of Commerce, Bur. of Mines, Coal in 1931, p. 426.
[3] U. S. Dept. of Commerce, Bur. of Mines, Statistical and Economic Surveys, Weekly Coal Report, August 19, 1933, preliminary survey.
[4] U. S. Dept. of Labor, Bur. of Labor Statistics, Monthly Labor Review, September, 1933, p. 636, shows steady increase in average hourly earnings since 1922.

important than investigation of the abstruse,"[1] thus confirming the statement made here, that there is general agreement regarding the facts of the coal problem. He summed it up as follows:

> The coal industry thus presents the spectacle of an overdeveloped, undermanaged industry, in a continuous state of internal and external economic struggle.
>
> The secret, if it is a secret after years of publicity given to the problems of the coal industry, lies in the fact that under the regime of competitive individualism to the limit, no one mine, no one company, could alleviate the handicaps alone. In fact, any forward step made by one mining company, good by itself, brings about conditions that are prejudicial to the industry as a whole, and makes the inherent contradictions only more acute.
>
> And even if by the move of a magic wand the demand for coal should double, and the partly idle mines begin to cover the financial charges on their past excessive investments and even show some profit, then bankrupt mines will be reopened, and new mines will be opened and the competitive war will go merrily on. Then retrenchment, wage cuts, strikes, unemployment, cut-throat competition, bankruptcies, commence all over again. The old squeaky merry-go-round will again commence to cycle: too many mines, too many miners, too much equipment, too little management, no planning, no profits, no living wages.

The statistics on which this conclusion was based show that capacity reached its peak in 1923, when the mines could have produced 970,000,000 tons a year if they had been open for work 308 days, the full working year. Mines had been opened "in regions relatively remote from markets," and this condition immediately resulted in a down drag upon wages, since these remote mines "could continue to exist only by paying wages lower than the rates prevailing in the fields lying closer to the markets." It was

[1] National Recovery Administration, Washington, Release No. 237, August 12, 1933. For complete text, see Appendix XI of this volume.

pointed out that the total payroll constitutes 65 per cent of the cost of production at the mine, so that

> the fixing of the wage rate in any field at a competitive level becomes a matter of economic life and death. With a chronic surplus of labor the non-union mines of the South found they could obtain all necessary workers at much less than the 1924 wage of $7.50 a day under the ill-fated Jacksonville agreement.
>
> Thus was created a situation where in the last quarter of 1924 operators in the Central Competitive Field paid $7.50 for an eight-hour day, while operators in West Virginia paid the equivalent of $4.79 a day.

How this condition affected the strength of the trade union, appears in the following statement by Dr. Sachs: "Lower labor costs enabled them to capture much of the business of the northern mines. While the South increased its production enormously, the unionized mines languished."

Apparently this condition was perpetuated by the setting of freight rates by the Interstate Commerce Commission. Speaking on behalf of the National Recovery Administration, Dr. Sachs said:

> The schedules of rail rates have developed without the benefit of a continuous policy or a local basis. Differentials in rates have been granted in order to compensate for the disadvantage of greater distances to market, often without full appreciation of their ultimate effects. Once fixed and a new field developed, the rate becomes a vested interest, which can be changed only with the greatest difficulty. Increases and decreases have been made until a curious pattern has been achieved, and original inequities have been lost and found and pyramided in the maze of the present rate structure.

The conclusion drawn showed in part the relationship between coal and the railroads: "It is obvious that the coal problem is not that of production alone, but one including transportation as well."

Moreover,

> in addition to the complexity of rate schedules the rates on coal have advanced from time to time until the railroads have acquired the position of having a greater stake in the bituminous industry than the coal operators themselves. In 1929, when the average f.o.b. mine realization per ton was $1.80, the revenue received by the railroads was apparently 1.3 times as great as the revenue-coal handled. With the average mine realization much lower for 1932, the average revenue per ton for the railroads was probably twice as great as that to the operator.

After discussion of the causes of "the chronic state of virtual chaos" (to which reference will be made later in this chapter), and an outline of facts on technological changes and competition with other fuels, Dr. Sachs draws the conclusion that "the consequences of this excess productive capacity, magnified by the new technology during the last decade, have been to create in this always competitive industry an economic warfare for markets."

Causes of Insecurity and Waste

The facts which have been given regarding fluctuations in coal production in American industry reflect the causes. Dr. Sachs listed them in the following statement:

> The causes of the chronic state of virtual chaos in the bituminous coal industry in the past decade may be listed as follows:
>
> (1) Excess capacity stimulated by the Great War;
>
> (2) Transportation differentials unco-ordinated and inequitable in terms of the whole economy and the use of the fuel in the varying markets;
>
> (3) Wage differentials unco-ordinated and inequitable in

terms of the whole economy from the point of view both of competing operators and competing workers;

(4) Uneven technological improvements in coal production in the various fields, which unequally increased supplies. This tendency to overproduction was in turn fostered and aggravated by the wage and freight differentials;

(5) Technological economies in the use of coal, which have continuously and markedly reduced the demand;

(6) More importantly revolutionary technical displacements of the demand and the outlets for coal by reason of the development of competitive fuels under conditions of competitive and wasteful exploitation of natural resources, which, while increasingly hard on the substitutes, have been crushing on the older fuel thus displaced;

(7) Legal restraints hitherto existing which prevented agreements for the organization of the industry, the marketing of the product, and the balancing of production with consumption and co-ordination of such production with that of substitute and competing fuels.[1]

But these causes operating during the decade prior to 1933 could be matched by more fundamental basic causes of overdevelopment. Dr. Sachs said:

The condition of overdevelopment in the bituminous coal industry dates back many years. . . . Among the causes of overdevelopment were:

The great abundance of the natural resource, accessible at small cost;

The common law concept that transferred ownership of mineral with the original grant of the surface land, causing title to the underlying reserves to pass into the hands of some millions of separate owners, each of whom naturally wanted to profit from his ownership.

Again, according to Dr. Sachs, "the much discussed 'coal problem' is thus but one of the endproducts of our national

[1] For complete text, see Appendix XI, p. 367.

policies or rather lack of policies relating to the ownership and development of the country's natural resources."

To one aspect of ownership, Dr. Sachs makes but a passing reference. Speaking of the "economic warfare for markets," he says: "Price cut has followed price cut, and large consumers have been able to practically set their own prices." Here emerges an exceedingly important point in the problem of the bituminous coal industry. It is commonly regarded as a problem of competition between many owners, neglecting the fact that there is a primary and continuing control exerted by industrial consumers. The majority of the consumers of bituminous coal are not domestic users, purchasing for their own homes, but industries—such as steel mills, railroads, public utilities, and many others. For these industries, coal is merely an element in cost of production; its price must be kept as low as possible. Owners, many of whom are interlocking companies, find it better to keep the price of coal low and to make their profits in steel and other fabricating industries. Thus arises the extraordinary situation of the coal industry selling its product to industrial users at less than cost of production. If these industrial users own mines, the so-called "captive" mines,[1] they will keep the price low and get their profits out of their own product as a means of controlling the price charged to them by the independent operators and thus keeping down costs of raw materials. Similarly, industrial users, desiring low costs of raw materials, will, on the one hand, purchase and hold coal lands for future use, and, on the other hand, stimulate the opening of new mines, under either their own or other management, thus increasing the excess capacity of the industry.

The bituminous coal industry is divided among many

[1] A "captive mine" is one owned by an industry which uses the output in its own production.

owners. One aspect of private ownership which deserves discussion is that this splits up the industry into separate units of management, each with its inherent objective of securing as large as possible a proportion of a profitable market. In the nature of this system, the problem of planning and managing the industry as a whole is never envisaged. In contrast with this total objective is the purpose which the annual report of any coal company would reveal, namely, profitable operation for that particular company.

At the risk of further emphasizing the obvious, this objective of a particular company, in contrast with the objective of a scientifically managed[1] industry as a whole, needs further analysis because of its importance as a factor in the problem of coal. In the task of making a profit, a coal company naturally must find a market, and to that end it must set a price no higher than its competitors' prices, unless it has a special competitive advantage in the quality of the coal or the service rendered or in some other means of attracting buyers. Its price must cover its cost of operation, in which wages and salaries are the largest items, but in which new equipment, care of machinery and property and taxes must be covered, all directed toward the earning of the fund to yield a current return to investors, that is, to pay not only interest for the use of capital but to compensate owners as owners through profits; otherwise that asset of business operation which is more important than dollars—namely, credit—will not be obtained.

To achieve this objective, the first effort is to keep prices as high as possible; and when the demands of active industries for coal and a domestic market of prosperous consumers are sufficient, this may be feasible. Given, however,

[1] See p. 213 for a definition of scientific management.

an abundant supply of bituminous coal, rising prices lure other investors; new mines are opened and the market has to be shared with a larger number, with the result of reducing production below capacity. The mines are then open less than the full working year, with resulting unemployment for the miners and high cost of carrying fixed charges. In the effort to sell more coal, price-cutting begins and discriminatory rates are offered.

Another way to gain a larger fund for profit is to decrease cost of production. Wages being the largest item, wage-cutting becomes the more tempting to employers in the mining industry. The miners' resistance is made difficult because with the overdevelopment of the industry the working force becomes too large and always miners who work only part of the year are ready, in the hope of more work, to take reduced pay. To keep them organized in a demand for suitable wages in the face of the owners' opposition to the union's success in raising wages, and to extend this organization over a sufficient area of the industry to control the wage scale, is a task of staggering proportions, as is shown in the history of the United Mine Workers of America.

If, on the other hand, effort be made to overcome these competitive conditions by agreements between the union and associations of employers, always the inherent struggle for profit for a particular operation endangers the agreement, especially if a whole region of coal production remains outside of any agreement. West Virginia, with its abundant coal and its large number of new operations during the war, has played this disorganizing role against the efforts of workers and some operators in other regions to maintain union agreements and to stabilize wages.

Closely related to this discussion of ownership as determining the objective of management, is another consideration, namely, the relation of coal to the "land question." Coal, lying below ground, is a hidden source of wealth. When discovered, it gives new value to the land above it. Thus it is not merely a product susceptible of use in industry, classifiable in economic theory as an object upon which labor is to be expended, and in the capitalist system as a commodity requiring privately owned capital for its production and distribution and paying interest and profits to the owners of capital; but it is also an element in the value of land and subject to the claims of the prevailing system of private property therein. It pays rent in the form of royalties to land-owners, as well as yielding returns to capital in interest and dividends.

Mining stocks have been notorious for their insecurity. Mining property has been a lure for land speculators, and the overdevelopment of productive capacity of coal mines has been a reflection of speculative stock market transactions quite as much as an indication of capital seeking sound investment. On the other hand, financial interests and the powerful basic industries have been aware of the importance of ownership and control of this raw material for their operations.[1] Thus coal is part of the land question, as well as an element in the problems of production and utilization of raw materials.

Moreover, it is a special kind of land question, because it is non-restorable; and a plan for its maximum utilization must take account of its inevitable exhaustion at some fu-

[1] It would be timely to study the shift in ownership of coal mines which has probably occurred during the industrial depression since 1929. Properties involved in serious losses have probably been acquired by powerful interests which could afford to hold them for operation in the long future, having acquired them from necessitous owners willing to take a low price. The part played by this shift in ownership during periods of depression in the building up of a large fortune has been described in a recent book, Mellon's Millions, by Harvey O'Connor (John Day Company, New York, 1933). While popularly written, the analysis of documents and source material in this book is useful for investigators.

ture date, depending upon the rate of production. Production becomes more difficult and more "expensive" in terms of money as the supply decreases; it is harder to take the coal out of old mines, and thus "costs" vary. And as a result, effort to establish uniform prices or uniform wage rates or indeed any concerted action by separate companies is constantly thwarted by the varying costs of their operations.

But the point to be emphasized here is that management cannot have a scope for control wider than the ownership with which it is associated; and private ownership of a part of the industry can never have the objective of scientific management of the industry as a whole. A single company may extend its control by agreement with other companies; but even then their separate interests may break up the agreement, as happened in the Northern Colorado Coal Producers' Association, where competition for a share of the restricted market led to destruction of the very standards for prices (the decision not to sell below cost of production) upon which the separate profits depended.

Conflict Between Workers and Owners

As competing interests between companies break up agreements whereby management might function over a larger area of the industry, so, too, within any company there is a conflict between workers and owners. Private ownership, seeking profits, is inherently in conflict with labor, seeking to raise wages. At best, agreements between trade unions and employers constitute a kind of truce based on reconciliation of competing interests. The owners' immediate objective—to find a market for a given output at a fair price—is usually accomplished by limiting or expanding production in response to the market price. The company which is ready quickly to expand production in a time of rising prices may make quick profits; and when prices decline, that company which can most quickly decrease its costs will retain its profits longest. Since labor is an important element in costs, the effort is to keep wages from rising too high in a rising market and to lower them as quickly as possible in a decline.

Here emerges the struggle between "labor and capital," which in the coal industry is a struggle between miners and management. It is a struggle for power, since each side recognizes that the important point is not the rate set in a given situation but the relative strength of the two parties to the bargain. This is because the interests of the two are in conflict. For this reason, "recognition of the union" is regarded by workers as vital and worthy of sacrifices in a prolonged strike; while the owners of industry, realizing that an agreement with the union prevents quick cuts in wage rates, resist recognition with all their might. Thus in the last analysis it is the workers who seek to raise standards of living; while industry, composed as it is of privately owned separate companies, each aiming to attain its immediate objective by lowering wages, lowers standards.

Yet victory for an industry in thus lowering its workers' standards of living lowers the general level of consumers' purchasing power and lessens the capacity of the market to absorb the output of industry. When an industry succeeds in selling at a profitable price a low-cost output produced with cheap labor, in the end it must meet the difficulty that profitable selling will cease if people have not the money to buy. Thus there can be no fundamental reconciliation of interests between workers and management in privately owned industry.

Thus coal has a long history of disorganizing and wasteful practices. In it we have a picture of exploitation of man by man; denial of opportunity to earn a living to those who have chosen the occupation and acquired skill in it; denial of security or proper living conditions in the communities where miners live; irregular and wasteful service to the domestic consumer; and waste of a natural material which cannot be restored and yet is essential in a mechanized iron age like our own.

While these characteristics have been true for many years, the problem of coal has taken new forms in the present general industrial crisis. In such a crisis it can no longer be ignored. The general industrial depression cannot even be alleviated nor its fundamental problems understood without attention to the coal-mining industry and to its 300,000 surplus workers. Probably for 200,000 of them it could find no place even if business in general were "normal." That is why the relief workers' efforts to find a "permanent" solution for unemployed miners living in their areas are seen to be futile in the light of facts as to the fundamental causes of unemployment and overdevelopment in the coal industry. The problem here is not merely the number of displaced workers, important as are their needs, especially as they have been in distress for many years prior to the present recognized depression. It is a problem of unsound foundations in American industry.

Government's Failure to Find a Solution

The significant point for American industry today is not only to appraise the facts regarding the coal industry, but to discover why, when these facts have been known for so many years, no effective action has been taken by the nation. Repeatedly it has been necessary for the federal government to intervene, as in the anthracite coal strike in 1902; in the work of the Industrial Relations Commission in 1914; in the necessity for establishing the Federal Fuel Administration during the World War; in the appointment of the President's Bituminous Coal Commission following the strike of 1919; in the extensive investigation by the Coal Commission appointed by act of Congress in 1923; and finally in the National Industrial Recovery Act in 1933. Yet if the essential elements of some of the proposals made in the past be analyzed, they will be found not to correspond with the causes of the trouble as now recognized; and moreover, it will be found that even these official proposals were not acted upon, or that inadequate action was taken.

The United States Coal Commission ended its work on September 22, 1923, after an active life of eleven months, during which it employed at one time more than 500 persons and spent a little less than $600,000. After its consideration of the mass of information gathered in its study, the Commission first analyzed the anthracite industry, declaring the fundamental evil to be "monopoly—the treatment of limited natural resources as if they were like other private property"; and then drew the following conclusion regarding bituminous coal:

> The mining and marketing of soft coal is the larger and, from the point of view of the national economic life, the more important industry, and here the fundamental evil is overdevelopment, irregularity of operation and consequent enforced idleness of miners and of invested capital. This problem, like that of anthracite, can be solved only by the Federal Government, in co-operation with the industry, working on a national scale and with a clearly defined national policy.[1]

[1] Hunt, Tryon and Willits (Editors), What the Coal Commission Found. Williams & Wilkins Company, Baltimore, 1925, p. 403.

The act which authorized the appointment of the Commission had charged it to make recommendations to the President and to Congress "which would be deemed helpful in determining and establishing a wise and efficient policy by the Government relative to said industry."[1]

This "wise and efficient policy" was described by the Commission's staff as resting on two fundamental principles: (1) that "coal is clothed with a public interest"; (2) that it is more than a commodity—it is a service, involving transportation as well as production. Therefore the proposal for regulation was that a Coal Division be created in the Interstate Commerce Commission, emphasizing that "the key to coal is transportation" and providing for governmental regulation analogous to the regulation of railroads. The second recommendation was that "the industry can reform itself."

Passing over for the moment the efficacy of these recommendations, it is important to emphasize that neither was adopted. This may seem curious, in view of the fact that it was the Secretary of Commerce, Herbert Hoover, who actively initiated the movement leading to the establishment of the Coal Commission. This was one of the results of the President's Conference on Unemployment, appointed in 1921 under Mr. Hoover's chairmanship. Thereafter for ten years the same political party remained in power; yet for a time the report even remained unprinted except for the book commercially published, which has just been cited; and so far as appears to the public, no effort was initiated to pass this legislation, either while Mr. Hoover was Secretary of Commerce or during his presidency.

In 1932 the United Mine Workers made an effort to secure action. On their behalf the Davis-Kelly Bill was in-

[1] *Ibid.*, p. 407.

troduced in Congress.[1] Its purpose, as described in the Senate bill, was

> to regulate interstate and foreign commerce in bituminous coal; provide for consolidations, mergers, and co-operative marketing; require the licensing of corporations producing and shipping coal in interstate commerce; and to create a Bituminous Coal Commission; and for other purposes.

The essential features of the bill were to encourage the organization of operators to combine to regulate the market without interference by the anti-trust law, while guaranteeing to labor the right of "collective bargaining"; and enforcing both these measures by a licensing system. The bill was bitterly opposed by operators, who were unwilling to grant to the miners the right to organize, though they might have welcomed freedom from anti-trust laws. The bill never reached a vote in either House or Senate.

That the feature of the Davis-Kelly Bill which permitted marketing organizations without interference by anti-trust legislation was acceptable to operators, was shown in the organization of Appalachian Coals, Inc., as a regional sales agency for a number of coal companies. This did not require legislation, but, as already noted, it was brought before the United States Supreme Court and received a favorable decision. This may be said to be the only governmental action on the coal industry by any branch of the federal government in the decade prior to 1933, when, as the facts show, the problem was becoming increasingly acute and an official commission gave wide publicity to the facts.

While in the Supreme Court decision in the case of Appalachian Coals, Inc., operators were set free to establish sales agencies, thus winning a victory in the struggle for

[1] Seventy-second Congress, First Session, Senate 2935, January 7 (calendar day January 12), 1932.

markets, the trade union could show no victory but rather a series of defeats in that period. The action of the government with reference to the union was the encouragement, by the Secretary of Commerce, of the Jacksonville Agreement which was adopted in 1924 between coal operators and the United Mine Workers of America for a period of three years. In maintaining the basic day wage of $7.50, which had been attained during the war by agreements encouraged by the United States Fuel Administration, the theory was that during the three-year period some of the overdevelopment might be curtailed.

The following comment on this agreement appears in the Annual Report of the Secretary of Commerce, Herbert Hoover, for 1924:

> Through cooperation by the department with the unionized operators and with the leaders of the United Mine Workers, a long term agreement has been entered upon, which insures industrial peace in the industry.[1]

The Secretary included this in a summary of steps taken by the Department to remedy the old, familiar difficulties. He declared:

> Investigation made early in this administration, published in various departmental documents, revealed the high instability of the bituminous coal industry and the fact that it was functioning at great national loss.[2]

To correct this condition, the Secretary said:

> Committees of important men representing various phases of the problem were appointed and systematic cooperation has been set up in remedy. . . .
>
> Through cooperation of trade associations of the principal

[1] U. S. Dept. of Commerce, Twelfth Annual Report of the Secretary of Commerce, 1924, p. 13.

[2] *Ibid.*, p. 12.

industrial consumers, through chambers of commerce and public utilities a large amount of regular summer storage has been induced. Through the fine cooperation of the railways greater equipment and terminal facilities have been provided and car shortages have been largely eliminated.[1]

Then was cited the co-operation by the Department with the unionized operators and the leaders of the United Mine Workers, just quoted, and the whole experience was summed up as follows:

The industry is now on the road to stabilization. The benefits lie not only in the provision of coal to the consumer at lower prices than have been attained at any time since the beginning of the war. The gradual elimination of the high-cost and fly-by-night mines is bringing about a greater degree of concentration of labor upon a smaller number of mines, the increase of days of employment per annum, and thus a larger annual return to the workers. The inherent risks in the industry will be decreased because the efficient and stable operator will no longer be subjected to the type of competition that comes from those mines that exist only to take advantage of profiteering periods. No better example of cooperation to secure the elimination of national waste can be presented. The past year, as compared to the year 1920, shows a saving to the consumer of about $1,000,000,000, which must be reflected in decreasing costs of production in every avenue of industry and commerce.[2]

On November 21, 1925, however, John L. Lewis, president of the United Mine Workers, wrote to President Coolidge, calling attention to the failure to carry out the co-operative agreement which had seemed to the Secretary of Commerce so promising. "The accomplishment," he wrote,

met with general public approval, as the agreement gave promise of security and advantage to the public with respect to the

[1] *Ibid.*, pp. 12-13. [2] *Ibid.*, pp. 13-14.

factors of continuous supply and price. Agencies of the Federal Government co-operated in making possible the agreement, the Departments of Justice, Commerce and Labor participating.[1]

Despite the auspices for this co-operation between the operators and the union, Mr. Lewis had to report, a year and a half later:

> Notwithstanding the acknowledged virtue of the before-mentioned contract, I am compelled to authoritatively advise you that substantial coal-producing interests, signatories to the arrangement, have violated and repudiated their written word of honor and in so doing have impaired the integrity of the wage structure throughout the entire bituminous industry.[2]

Raising the question as to whether the federal government would not think that it could intervene to persuade the operators to maintain their agreement, the president of the union went on to say:

> If it should occur that the Federal Government is disposed not to intervene for the protection of a meritorious wage agreement, might the mine workers believe that their own efforts in that direction may be considered as justified?[3]

This is not the place to describe the history of the Jacksonville Agreement, but merely to point out what has hitherto been indicated in quoting the statement of Dr. Sachs, that it resulted in curtailment of production in the unionized fields, where a comparatively high wage scale was being maintained, and one by one operators who had joined in the agreement broke it and the United Mine Workers found no support from the government in attempting to maintain it. Again in the struggle between miners and management the struggle between operators

[1] New York Times, November 23, 1925. Quoted in Labor Agreements in Coal Mines, pp. 317-318.
[2] *Ibid.*, p. 318.
[3] *Ibid.*, p. 319.

for a share of the market and for higher prices resulted both in the lowering of wage scales and in the breaking up of collective action between organized miners and organized management.

Failures of Trade-Union Leadership

Yet in the face of this defeat the leadership of the United Mine Workers developed no adequate program of workers' action. With the failure to secure signed agreements with the operators, the revenues, which come primarily from dues and through the check-off of miners' dues by the operators, as provided for in these agreements, fell away both for the national[1] office and for the districts. Thereupon in district after district the national office took over the affairs of the district unions on the ground that they had lost their autonomy. This meant that district officers were appointed by the national office rather than elected by the miners. Moreover, in those districts where agreements were secured the check-off was paid direct to district officers, thus giving the control to the national office. The local unions were cut off from effective influence in the affairs of the organization.

Protest movements developed. First came a struggle between District No. 12, Illinois, and the national office of the United Mine Workers.[2] When this ended, with the national office in control, the protesting miners formed a new union, the Progressive Miners of America, which is now active in Illinois and has signed contracts with a number of

[1] The word "national" is here used interchangeably with "international" which the union itself uses for the headquarters' organization for the United States and Canada.

[2] The beginnings of this conflict are briefly described in the introduction to Labor Agreements in Coal Mines, a study of the collective agreement in Illinois, previously published by the Russell Sage Foundation. (See reference in footnote, p. 15.)

the operators there. More recently, anthracite miners in one district of Pennsylvania have broken away and formed a new organization. The National Miners' Union, mentioned in the early pages of this study, is active in the Far West and in other areas. These divisions and the dictatorial tendencies in the United Mine Workers have made it more and more difficult for the rank and file of the miners, through united protest, to protect themselves against constant onslaughts on their wage scale.

Agreements were signed for them by the district and national officers. In these agreements the wage scales varied widely in different regions, thus greatly increasing the disorganization of the price scale. Moreover, these variations tended to concentrate production in the mining areas where wages were low, thus further jeopardizing the living standards of the miners in those areas where a higher wage scale had been obtained; their wage scale was maintained, but production and employment fell off. These varying wage scales were destined to play a disastrous part for the miners in the procedures adopted under the National Industrial Recovery Act of 1933.

National Industrial Recovery Act of 1933

In June, 1933, the National Industrial Recovery Act was passed. It was welcomed with enthusiasm by the leaders of the United Mine Workers, who declared that it embodied the essential features of the Davis-Kelly Bill. In essence, the new act called for "self-government in industry"; that is, it freed industry from anti-trust laws, provided that trade associations would formulate codes; and then in due course they were to become the administrators of these codes for regulating their own practices. On the other hand, the law promised to labor the right of collective bargaining.

The first section of the law was entitled "Declaration of Policy." A national emergency was declared to exist, and its symptoms were "widespread unemployment" and "disorganization of industry." This disorganization, Congress declared, "burdens interstate and foreign commerce, affects the public welfare and undermines the standards of living of the American people."

To meet the national emergency it was declared to be "the policy of Congress" not only "to remove obstructions to the free flow of interstate commerce," but also

> to provide for the general welfare by promoting the organization of industry for the purpose of co-operative action among trade groups, to induce and maintain united action of labor and management under adequate governmental sanctions and supervision, to eliminate unfair competitive practices, to promote the fullest possible utilization of the present productive capacity of industries, to avoid undue restriction of production (except as may be temporarily required), to increase the consumption of industrial and agricultural products by increasing purchasing power, to reduce and relieve unemployment, to improve standards of labor, and otherwise to rehabilitate industry and to conserve natural resources.[1]

The paragraph which won wide support for the act from the trade unions required every code established in accordance with the law to contain the provision "that employees shall have the right to organize and bargain collectively through representatives of their own choosing."[2]

[1] Seventy-third Congress, Public No. 67, H.R. 5755. An Act to Encourage National Industrial Recovery, to Foster Fair Competition, and to Provide for the Construction of Certain Useful Public Works, and for Other Purposes. (Approved June 16, 1933, 11:55 a.m.) Title I, Industrial Recovery, sec. 1.

[2] *Ibid.*, sec. 7 (a).

Moreover, it was provided that

> The President shall, so far as practicable, afford every opportunity to employers and employees in any trade or industry . . . to establish by mutual agreement, the standards as to the maximum hours of labor, minimum rates of pay, and . . . other conditions of employment.[1]

The efficacy of the National Industrial Recovery Act in relation to the coal industry depends upon whether it is true that the basic cause of the difficulty in that industry was the limitation set by anti-trust legislation upon the legality of combinations by coal operators. The analysis already given indicates that this is not the real difficulty. Yet it was the theory of those who defended the act that it would offer the opportunity to eliminate destructive competitive practices.

Thus Dr. Sachs, parts of whose statement as economist of the National Recovery Administration have been quoted, declared at the coal code hearings in August, 1933:

> Despite the obvious need for control of production, collective action to limit output or control of markets, was blocked by the anti-trust laws. Direct agreement to apportion markets was illegal. Indirect understandings of a kind reached in some other industries were impossible among thousands of mines driven on by the remorseless pressure of overhead and fighting for a limited market.

Therefore he concluded:

> Speaking in a personal capacity, it seems to me indisputably clear that the only solution lies in organizing and planning for the industry as a whole, and not through continuing the laissez-faire cut-throat competition.

This is not the place to appraise results of the National Industrial Recovery Act, but rather to measure its prin-

[1] *Ibid.*, sec. 7 (b).

ciples against the analysis of problems already given. Will the organizing and planning for the industry as a whole, which Dr. Sachs believes to be necessary, be achieved by giving authority of self-government to a trade association representative of the operators? Will this "planning for the industry as a whole" protect the standards of living of the miners and utilize this natural resource for the increased wealth of the nation and in the ultimate standards of living of all the people? Private ownership and profits still continue. Will it be possible to reconcile the interests of one operator with those of another, of one region with those of another, and the interests of workers with those of employers, while the separate ownerships and separate efforts to secure profits continue as a basic conflict of interests?

A discouraging sign became evident at the outset in the decision regarding hours of work. The United Mine Workers asked for a maximum of 30 hours and employment for five days in a week. It is worth noting that this was one of the main demands of the miners in the strike of 1922. The union's contention put forward in 1933 before the National Recovery Administration was borne out by the figures of Dr. Sachs, who gave the following estimate:

> If one assumes that the production during the next six months will amount to as much as 200,000,000 tons (which is only slightly higher than the current rate . . .) a rough estimate of employment to be expected can be made. If 32 hours were set as the maximum working time and an average working time of 30 hours was achieved, the average number of workers required would be approximately 385,000 men. If the average attained were but 28 hours, the average number required would be 412,000 men. If the average time achieved were 35 hours (approximately the same as for 1929) the average employed would

total only 330,000 workers. These numbers compare with 503,000 men employed in 1929.[1]

Yet in the face of these figures and though the act had as one of its important purposes "to reduce and relieve unemployment," the code presented by the operators and accepted by the President as administrator of the act contained the eight-hour day and the 40-hour week. The eight-hour day had been won by the miners in 1898, and since that time obviously the increased productivity of the mines has suggested the importance of regulating production by shortening hours. The reason for this failure to act upon the obvious would appear once again to lie in the conflict of interest between miners and management, since hours, like wages, enter into the cost of production and any effort to increase cost of production is resisted by the owners. Under these circumstances, the "united action of labor and management" called for by the National Industrial Recovery Act would appear to be obtainable only by a surrender of interests on one side or the other. In this instance the government stood on the side of the employers.

A new element, which is to be attributed to the hopes aroused among the workers by the guaranty of the right of employes to bargain collectively, has been a great accession to the United Mine Workers throughout the country. Miners began organizing as soon as they knew that the National Industrial Recovery Act gave them that right. When the code was adopted a large number of operators signed trade-union agreements. A significant stumbling block, however, as might have been expected, was the refusal of the steel industry, with its control both as consumer and as owner, to accept a trade-union agreement in its coal mines (the "captive" mines, selling all their product to their industrial owners), thus bearing out the analysis

[1] Appendix XI, p. 367.

of the conflict already described in this chapter and emphasizing the pre-eminent importance of the relation of other industries to coal and their influence over its policies. The miner faces not only the operator but the corporations to which his employer sells, and the financial controls represented in those powerful industries.[1]

It was a brave group of miners working in the "captive" mines of the steel industry in Pennsylvania, who struck in the summer of 1933 for "recognition of the union," which they believed the National Industrial Recovery Act guaranteed to them. At the crucial moment between the hearings on the steel code and the hearings on the coal code, a new agency of government was established, the National Labor Board, under the power given to the President as administrator of the National Industrial Recovery Act, and the President's statement in announcing it called upon "every individual in both groups to avoid strikes, lockouts or any aggressive action during the recovery program."[2] The first situation to which this declaration was applied was in these "captive" mines, and the miners were instructed to go back to work while the National Labor Board would mediate their difficulties. The leaders of the union, as well as government officials, urged this upon them.

The whole situation is beyond the scope of this report to analyze; but briefly it may be said that, despite an agreement with the President, a supervised election under the direction of the National Labor Board, and finally a

[1] A further difficulty for the workers was the organization of company unions by the steel companies and other industries to circumvent the N.R.A.'s guaranty of collective bargaining.

[2] New York Times, August 6, 1933. This declaration by the President followed an appeal by the Industrial and Labor Advisory Boards of the National Recovery Administration, to "all those associated with industry, owners, managers, and employes, to unite in the preservation of industrial peace." John L. Lewis, president of the United Mine Workers, as a member of the Labor Advisory Board, was one of the signers.

decision by the Board, apparently intended to open the way to conference between officers of the United Mine Workers and representatives of the company, up to the present (January, 1934) the miners have not won "recognition of the union."[1] The United States Steel Corporation and other steel companies have repeatedly declared that they would not sign a trade-union agreement, and this indeed followed the declaration made by representatives of the steel industry at the hearings on their code in Washington in July, 1933.

A significant element in the administration of the code in the bituminous coal industry must be stressed. Objection was put forward by the operators to the establishment of a national code. The more powerful preferred separate codes for separate regions; and although the Administration finally won in its insistence upon one code, a curious form of code authority is set up in this industry, namely, a series of regional code authorities, appointed by the associated operators in the different regions, which hold the primary delegation of authority to administer it; and then out of these regional code authorities is created a National Bituminous Coal Industrial Board. After considerable delay, the president of the United Mine Workers was appointed by the government to sit on this Board. Thus in the set-up of the code, regional divisions and the same old struggle for markets are perpetuated, even though the units involved in the struggle may have gained strength through organization in their regional trade associations.

This same regional organization gave the opportunity to perpetuate the variations in the wage scale which seem

[1] At the Indianapolis convention of the United Mine Workers the last week in January, 1934, their officials made a hopeful report, promising that after the convention they would seek conference with the officers of the companies owning the "captive" mines, and saying that it was expected that an agreement would be signed. On February 21 such an agreement was announced in the press; but the union was not "recognized."

to have no justification in working conditions, productivity, or standards of living. The minimum basic rate for "inside skilled labor" per day was set, for example, at $4.60 in Pennsylvania and Ohio; $4.36 in northern West Virginia; $4.20 in southern West Virginia, the upper Potomac district of that state, eastern Kentucky, Maryland and Virginia; $3.75 in Missouri, Kansas, Arkansas and Oklahoma; and $5.63 in Montana. If there were a method of measuring the strength of the miners' organization against the strength of the controlling interests, including the industrial consumers, in these various regions, it would probably be found that these variations in wage rates correspond to the differences in strength as between the organized miners and the organized operators. A notable point in the study of Colorado which has been the subject of Part I of this report, is the fact that in southern Colorado, which is dominated by the Colorado Fuel and Iron Company, with its company union, the rate set was $4.44, and in northern Colorado, where the unionized Rocky Mountain Fuel Company is located, the rate was $5.00.[1]

The dangers to trade-union organization in this situation are obvious, since, in the struggle for markets, orders for coal may go to those operators on whose property the miners have not been able to maintain their organization sufficiently to protect the wage scale. The variations in wage rates measure the failures of the national union, which has given way in the protection of the miners' wage scale in so many important coal fields.[2] All of this illustrates once again the difference between a planned indus-

[1] National Recovery Administration, Code for the Bituminous Coal Industry, as approved September 18, 1933, by President Roosevelt, Schedule A, Basic Minimum Rates. The United Mine Workers in Colorado was able through negotiation to get these rates raised to $4.70 and $5.25 respectively.

[2] A further provision of the code required that all controversies should be settled by Coal Labor Boards for a period of not longer than six months, thus in effect outlawing strikes during that period.

try, which would standardize wages, and an industry necessarily disorganized by division into separate units, each struggling for its share of the market.

A Socially Planned Industry Impossible in a Capitalist System

It has been pointed out that no one challenges the facts regarding the mismanagement of the coal industry. Indeed the testimony brought out in the hearings on the coal code before the National Recovery Administration in Washington in the summer of 1933 underscored once again all that had been said by official and private investigators in the past. The most cautious investigator appears to be justified in drawing the conclusion that these evils are inherent in the system of separate private ownerships —that is, in the capitalist system. At least, it is clear that these conflicting private owners in the coal industry in the United States have never given security and proper standards of living to the miners, conserved natural resources, nor provided for the domestic consumer a regular supply at a dependable price.

The coal industry of the United States is a badly functioning branch of production, with disastrous effects for workers and consumers; in its failures the problem is presented, of how to manage this vital but non-restorable element so as to yield its maximum value in the material basis of American civilization. Yet it should be obvious that this problem cannot be solved or even envisaged for one industry alone. It is the problem of the total economic system.

The material basis of civilization takes shape in the standards of living of individuals and of communities. The coal industry affects the nation's standards of living in three ways:

1. Through the adequacy or inadequacy of the wages, regularity of employment, and living conditions established for its own workers[1];

2. Through the efficiency or inefficiency of its service to all industries using coal, and to domestic consumers;

3. Through its conservation or waste of a non-restorable natural resource which is part of the nation's wealth, so that its loss leaves the whole nation so much the poorer.

A Task for Scientific Management

To utilize coal for its maximum contribution to standards of living in these three directions, clearly would require scientific management of the industry as a whole.

"Scientific management" as here used refers to the well-known principles of that "science and art" as built up in American industry following the work of Frederick W. Taylor. Its history in America has too frequently associated the scientific management movement with efforts to secure high productivity at the expense of the workers. But its principles as interpreted by leaders in the Taylor Society include co-operation with workers.

Dr. H. S. Person, managing director of the Taylor Society, in a paper read at an international congress in Cambridge, England, in June, 1928, declared that

> considering both mental attitude and practice, and looking back from 1928 over forty-eight years of its development, scientific management may be restated as involving:
>
> The discovery by investigation and experiment of a factual basis for every determination of policy, program, product, ma-

[1] For these the coal industry has a more specific responsibility than many other industries, because often coal companies own not only the mines but the community; and control the housing, the local government, the education, and even the recreation of the workers and their families.

terial, machine, tool and method in the operation of an enterprise;

A system of control of operations, in terms of standards determined by the research and experiment, which brings individual specialized efforts into co-ordination with the result of a minimum expenditure of the human and material energies involved;

Both research and procedures which, although in design and application chiefly the work of specialists, must be open, reasonable, just, acceptable to all individuals concerned, and expressive of a common purpose and good-will.[1]

It is obvious, from this definition, that in practice scientific management is limited to an industrial enterprise. Management, whether scientific or otherwise, may be here defined as the structure and methods of directing a company as a whole in its economic function. If applied to the whole business of the coal industry, for example, management might be defined as the structure and methods of directing the production and distribution of the coal supply of the United States. In its application to a single company, the usage is familiar. When applied to a whole industry, it requires imagination to understand it. That fact is significant; it is a reminder of the fact that in the United States no industry as a whole has developed a mechanism of management. Thus in the coal industry the management which might direct the production and distribution of the coal supply of the nation is only the sum total of separate managements of separate companies.

Scientific management of the coal industry as a whole would have the following specific tasks:

1. To produce what is needed at a minimum cost of human

[1] "Scientific Management." In Report on the Development of Fundamental Relationships within Industry in the United States of America. Reprinted by International Association for the Study and Improvement of Human Relations and Conditions in Industry (now International Industrial Relations Institute), The Hague, June, 1928.

energy and with the maximum utilization of the nation's supply of coal;

2. To reduce to a minimum the drudgery, accidents, and hazards to health and life of mine workers; and to pay willingly and adequately a fair compensation for accidents;

3. To distribute in wages and through contributions to social insurance (including unemployment compensation and pensions available at an earlier age than in less hazardous and laborious occupations) a sufficiently large share of the value of the product to enable mine workers to buy as consumers their full quota of the high productivity of other American industries[1]; thus recognizing also the high degree of efficiency of American miners, the highest in the world;

4. To regularize production and employment;

5. To give free scope to the co-operation and skill of workers, technicians,[2] and scientists, by giving them full responsibility for local mine management; this would appear to follow from a complete application of the principles of scientific management;

6. To give the benefit of increased mechanization to the workers in decreased hours, lighter work, and higher wages; and to the consumers in lower prices;

7. To utilize to the full, scientific discoveries to increase the energy available from a given quantity and quality of coal; and to take advantage of substitute fuels to increase the nation's resources and to conserve them for future use;

8. To eliminate technical and economic waste—the technical waste due to failure to conserve the fuel and its byproducts; and the economic waste due to overdevelopment, excess productive capacity, and the unscientific multiplication of units of

[1] In the necessary task of balancing production and consumption, industry at present thinks first of restricting production by dividing up the market. The sound economic method of balancing, however, would be, first, to enable workers, by increased purchasing power, to obtain the goods and services needed and desired, and then to plan production to meet these expanding needs; while at the same time the increasing production would be the source from which enlarged purchasing power would be drawn.

[2] "Technicians" is here used for all "experts," whether as management engineers, technical engineers, or others who apply science to the day-to-day administration of an industry.

operation through opening too many mines; and the lack of a rational plan of relating a regional market to the nearest mines having a suitable quality of coal instead of the present practice of transporting coal to distant points to win new markets, encouraged by a system of freight rates set without a guiding production plan;

9. To relate coal to all other industries in a planned economy designed to raise standards of living to correspond with productive capacity of industry as a whole.

The mere recital of these tasks of scientific management seems sufficient to show that they are inherently beyond the power of private ownership of coal. Those which relate to reduction of accidents and hazards to health and life of mine workers, together with the tasks of providing wages enabling mine workers to buy as consumers their full quota of the high productivity of other American industries, and in general the suggestions regarding the giving of the benefit of increased mechanization to workers and to consumers, all meet with the inevitable obstacle that to private owners, competing for a market at a profit, wages and all other costs of labor are part of the cost of production; and if they are kept high by regulation of any kind—by agreement or otherwise—they either result in loss of the market to competitors with lower wage scales, or they stimulate mechanization, which in turn creates unemployment and further increases the burden of debt and stimulates overcapitalization.

Those tasks of scientific management already cited which relate to planning and regularizing production, taking due account of the advantage of using substitute fuels rather than bewailing their entrance into the market as competitors, and in general eliminating unscientific multiplication of separate units of operation; and the making of a plan for a market in terms of economies in transportation and the like, all assume the power and the motive on the part of separate owners to plan the industry as a whole. Realism demands recognition of the fact that the struggle for the market makes such industry-wide planning under profit-making ownership impossible.

The last item in the tasks of scientific management is seen to be so impossible under this form of ownership as to be merely a Utopian picture. It is "to relate coal to all other industries in a planned economy designed to raise standards of living to correspond with productive capacity of industry as a whole." Such a purpose contemplates not only industry-wide planning but the planned interrelationship of all industries; and it requires not only a plan for production but a plan for distribution so scientifically managed as to result in a progressive balance between all branches of production and consumption. With private, profit-making ownership, the unified control which is necessary for a planned economy is lacking.

But is it possible for government to regulate or to change the ownership of coal? Here emerges an equally important field of research. Economic studies have been too insufficiently supplemented and have had, on the whole, too little support from political studies, which are equally important if governmental action on economic problems is contemplated. The outline which has been given of the failures of government to remedy the recognized evils of the coal industry during these crucial years of its development in the United States, is a suggestion of the type of problem on which political research ought to accompany economic research. We have more illusions as to the power of government than we have as to the facts of industry.

Coupling the failures of industry with the failures of government in the history of the coal industry in the United States, suggests a reason for the inability of government to act. This reason is to be found in the economic conflicts between separate owners and in the cross-conflict between miners and management. As a result, the community or the state becomes a house divided against itself. The government, which is merely one function of the community, is not a supreme power able to hold the scales of justice in favor of greater efficiency or social righteousness, but must on the contrary be dominated by the strongest power among the conflicting interests which make up the community. A unified economic plan or a planned economy in the common interest could be achieved only if the causes of conflict in interests were removed. The history of failure of efforts to secure even a minimum of control by the federal government in the coal industry suggests that the economic power of owners is stronger than the government.

The National Industrial Recovery Act does not attempt to lessen this power. It takes the path of giving to the owners the nation's sanction in governing themselves, merely establishing "rules of the game," including minimum wages and maximum hours, while the minimum wage is not large enough for a proper standard of living, and the maximum hours are not short enough to give employment to all the miners. Most remote of all is any provision for stabilizing employment and eliminating further overdevelopment of the mines.

Objections to Governmental Operation

This twofold analysis of economic failures and governmental inhibitions against action suggests that the usual proposal for nationalization of the coal industry, under governmental ownership and operation, is as unpractical and unlikely to be achieved as the more conservative proposals for regulation put forward by the United States Coal Commission or the proposal for enlarged power to combinations of industry as a means of preventing unemployment and raising standards of living, which is the essence of the paradoxical National Industrial Recovery Act.

Nationalization, as a program of the taking over of the mines by the government, is predicated upon a gradual process of extension of governmental control on the assumption that this governmental control will be exercised in the interest of the whole people. On the one hand, history shows the resistance which has so far prevented the nationalization of mines in any capitalist country, despite its support by political parties, such as the Labor Party in Great Britain. On the other hand, even if resistance breaks down for one industry, such as railroads, for example, which have been nationalized in certain European countries, the control is too limited to make possible a thoroughgoing planned economy.

It is of interest to note here that coal is a problem in other nations as well as in our own. The four countries having the largest supplies of coal are, in the order of magnitude of this natural resource: the United States, Great Britain, Germany, and the Union of Soviet Socialist Republics.

Great Britain is attempting to regulate production in relation to the market, through the Coal Mines Act of 1930, which gives to owners of mines the power to achieve this regulation. They may submit a "scheme," which corresponds to the word "code" in the present American legislation.[1]

In Germany, regional syndicates of producers have had

[1] United Kingdom of Great Britain and Northern Ireland, Public General Acts, 1929-1930. His Majesty's Stationery Office, London, chap. 34, p. 425.

governmental sanction and control which has provided for representation of the miners' union. The essential aim has been to control production, and, as in England and the United States, private ownership is left untouched.

In the Soviet Union, coal is socialized, as are all other natural resources and means of production, and the coal industry is planned as an element in the total planned economy.[1] It is significant that, among the principal coal-producing countries, only in the Soviet Union, where economic institutions and governmental institutions have both been simultaneously changed, has nationalization of the mines been achieved.

The objections to nationalization in the United States are not merely that, on the one hand, it would be resisted and that, on the other hand, it would be impossible to plan the interrelationships to other industries, still privately owned. Another objection is the fact that the government itself is not adapted to administration of industry. Built up on the idea of representation of electors, its procedures are directed toward political activities unrelated to industrial or economic processes. Mismanagement, induced by political considerations, would probably follow nationalization under present conditions. For the management of modern industry, quite new political instruments would have to be developed, which would give responsibility to the expert, rather than to the politician.[2] Moreover, so

[1] Union of Soviet Socialist Republics, State Planning Commission, Summary of the Fulfilment of the First Five-Year Plan for the Development of the National Economy of the U.S.S.R. Published by the State Planning Commission, Moscow, 1933. See particularly section on Fuel, pp. 98-108. See also "Observations on Management in the Soviet Union," by Mary van Kleeck, in Bulletin of the Taylor Society, April, 1933.

[2] An engineer, Hugh L. Cooper, who built the dam at Muscle Shoals in the United States and the dam at Dnieprostroi in the Soviet Union, has recorded his opinion of the need for a new science of government, in an article entitled "An Engineer's Suggestions on Government," in World's Work, May, 1925. The editors state that "the author of this article has appeared many times before

long as private ownership continued in any important industries these would dominate government and prevent planning even the governmentally owned industries for social uses.

If this conclusion appears to be merely negative—that the United States cannot have a planned economy so long as capitalism continues—it is put forward nevertheless in the interest of the clear thinking which is of great importance in the present crucial period in the history of the United States. Only by a clear picture of the changes which a planned economy demands, can disappointments with half measures which lead inevitably to reaction and renewed distress in economic life be prevented.

The people of the United States seem to be groping in the dark in this period of long-continued industrial depression. They are undecided whether to try to re-establish industry as it used to be; they are torn between hope that this may be possible and fear that there is something wrong in the understructure. They are uncertain as to how far the current new experiment initiated by the federal government in the National Industrial Recovery Act and other measures constitute the social revolution which some see in them. Many of the middle class, as well as industrialists, are hoping that recovery will be possible without giving up private ownership and profit-making in natural resources and instruments of production. The danger is that, in the desire to fulfil this hope, the political liberties of the workers, whose discontent will be the mov-

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Congressional committees as an expert and has spent great sums in engineering work for the Government. His experience in dealing with the Government has so impressed him with its ineffectiveness that he cannot longer endure the situation without an attempt to formulate a constructive solution." His recommendation was that as successes in the arts and sciences are "the direct result of highly organized, continuous study, over long periods of time," so "we never will record any corresponding progress in government until parallel methods are applied to this problem also."

ing power for change, will be curtailed in order to protect the old economic privileges.

Necessity for Leadership by Workers

The tasks just outlined, for scientific management of the coal industry as a whole, involve two major responsibilities of an industry: (1) to fulfil its own specific material task efficiently, whether the product be goods or services; (2) to function as an economic unit in society, with human relations and social ends as dominating controls.

The first task might be fulfilled by technicians playing the role of the necessary manipulators of materials for a given purpose[1]; but the second is of the essence of civilization itself, and reflects man's command over technical and material resources to the end of conserving and evolving human society. In the first, the worker might be increasingly regarded as a mere instrument of production; but the second, in this historical period, recognizes that civilization cannot survive this exploitation of man by man and that therefore the present control of man over man, arising out of private ownership, must be reversed; and the workers be given dominance over the machine by collective ownership, thus setting free not only the workers but the rest of society, which then becomes a workers' community. "Workers" in this sense includes all who perform services to society, in industry, in the arts, and in all professions.

Hence the first assumption in drawing a picture of the future is that the present conflict between property rights and human rights, which is waged on the one hand by private ownership and on the other hand by workers'

[1] The technocrats whose brief day in the limelight came and passed in the United States in 1932-1933 stopped at this point. When the nation takes up the second task, the technical problems posed by the technocrats will take their proper subordinate place in a social plan.

organizations, must result in the victory of human rights and the leadership of workers' organizations in putting before the economic system the new and uncompromising purpose of raising standards of living by producing for use. This assumes that the control will rest with workers and technicians and that new forms of economic organization and political organization will have to be evolved to compass such an all-embracing new economic and social purpose.

It is the workers who have suffered most from the present breakdown in the economic system, of which the breakdown in the coal industry is a significant symptom. It is the workers who must lead in the upbuilding of a new system. Political action which leaves the foundations of the capitalist structure as they are, while seeking to satisfy the conflicting hopes of the groups in industry whose interests cannot be reconciled, is likely to lead merely to dictatorial control by the strongest groups, using government itself as their instrument.

Scientific management must be given freedom to operate over the coal industry as a whole, but scientific management is possible in one industry only as part of a total planned economy, and this is impossible for capitalism. It requires social ownership and administration as the logical and inevitable next step in the evolution of the economic system. But the science here put forward is not the science of the technician alone, but science in the service of workers and producers, whose collective action can build not only an economic system but a human society.

Socialization Defined

The references which have been made to social or collective ownership, as opposed to private ownership, suggest the need for a definition of the whole idea of socialization of industry. It is difficult to define that which does not exist. Yet in the breakdown of the present a clear analysis of the problem requires some definition of the structure which might be built up to take the place of that which has broken down. Reference has been made to the fact that only one important coal-producing nation of the world has socialized the coal industry. That nation is the Soviet Union, in which coal is a part of the whole planned economy. Naturally the foundation rests in ownership by the nation of all land, natural resources, and instruments of production. A political system in the form of a workers' state took the place of the old government of the czars; and this new political system—the instrument of the "dictatorship of the proletariat"—was given the task of socialization of industry, a term comprehending both social ownership and administration. The forms which have been developed, as they apply to the coal industry, are as follows:

1. Administration is centralized in a division of the Commissariat (or department) of Heavy Industry, which is responsible directly to the Council of People's Commissars, corresponding roughly to the Cabinet in other nations.

2. Administration is then delegated to a number of "trusts" in the different regions producing coal.

3. The "trusts" have direct supervision of the local coal mines, to which is delegated responsibility for management.

4. The planning of coal is in charge of the State Planning Commission, which plans all industries and determines the amount of coal needed when the programs of production of iron and steel, the making of machines, transportation, and the use of other fuels and sources of power are determined. In the process of planning, each unit of administration, from the local mine to the main fuel division, is consulted and thereafter each functions in its proper place in the carrying out of the plan.

5. The miners' union, which is organized nationally, regionally, and locally, is related at every point to the administration of the industry, from the local mine, where standards are applied and controlled by the workers after being set up by technicians, through the trusts, up to the main fuel administration, where the union functions in the working out of wage rates, selection of workers, and in all questions affecting employment and working conditions.

6. The union, as part of the whole system of trade unions, has recently been given a new function of administration, namely, administration of all labor laws and social insurance. These were formerly administered by the Commissariat of Labor, which was a department of government; but, in line with the theory and development of socialization, the state gives place to the economic administration as rapidly as the economic structure of the new society develops.

These being the main lines of planning and administration of the coal industry in the Soviet Union, it is possible to envisage for the United States a corresponding structure of scientific management.

To a Fuel Administration composed of workers and experts in mining, would be assigned this general task: To utilize coal and other fuels as an element in the national economy for the sole purpose of yielding maximum results in a system of planned production designed to lift the level of the material basis of standards of living of the people in proportion to increasing productive capacity. As productive capacity increased to a surplus, leisure would increase through shortening of hours of labor and the consequent limiting of production.

Doubtless a National Planning Council would be established to draw a plan for coal in relation to other fuels and their joint relationship to all other industries.

In addition to co-operating in the drawing of this plan, the Fuel Administration would have the following main tasks:

1. To conduct research, which would comprise all technical problems, such as preparation of coal for its particular uses; recovery of chemical elements and their utilization; and also all forms of management research, such as standardization of equipment and processes, organization of the job, protection of the worker against accidents or excessive effort, and other factors, both technical and human, in production.

2. To supervise administration by Regional Fuel Authorities, basing decisions on research, and collaborating with the trade union in all functions having to do with the application of procedures on the job as established by research and the administration of standards for working conditions.

All questions affecting employment, including wages and hours, would be covered by a collective agreement between the Fuel Administration and the miners' union.

Thus research and planning would be centralized, but the actual administration would be decentralized, the local mine being the important unit in management, with the trade union functioning in the control of working conditions and in the application of standards; and the technicians being responsible for the setting up of standards and the application of procedures established by research on a national scale. Naturally the local unit would be also a unit in this national research and would participate in the making of a national economic plan.

The Regional Fuel Authorities would establish the machinery for observation of local management in each district; select and appoint the manager for each mine, according to specified tests of competence; and handle the marketing of coal in the region.

It would be a responsibility of the Fuel Administration, in conjunction with the National Planning Council and the Regional Fuel Authorities, to map out the rate of development of separate mines in each natural region; and to establish principles for the zoning of markets to be served most economically and efficiently by each regional authority. Closely allied to this technical question of the rate of development of each mine would be the provision for conserving the coal supply by such methods of mining as would result in maximum recovery of the coal in the ground.[1]

Naturally in the process of planning coal all other raw materials would be considered, and the needs of all basic industries, such as electric power, railroads, steel, machine-tool building, and the like. Upon the foundations laid in these industries, which make producers' goods, all of the many branches of consumers' goods and services would have to take their place, since only as their needs are determined can the production of producers' goods be balanced in relation to the needs of the market. Thus a planned economy is an administrative structure predicated upon collective ownership of all branches of production and distribution which are to be planned and administered.

Therefore this design for administration of a socialized industry in a planned economy is put forward as a definition or design, not as a recommendation. A mere description suggests the conclusion that no immediate, partial application of the idea is possible, since the immediate and the partial would not be the idea. The Fuel Administration of the United States during the World War only presided over a new expansion of an already excessive development of the mining industry. Governmental ownership substituted for private ownership, if undertaken as a desperate

[1] At present an alarmingly high percentage of coal is left in the ground, either as pillars to support the roof or through wasteful layouts which result in getting out the coal which is easiest to mine and losing what is left. Of course, the driving force toward these wasteful practices is the effort as speedily as possible to get a share of the market in order to make returns on capital invested.

measure for a broken-down industry, would not make possible a planned economy.

Conclusion

Thus out of this study of a single experiment in co-operation between miners and management, and out of a review of the present problem of coal in the light of the past, emerges the conclusion that socialization of all natural resources as part of a planned economy is the only solution for the breakdown of the coal industry in the United States, which for fifty years has caused continuous and widespread unemployment; waste of a non-restorable natural resource; and discrimination against the household consumer in favor of the steel industry, public utilities, and other large industrial buyers. Yet at this point it is clear that it is not a problem of coal alone. Coal merely illustrates a general breakdown of industry which challenges the nation to a new policy. Moreover the coal industry cannot cope with mechanization as a cause of unemployment; nor with the wastes of competition with oil, natural gas, and hydroelectric power.

Past failures of the industry to reform itself, and the complete failure of government to take any effective action in fifty years, indicate inherent conflicts between the irreconcilable interests of private profit-makers and of workers whose need is to achieve standards of living proportionate to the natural resources of the nation. Both economic and political structure must be changed if the United States is to move from the present irrational condition of poverty in the midst of plenty to the constructive task of using the abundance of America's natural resources to replace the present shamefully low standards of living in the basic industries with security, comfort, and hopefulness commensurate with the skill and productivity of America's workers.

The struggle for power to bring about this change will be between workers and owners. And in that task, which may well be the historic work of this generation, the miners will have an important part to play, as they have played an important part in the workers' struggles in the past.

If the miners and other workers are to take the part here indicated, all workers' organizations must be strengthened. In the mining industry the task is a heavy and immediate one. Some indication has been given in this chapter of the failures of leadership which show themselves in a dominating control of the union and the lessening participation by the rank and file. This situation, taken in conjunction with the economic condition of the industry, has led to the development of independent unions, so that at present the miners' ranks are split. The first task will be to achieve unity, and closely allied with this is the necessity for rebuilding the union, setting before it a new program of immediate steps as well as a larger objective growing out of the problems of the economic crisis.

This suggests certain immediate steps which may here be briefly summarized:

1. *Unemployment funds for miners*

It is important not to overlook the need for immediate action on behalf of the unemployed miners and their families. It has been brought out, in the statistics cited in this study, that the number of "surplus workers" in the industry is very large, and these cannot be "absorbed" into other industries in a period of general depression. Relief agencies in every coal-mining state face in the mining communities a task which they cannot fulfil.

Children are suffering, and social and living conditions have reached an alarmingly low level. Government and the mining industry alike must recognize their obligations to this large group of unemployed workers, whose distress is due to no fault of their own, but wholly to the overdevelopment and mismanagement of the industry and the failures of government to deal with it. Some form of unemployment insurance should be developed to meet these needs.

2. *Freedom for workers' organizations*

An important step is to set the workers free to organize and to act for protection of their interests. No procedures of the National Recovery Administration should be tolerated and no new laws should be enacted which discourage strikes, since under present conditions the unions can protect the workers only if there be the unimpaired and undiscouraged right collectively to withhold their labor. Otherwise the government must assume full responsibility for all conditions, and these the nation cannot control when ownership is in private hands. Equally important is the protection of civil liberties: the rights of free assembly and free speech; protection against injunctions in time of strike; and particularly elimination of the opportunities for violence against strikers which are offered in deputizing sheriffs and other police officers employed by corporations, thus giving governmental authority to privately controlled officers.

3. *Workers' education and the co-operation of all workers, industrial, technical, and scientific, in the study of the economic problems facing the nation*

The times themselves are teaching sound economics to the workers, but there must be teachers and leaders among them, so that their policies and protests may be directed toward constructive ends. Here again must be emphasized the importance of maintaining the constitutional rights of free assembly and free speech, since education will largely take the form of discussion of current problems and conditions. If at the same time technicians and scientists can participate in this economic education, using as their textbook, so to speak, the experiences of the industrial workers, the leadership of the exponents of human rights will be strengthened.

4. *Education of the "general public"*

A constant effort is needed to clarify public opinion so that a constantly widening circle will understand the issues involved and throw their influence toward the protection of human rights against property rights in the inevitable struggle of the workers for a new status, which the present crisis shows to be necessary.

This study began in the hope of making a concrete suggestion for a new policy in the coal industry. It was believed that the study of one company, in which union-management co-operation had given a new status to the workers, might reveal both the problem and its solution. This company would have the same value that a specimen has in any science. In a sense, this hope was fulfilled, in that the company was studied against the background of the industry-wide influences which would prevent a solution in any one unit.

As the investigation progressed, an idea took form, which would involve the taking over of coal by a public trusteeship composed of workers, technicians, and scientists, who would plan and administer the industry. At that point, legal precedents and court decisions were analyzed.[1] Actually the suggestion was laid before a member of the United States Senate.

Meanwhile further investigation and an interpretation of the significance of the deepening economic crisis affecting all industries showed this proposal to be quite inadequate to meet the fundamental difficulties. In fact, it appeared that even to make it as a recommendation would tend to divert thought and action from the more fundamental significance of the depression. Too many bankrupt coal companies might wish to sell their property to the government. Putting such a proposal into effect would be merely a desperate step to save a part of the old economic organization, and scientific management under those conditions could not be achieved.

The nation in this economic crisis faces three paths—the old way, which has failed; a middle way, which is now being tried; and the ultimate way of complete socialization. The danger of the middle way is that the effort to maintain the old economic privileges leads step by step to the curtailment of the liberties of workers and the middle class and the extension of the powers of government, thereby increasing the dangers of selfish domination by private economic power.

How socialization will come, is not within the power of a research worker to forecast. Only one conclusion seems justified, namely, that insecurity and waste in the coal industry is a problem for workers' action. Of the three ways described, the first is the way of industry's own self-government, which has clearly failed. The second, the middle way, is an alliance between industry and government, giving governmental sanction to economic privilege. For the third way, the third group in the economic system

[1] This analysis is published in Appendix IX.

—the workers—would be the logical leaders, since in its essence socialization is collective work; and the workers' objective, to establish security and raise standards of living, is the only control that can successfully achieve balance between production and consumption in an age of surplus.

APPENDICES

APPENDIX I

MEMORANDUM REGARDING STUDY OF UNION-MANAGEMENT CO-OPERATION IN THE ROCKY MOUNTAIN FUEL COMPANY

Prepared as basis for discussion with miners; union officers in mining and in other industries in Colorado; management in this company; and others informed of pertinent facts. March 7, 1932.

I. *Forerunners of the present study*

This study, undertaken by the Department of Industrial Studies of the Russell Sage Foundation, is part of its series on Labor's Participation in Management. The series was designed at the close of the World War to be a record of experiments in the relation of labor to management. It was not limited to trade-union experience. Quite the contrary; it was thought desirable to make thorough studies of plans put forward by companies which had no agreements with the unions, and to contrast these with co-operation between unions and management. Thus the employes' representation plan of the Colorado Fuel and Iron Company in its coal mines was the second in the series, and the third was this plan in steel; for it was this company which initiated the movement for employes' representation, destined to be widespread in American industry.

The studies so far published in this series include: (1) the Dutchess Bleachery, a cotton textile bleaching and finishing plant, which had a thoroughgoing plan of management-sharing and profit-sharing, and friendly relations with the only existing union in its field, the folders, a local of the United Textile Workers; (2) the Colorado Fuel and Iron Company's plan for employes' representation in coal; (3) the same plan in steel; (4) the Filene Store, which had an ambitious plan contemplating sharing management, profits and eventually ownership, only the first of which was ever realized even partially; and (5) labor agreements in the Illinois District of the United Mine Workers. Other brief studies have been made as background, which are not published, but may be caught up later in a general book on trends in labor-management cooperation in the United States.

It will be observed that coal figures rather prominently in this series. It has also been touched by other studies in the Department. A study of the Canadian Industrial Disputes Act, published under the title, Postponing Strikes, gave a good deal of space to the coal industry. Indeed, it was a coal strike which led to the framing of the law. As the law establishing the Industrial Commission of Colorado was based on this Canadian act, the study of its operation in Canada bears on conditions in Colorado.

Another study of coal was a pamphlet published in 1922, under the title, The Coal Miners' Insecurity. It brought together available statistics showing the irregularity of employment and operation in the bituminous coal industry since 1890—the period covered by governmental statistics. Another study, not yet published, analyzed statistics of employment in German coal mines, where the cartel has tended to keep production down to the level of market demands. In addition, of course, the general problem of coal has absorbed much of the interest of the Department in the past ten years.

It seems obvious to all who are familiar with conditions in coal that it is time to make the industry an issue requiring thoroughgoing national action. It is a basic industry and a natural resource. It plays a large part in the present crisis of unemployment and industrial instability.

As a contribution to a national program for coal, then, this study of the Rocky Mountain Fuel Company is undertaken. Out of previous studies has come the general conclusion that the basic condition for stabilization of industry in the United States must be the establishment of right principles of relationship between labor and management and the proper joint organization for carrying them out; both groups being subject to the only valid purpose for industry, namely, to serve the public interest by producing goods and services with the least waste of human energy and materials and the maximum of stability, combined with progressive improvement in methods and relationships. Thus, the technical management of an industry functions within an environment of reciprocal human relations of management to labor and of both to the consumer. How far ownership of capital, as distinct from management and labor, actually does and should control management, and upon what principles this element should function if the aims of conservation, stabilization, and public service are to be paramount, is one of the vital questions before American industry. In the past ten years, ownership of capital has been the controlling element, largely controlling the policies of management in relation both to labor and to the consumer and the public. The results of this control is a proper subject for objective study. Finally, there remains to be worked out the relation of the community as a whole, through legislation, administration and the judicial process to the functioning of labor, management, and capital ownership in the public interest. The emphasis here is upon *functioning* and *responsibility for service*; not *rights* or *power*.

II. *The subject for investigation*

Within the framework of this large statement of the problem the Rocky Mountain Fuel Company is to be studied as a case in which labor, management and capital-ownership are functioning together on the basis of agreed principles. The inquiry should show:

A. What these principles are, and how they came to be formulated and agreed upon.
B. What forms of organization are established to carry them out.
C. How these forms of organization actually function.
D. What the actual results are, in return to labor, in wages and regularity of employment; in return for capital investment; in prices

to the consumer; and in stability of relationship with other industries and with the community.

E. What existing laws affect the operations and relationships of the company, and with what results: e.g., Industrial Commission; state safety law; taxation; law of incorporation; any other.

F. What relationships are established with other industries and branches of economic life: e.g., the banks; railroads and public utilities, as purchasers and as sellers of their goods or services to the mines.

G. Relations with retail dealers, and other aspects of the process of distribution.

III. *Scope of inquiry*

The first step, for which this memorandum is intended to be the basis, is to interview those responsible for leadership of management and of labor and to inventory the specific questions and the material available, in order to determine how far the data are in documents and how far they must be secured through interviews and observation.

Following the outline of the preceding section the following subjects and possible sources of information are listed:

A. Principles of relationship.
   1. Agreement between Company and United Mine Workers. Printed form available. Comparison with other labor agreements in the coal industry. Interviews with officers of the company and the union for further details of its history and its actual interpretation by those involved in carrying it out.
   2. Any modification or amplification arising from the administration of this agreement; or other relationships to consumer, community, etc. For example, the company's policy regarding contributions to social work in the communities where it operates.

B. Forms of organization to carry out agreement.
   1. Organization and function of management in its different divisions, in relation to the agreed principles.
      a. Board of Directors and stockholders.
      b. Officers and their functions.
      c. Management.
         (1) Mine management; responsibilities of superintendents and foremen.
         (2) Sales.

(3) Engineering and technical.
(4) Finance and auditing.
(5) Labor relations.
(6) Public relations.

2. Organization and function of mine labor; the union and its administration.
3. Joint Administrative Board; plan and reasons for it.
4. Union labor in city and state other than the United Mine Workers.
   a. Sales organization for coal.
   b. Other activities, such as publicity (Colorado Labor Advocate); unions in related trades and their attitude.

C. Illustrations of functioning, effective or inadequate, in all these divisions; with especial emphasis on joint functioning.

Here would be developed the experience in dealing with determination of wage rates; day-to-day application of agreement in the mines; policy and procedure in introduction of new machines. Of course, the special character of the company's mines, quality of coal, height of seams, size of operation, etc., would all be considered as giving rise to questions requiring adjustment.

D. Actual results; facts and experience.

1. Labor statistics.
   a. Wages (plan to be developed after examination of available records).
   b. Regularity of employment (also to be developed).
   c. Accidents; statistics and practices.
   d. Comparisons with other companies and with the industry elsewhere in all these items.
   e. Cost and standards of living in Colorado.
2. Statistics of company operation.
   a. Costs of production and changes in them.
   b. Costs of administration.
   c. Costs of capital; history of company's capitalization; bonded indebtedness; stock ownership and dividends.
   d. Prices; facts and policies.
   e. Profits.
3. Sales; analysis of the market—proportion sold to different industries and to individual consumer; influence upon coal of stabilization of other industries.

E. Laws affecting the company's operations, especially the Industrial Commission and its decisions on wages. (See also the other points mentioned in this division under II.) Material available in hearings. Other sources?

F. and G. Sources of data on these more general subjects of relationships to other industries and businesses.

IV. *Applicability of principles and practice of union-management co-operation in this company to the problem of planning the coal industry in the public interest in this country.*

This phase cannot be defined in advance, but will be kept in mind as the inquiry proceeds. At every point possible data for the industry as a whole will be available for comparison.

V. *Attitude of the public; influence of the company and the union in educating public opinion on the industry's problems*

1. The Denver press and its attitude.
2. Use of radio.
3. Advertising.
4. Attitude of civic organizations.
5. Attitude of universities and colleges.
   a. Research on coal.
   b. Economics classes.
   c. Mining engineering, and its relation to economic organization and stabilization.
   d. Law school and its relation to legislation for coal.

VI. *To readers of this outline:*

Please list here omissions of subjects which should be included; or suggestions regarding sources of information, persons who should be interviewed, or specific instances to be studied as bearing on any aspect of the investigation.

APPENDIX II

STATEMENTS OF POLICY BY OFFICIALS OF THE ROCKY MOUNTAIN FUEL COMPANY

A. STATEMENT OF THE COMPANY'S NEW POLICY, ISSUED MARCH 18, 1928.

The policy of the company will be based on the fact that the men employed are as much an essential factor in the industry as the capital invested in it, and have independent rights in the determination of working and living conditions.

The denial of these rights has resulted in constantly recurring strikes through the entire history of the industry. The consequent losses have fallen on the miners, the operators and the public alike. This system in the industry has created a vicious circle of prices below cost of production, strikes, imported coal at exorbitant prices to the public, and forced settlements leaving the parties still at war with one another. When operators in their greed for business cut prices to bedrock, as they have just started to do again, they make their men pay for the loss, thus paving the way for another strike, for further loss of profits, for failures and receiverships such as the industry in Colorado has recently witnessed. When profits are made notwithstanding such conditions, coal operations are characterized by practices which no industry should tolerate. To support this policy and maintain these conditions the public must again and again stand and deliver the prices demanded for imported fuel as it did this winter. The public's coal bill this winter and its business losses caused by the strike amounted to many millions. It was a needless loss and waste. We are sure the public would rather pay reasonable uniform prices for a constant and sufficient supply of coal and thus insure satisfactory working and living conditions to miners and fair profits to the industry.

The coal industry is sick, and the outstanding cause of its condition is that operators have consistently and continuously been at war with labor, with the public, and with each other. The inefficiency of such a policy is indicated by the low tonnage production per man in many of the larger operations, showing conclusively that hostile relations between the parties diminish productive power. The industry has been the subject of comprehensive and scientific investigation by competent government agencies. Findings of fact and recommendations of a constructive nature based upon such investigations have been placed at the disposal of operators but have been entirely ignored. The only resort to government agencies and powers by coal operators has been to employ them to help support and maintain existing ruinous policies and conditions.

This demoralization of the coal industry stands out in sharp contrast to the stability and prosperity of certain other industries in which industrial warfare has been succeeded by sound relations based upon a recognition of the rights of all persons whose labor and whose capital are equally essential to production and distribution. Without going into detail the results of a policy of mutual understanding and joint effort prove beyond room for doubt its practical financial as well as human value.

Recognition by each party in industry of the rights of the other is necessary for successful operation and permanent stability.

Acting upon this principle the Rocky Mountain Fuel Company is putting into effect a policy which is based upon the fact that the men employed in the mines are as much an essential factor in the industry as the capital invested and have the right to act upon equal terms with the investor to determine working and living conditions.

We realize that this policy cannot be put into successful operation over night, or even in a brief period of time—and we find in talking with miners that they understand as well as we do the importance of the time element in the situation. Many complex problems, arising out of years of antagonism and conflict, must be worked out before these plans can be fully effective. The development of this policy will naturally require full cooperation of the management and the men in the mines. Upon mine superintendents and other mine officials will rest a particularly heavy share of the responsibility for its ultimate success.

In previous statements we have indicated in a general way what the policy of the Rocky Mountain Fuel Company will be and have specifically stated that there will be no blacklisting of men, that employes of the Rocky Mountain Fuel Company who have been on strike will be taken back as soon as there are openings for them; that it will be the policy of this company to operate in conformity with provisions of the mining law requiring checkweighmen, safety inspection committees, and regulating work and conditions in and about the mines; and that employes having complaints or grievances may take them up through the proper channels and have them heard and adjusted.

We suggest, at this time, in the absence of other means, the use of the Inspection Committee provided by law, which is elected by the men, to hear, to investigate and to report complaints and grievances and otherwise to represent the men in meeting the management.

B. STATEMENT OF THE ROCKY MOUNTAIN FUEL COMPANY, ISSUED MAY 29, 1928, IMPLYING READINESS TO REACH AN AGREEMENT WITH THE UNITED MINE WORKERS OF AMERICA, DISTRICT NO. 15.

It is not a secret that Colorado again faces the threat and possibility of another coal strike this coming fall. As a first step toward removing the causes which have made coal strikes in Colorado chronic and periodic, The Rocky Mountain Fuel Company adopted and on March 18, 1928, announced its future business and labor policy.

The right of miners to organize and collectively bargain through their own chosen representatives was recognized in that statement.

Since then the subject has been considered and discussed by the men and they are taking steps to organize.

It seems therefore a proper time to make the further statement that whenever the miners are organized in a union affiliated with the American Federation of Labor, The Rocky Mountain Fuel Company is ready to recognize and contract with their organization.

A conservative estimate shows that last fall and winter Colorado coal consumers paid several million dollars in excess of a reasonable price for their coal supply; business lost millions in the reduced purchasing power of all those engaged in the coal industry; the coal industry itself lost vast sums; the miners lost millions of dollars in wages; and taxpayers incurred a further loss exceeding $200,000 as the price of keeping the military forces in the field. Every dollar of these losses and expenses was a needless waste which could have been prevented.

During strikes the public pays exorbitant prices for imported coal brought in on long freight hauls at necessarily high rates. Following strikes, as everybody knows, much coal is sold below living wages and living profits.

After this last strike many operators in the Northern field returned again to their price-cutting practices. This cut-throat policy still continues. Much coal is today being sold at 50 per cent below cost of production because certain industries which use large quantities of coal take advantage of this demoralized market and demand and obtain their coal supplies for these discriminatory prices. Such industries whose earnings are in a very practical way assured by rates and protection given by the state and federal government are not justified in disregarding the economic rights and welfare of the public by practices which contribute to the demoralization of any vital industry. It is assumed that such industries will upon sober consideration of the injurious effects of their practices realize that their ultimate best interest lies in co-operation to remedy this condition by paying prices which will yield at least cost for their coal. At present other consumers are paying for the losses caused by the prices below cost granted these few favored industries. This discrimination is directly against the home owner, the wage earner, the apartment house owner, business-property owners and other industries.

The public knows little or nothing as yet of these price discriminations. They can only be corrected when these favored industries pay fair prices for their coal. Present practices are paving the way for another strike as surely as if it were deliberately planned.

To prevent another strike, to insure a constant and sufficient supply of coal at reasonable prices which can be uniformly maintained, to stabilize production costs, to establish satisfactory working and living conditions for miners and their families—in short, to protect the coal-consuming public, business and labor from a recurrence of this past year's loss and waste—has become an imperative necessity.

To meet this situation, The Rocky Mountain Fuel Company is putting into effect the definite policies and plans already announced. We believe the public will welcome and support such action.

APPENDIX III

AGREEMENTS BETWEEN THE COMPANY AND THE UNION

A. DECLARATION OF PRINCIPLES AND AGREEMENT BY AND BETWEEN THE ROCKY MOUNTAIN FUEL COMPANY AND THE UNITED MINE WORKERS OF AMERICA, DISTRICT NO. 15, FOR PERIOD BEGINNING SEPTEMBER 1, 1930 AND ENDING AUGUST 31, 1932.[1]

Declaration of Principles

We, the signers of this document, seeking a new era in the industrial relations of Colorado, unite in welcoming this opportunity to record the spirit and principles of this agreement.

Our purposes are;

To promote and establish industrial justice;

To substitute reason for violence, confidence for misunderstanding, integrity and good faith for dishonest practices, and a union of effort for the chaos of the present economic warfare;

To avoid needless and wasteful strikes and lockouts through the investigation and correction of their underlying causes;

To establish genuine collective bargaining between mine workers and operators through free and independent organization;

To stabilize employment, production, and markets through cooperative endeavor and the aid of science, *recognizing the principle that increased productivity should be mutually shared through the application of equitable considerations to the rights*

[1] The first agreement between the company and the union was for the period beginning September 1, 1928, and ending August 31, 1930. Italicized material in the text was added in the second agreement, which is here reproduced, because it was in operation at the time of the first field work. Footnotes at the proper points show material which appeared in the first agreement but was omitted in the second.

of workers and to economic conditions affecting the operations and business of the company;

To assure mine workers and operators continuing mutual benefits and consumers a dependable supply of coal at reasonable and uniform prices;

To defend our joint undertaking against every conspiracy or vicious practice which seeks to destroy it; and in all other respects to enlist public confidence and support by safeguarding the public interest.

Agreement

This agreement, made and entered into this *10th day of July, 1930,*[1] between The Rocky Mountain Fuel Company, party of the first part, for its mines operated in the counties of Boulder, Weld *and Gunnison*, in the State of Colorado, said party of the first part being hereinafter for convenience referred to as the Company, and the United Mine Workers of America, with National Headquarters at Indianapolis, Indiana, and District No. 15, United Mine Workers of America, with jurisdiction in Colorado, and the Local Unions of said the United Mine Workers of America, existing at the mining camps in said counties of Boulder, Weld *and Gunnison* of said The Rocky Mountain Fuel Company, parties of the second part, WITNESSETH:

Hours of Labor

Section 1

It is definitely understood and agreed that this agreement be based on an eight-hour day. That eight hours shall constitute a day's work in and around the mines, and it is definitely understood that an eight-hour day means eight hours' work, at the usual working place, exclusive of one-half hour for mid-shift lunch, six days a week when required by the Company, Sundays, Christmas Day, New Year's Day, April 1st, Thanksgiving, Decoration Day, Fourth of July and Labor Day excepted. It is understood that the above rules regarding holidays

[1] In first agreement, "16th day of August, 1928."

and Sundays shall not apply to monthly men or the making of necessary repairs.

Drivers shall work full eight hours in their respective places and take their mules to and from the stables, and the time for so doing shall not be included as part of the day's labor.

When the day men go into the mine in the morning in response to the customary signal for work they shall be entitled to two hours' pay whether or not the mine works full two hours; but after the first two hours the men shall be paid for every hour thereafter, by the hour, for each hour's work or fractional part thereof. If, for any reason, the regular work cannot be furnished the inside day laborers for a portion of the first two hours, the Company shall furnish other than the regular labor for the unexpired time.

Turn

Section 2

An equal turn shall be kept as far as practicable. This is not to interfere with development or necessary work.

When[1] development or necessary work must be done, local agreements are permitted to be worked out between the committee of Local Unions and the Company based on the Scale of Wages. Where such local arrangements are made, such work shall be divided among classifications of labor as are practicable and necessary to perform such labor.

Payment of Wages

Section 3

The Company agrees to pay twice a month, on the *14th and 29th*,[2] at all mines operated by this Company. Itemized statements shall be issued to employes two days prior to pay day. When the regular day comes on a Sunday or holiday, pay day to be the day before.

Men quitting the employ of the Company shall, upon giving

[1] In first agreement, "where."
[2] In first agreement, "10th and 25th."

proper notice to their Foreman of their intention to quit, receive all monies due to them within two days.

Pit Committee and Duties

Section 4

The Pit Committee shall consist of not more than three men, selected by the miners, all of whom shall be able to speak the English language, and shall be employes of the mine in which they act as Pit Committeemen. No meeting shall be held during working hours, except by mutual agreement between the Superintendent and Pit Committee.

The duties of the Pit Committee shall be confined to the adjustment of disputes between the Pit Boss or Foreman having proper jurisdiction and any member of the United Mine Workers of America, working in and around the mine arising out of this agreement. When the Pit Boss or Foreman having proper jurisdiction and said miner or mine laborer have failed to agree, and if an agreement is reached by the Foreman and the Pit Committee, said agreement must be made in writing.

Any Pit Committeeman who shall attempt to force any rule or proceeding in conflict with any provision of this agreement or any other agreement made in conformity herewith shall be forthwith deposed as a committeeman by the Local Union.

Manner of Adjusting Grievances

Section 5

In case of any local trouble arising in any mine through such failure to agree between such Pit Boss or Foreman having proper jurisdiction and any miner or mine laborer, the Pit Committee and the Pit Boss or Foreman are empowered to adjust it; and in case of their disagreement, it shall be referred to the Mine Superintendent and *Pit Committee*,[1] and should they fail to agree it shall be *referred to the District President of the United Mine Workers of America or his representative, and the Mine Superintendent or his representative, and should they fail to agree*

[1] In his first agreement, "the District President of the U. M. W. of A. or his representative."

it shall be referred to the Manager of Mine Operations or his representative, and the District President of the United Mine Workers of America or his representative,[1] and should they fail to agree it shall be referred to the President of the Company or his representative, and the International President of the United Mine Workers of America, or his representative, for adjustment. The mines, miners, mine laborers, and parties involved must continue at work pending investigation and adjustment until a final decision is reached in the manner above set forth. And there shall be no discrimination practiced against any employe while such case or cases are being adjusted.

If any day man refuses to continue at work because of a grievance, which has or has not been taken up for adjustment in the manner provided herein, and such action shall seem likely to impede the operation of the mine, the Pit Committee with the assistance of the Mine Foreman shall immediately furnish a man or men to take such vacant place or places at the scale rates, in order that the mine may continue at work; and it shall be the duty of any member or members of the U. M. W. of A., who may be called upon by the Pit Boss, Foreman or Pit Committee, to immediately take the place or places assigned to him or to them, in pursuance hereof.

The Pit Committee in the discharge of its duties shall under no circumstances go around the mine for any cause whatever unless called upon by the Pit Boss or by a miner or Company man who may have a grievance that he cannot settle with the Pit Boss. Any committeeman who causes a mine or any portion of the mine to be idle in violation of this agreement may be discharged.

The foregoing shall not be construed to prohibit the Pit Committee from looking after the matter of membership, dues and initiations in any proper manner.

Members of the Pit Committee employed as day men shall not leave their places of duty during working hours except by

[1] In first agreement, "taken up again by the President of the District and the Manager of mine operations of the Company for adjustment."

permission of the mine foreman or in cases involving the stoppage of the mine.

Management of the Mines

Section 6

The right to hire and discharge, the management of the mines and the direction of the working forces are vested exclusively in the Company, and the U. M. W. of A. shall not abridge this right. It is not the intention of this provision to encourage the discharge of employes or the refusal of employment of applicants because of personal prejudice or activity in matters affecting the Company and the U. M. W. of A. If any employe shall be discharged or suspended by the Company and it is claimed an injustice has been done, an investigation to be conducted by the parties and in the manner set forth in the preceding paragraphs shall be taken up promptly, and if it is proven that an injustice has been done, the Company shall reinstate said employe and pay him full compensation for the time he has been suspended and out of employment; provided, however, that if no decision shall be rendered within five days the case shall be considered closed insofar as compensation is concerned, unless said failure to arrive at a decision within five days is owing to a delay on the part of the Company, in which case a maximum of ten days' compensation shall be paid. It is agreed that the local Pit Committee shall investigate the merits of all grievances before submitting them to the Superintendent.

It is distinctly understood and agreed that in the case of all disputes and grievances of every nature arising under this contract the mines continue at work pending a settlement.

Check-Weighman

Section 7

Miners may elect a check-weighman and the Company shall furnish him with a check number and he shall credit to his number such portion of each miner's, loader's or tonnage cutter's coal as may be necessary to pay his wages. Tonnage cutter's portion is to be held out in office upon presentation of written order from check-weighman. The Company shall give any man so elected an average place in the mine at the end of his labors as check-weighman; providing, he was an employe at the mine at the time of his election as check-weighman.

Discipline

Section 8

No strike or stoppage of work shall occur at any mine until the question in dispute shall have been considered and finally disposed of, as provided for in this contract.

When an employe absents himself from duty two days or more, except on account of sickness, without giving advance notice when possible to the Mine Boss or Superintendent, he forfeits his position.

When a machine runner, or any employe upon whose work other employes of the mine are dependent, absents himself from duty without giving advance notice to the Mine Boss when possible, he forfeits his position.

In case a local or general suspension of mining occurs, either at the expiration of this contract or otherwise, the engineers, firemen, pumpers, and other men necessary to keep the mine in shape, shall not suspend work, but shall, when the mine is suspended, fully protect and keep in repair all of the Company's property under their care, and operate fans and pumps, and lower and hoist men as may be required to keep up steam at the Company's coal plants; but it is understood and agreed that the Company will not ask them to hoist any coal produced by non-union labor for sale on the market. The rates to be paid for such work are to be those in effect at the time of suspension and then subject to any subsequent settlement.

Observance of Mining Laws

Section 9

It is the intention of the makers of this agreement to conform to existing mining laws in the State, and both parties agree to cooperate in the observance of said laws.

Check-off

Section 10

The Company agrees to check off from the miners and mine laborers all dues, initiation fees, fines and assessments for the Local Union of the United Mine Workers of America to which such miners and mine laborers belong, and such other assessments as are set forth in this agreement, also check-weighman's fees, for which an order is signed by each of such miners or mine laborers, addressed to the Company in the following form:

CHECK-OFF ORDER

......................19..

To The Rocky Mountain Fuel Company:

I hereby authorize you to deduct from time to time from whatever sum may from time to time be due me while in your employ, whatever sum may be due from me as dues, initiation fees, fines and assessments to any Local of the U. M. W. of A. to which I belong as may from time to time be reported to you by the Secretary of said Local, and such other assessments as are set forth in the agreement of *July 10, 1930,*[1] between The Rocky Mountain Fuel Company and the U. M. W. of A. and to pay the same to the Secretary of the said Local; and also to deduct from time to time while in your employ such sum as may from time to time be due from me to the check-weighman at the mine at which I shall be employed, and to pay the same to the said check-weighman. It is understood that the check-weighman's wages shall have preference over other deductions.

Deaths and Funerals

Section 11

That on the day that death by accident occurs in a mine, for that day only the miners may cease work, but under no cir-

[1] In first agreement, "August 16, 1928."

cumstances shall a mine be laid idle for a funeral. This is, however, not to prevent individuals from attending a funeral.

Employes Exempt from Union Jurisdiction

Section 12

No scale of wages shall be made by the U. M. W. of A. for Mine Bosses, Superintendents, Assistant Mine Bosses, Face Foremen, Top Foremen, Company Weigh Bosses, Boss-Drivers, Night Bosses, Head Carpenters, Night Watchmen, Head Electricians, Head Machinists, Barn Bosses, Clerks and Office Employes. The words "Head Electricians," "Head Carpenters" and "Head Machinists" shall apply in cases only where they have supervision over two or more men performing the same class of labor.

Teamsters engaged in hauling any material connected with the production of coal shall not be exempt, but all other teamsters such as those engaged in hauling material for construction work or hauling coal or water or other commercial items shall be exempt.

The erection of head frames, buildings, scales, machinery, railroad switches, etc., necessary for the completion of a plant for loading coal, all being in the nature of construction work, is to be excluded from the jurisdiction of the U. M. W. of A. Extensive repairs to, or rebuilding the same class of work shall be included in the same exception, also employes working on Company farms or ranches, the employes thereon to be excluded as above when employed on such work.

Lost Coal and Duties of Machine Men Retimbering for Safety

Section 13

Where coal is cut by the ton or measurement in pillars or stumps and is lost by reason of place caving in, the machine men shall be paid for all such coal lost at the regular rate for such coal. When machine men remove posts or timber to cut a place, all such posts or timber shall be reset by the machine men. If the machine men fail in their duty to reset the posts or timber, then payment for lost coal shall not be made.

All machines shall be fitted with suitable skids, and machine men must cut coal level and close to bottom; and in no case shall thickness of bottom exceed four inches, except in case of pots or other extreme variations. Machine men leaving more bottom than above, and when upon investigation it is proven that the machine men are at fault, must lift same, or it shall be lifted at their expense. Where bottom is sulphurous and unmarketable the miner may call the attention of the Mine Boss to it and endeavor to arrive at an agreement for its removal or retention. If the Mine Boss and miner fail to reach an agreement as to compensation or otherwise, the matter shall be submitted to the Superintendent and mine committee for adjustment. Machine men are required to remove the undercuttings from kerf or mining.

Dead Work

Section 14

A miner or tonnage worker shall not be required to perform unusual dead work for which no scale is provided or perform work in deficient places that reduce his earnings. When such conditions arise the miner affected shall take up the matter as provided for by terms of this agreement.

Working Places and Material

Section 15

The Company shall keep the mines in as dry condition as practicable by keeping the water out of the roads and out of the working places. When a miner or loader has to leave his working place on account of water due to the neglect of the Company, the Company will give him another working place until such water is taken out of his place, provided, there be any vacant working places in sections of the mine being operated.

Props shall be cut to suitable length, and cap pieces and all *other material to be delivered as close to the face as practicable in pit cars.*

Laying of Track

Section 16

The Company shall lay all permanent track in entries, also all turns and switches.

Miners and loaders shall lay room track and temporary track in entries. Track to be laid in workmanlike manner, and all rails, ties and spikes necessary to lay track properly to be supplied promptly by the Company. Miners in rooms shall not be required to lay permanent track if the rails exceed 20 pounds per lineal yard.

The Company agrees to maintain and repair all permanent track in rooms and entries.

Marketable Coal

Section 17

It is not the intention of the mine run system to reduce the percentage of lump coal or to produce a large percentage of slack, and the miners and men shooting and loading after machines shall exercise reasonable care in placing their shots so as to produce the largest amount possible of marketable coal.

The miners at every mine, the mine committee and United Mine Workers of America, pledge their full cooperation to create and maintain efficiency in mining, shooting, and loading with a view to producing a maximum of large sized marketable coal.

Penalty for Loading Impurities

Section 18

In order to insure the production of clean, marketable coal it is herein provided that if any miner or loader shall load with his coal sulphur, bone, slate, black-jack or other impurities, he may for the first and second offense be warned, and for the third or any subsequent offense occurring in any thirty-day period, he may be suspended for five days, or for any aggravated or malicious case the miner or loader so offending may be discharged.

New Mines

Section 19

New mines opened and developed during the life of this agreement shall be governed by the same rates and mining conditions as provided in mines operated under like conditions covered by this contract.

The term "Sinkers" in wage scale shall include all men working in vertical shafts.

Mine Supplies

Section 20

Powder, fuse, caps and mine supplies shall be furnished at a reasonable price. The cost plus a reasonable charge for handling supplies shall be the basis for such price.

Miners' House Coal

Section 21

Company agrees to furnish house coal at each mine to its employes. The price per ton to be agreed upon locally by the Local Union and the Company.

Bath House

Section 22

The Company agrees to equip a bath house at each mine not now so equipped, as soon as *possible*[1] after receipt of written request signed by a majority of employes at such mine or mines. All employes *using such bath house*[2] agree to bear a portion of the expense connected with said bath house, which in no case is to exceed $1.00 per month per man. Where bath houses are in operation or where same are installed in the future, the Company agrees to maintain same in a sanitary condition. Buildings are to be heated, and warm and cold water furnished.

[1] In first agreement, "practicable."
[2] In first agreement, "signing said petition or request."

Department of Medicine, Health and Sanitation

Section 23

There shall be created *as soon as possible* a Department of Medicine, Health and Sanitation *in Boulder and Weld counties*, and a Commission to organize and direct the activities of this Department. The Department shall have a Director who shall be a licensed and qualified physician and surgeon; such assistant physicians and surgeons as work of the Department may require and such nurses as may be required. The Department shall further have consulting physicians and surgeons. The Commission shall be made up of one representative from each mine, elected by the miners, and of the same number of officials selected by the Company. *When established,*[1] the Commission shall meet and proceed to organize the Department and adopt rules for the transaction of the Commission's business and for such regular and special meetings as may be required.

The purposes of the Department of Medicine, Health and Sanitation shall be:

A. To render the best and most skilled medical and surgical service possible to employes and their families in case of illness or injury;

B. To provide scientific and adequate prenatal and confinement care for the wives of the employes;

C. To promote health and to prevent illness:

(1) By establishing and maintaining sanitary conditions in the Company's camps.

(2) By making available, through consultation and visitation of doctors and nurses, information on general health matters and specialized service and information on matters affecting children's health and development.

The Commission shall hear, investigate and adjust complaints which may arise in connection with the work of this Department. In case the Commission is unable to reach a majority agreement on the adjustment of any complaint, two of its members shall be selected, one by the miners' representatives on the

[1] In first agreement, "immediately after this contract is signed."

Commission, and one by the Company's representatives on the Commission, who shall in turn select any third person they desire, and these three persons shall adjust the complaint. Such adjustment by the three persons mentioned shall be final and binding on the parties to this agreement.

It is further provided and agreed that the present charges of $1.00 per month for unmarried men and $1.50 for married men and their families shall be charged to employes of the Company and be deducted monthly from their wages to assist in maintaining such Department, and that any expense incurred by the Department in excess of the fund so above provided shall be paid by the Company.

Inasmuch as the Alpine mine is in an isolated location, far removed from Boulder and Weld counties, the following medical provision shall apply to that mine, to wit:

The Alpine mine shall be equipped with one or more standard "first aid to the injured" outfits, kept at some convenient and sanitary place or places, and every such outfit shall be in charge of some competent employe of the Company.

It is further provided and agreed that the present charges of $1.00 per month for unmarried men and $1.50 for married men and their families shall be charged to employes of the Company and be deducted monthly from their wages to assist in maintaining necessary medical service for employes and their families at the Alpine mine.

Mechanical Appliances

Section 24

The use of improved mechanical appliances underground is becoming quite general, and competitive conditions require the continued and further extension of mechanization. If present wage standards are to be maintained changes in mining methods may be necessary in order to coordinate mining practice with mechanical operations. In the event that loading machines, conveyors or more modern cutting machines are installed at any of the mines of the Company, the Union will not obstruct or hinder in any way the operation or do anything militating against the success of the experiment.

Day wage rates shall prevail during the installation and experimental stage. After passing the experimental stage a conference between the parties to this agreement will be held to determine a schedule of permanent rates for such work.

Wage Scale and Methods of Adjustment

Section 25

In view of the general unsettled conditions now affecting the coal industry, it is understood and agreed that the wages set forth in this agreement are contingent upon competitive conditions affecting the Company's mines. In consideration thereof it is agreed:

1. *The Company will pay at its mines in Boulder and Weld counties a basic day wage of $7.00 and for classified work under the general wage scale will pay the rates of wages hereinafter specified.*[1]

2. If the basic day wage scale (as shown for the preceding month by the production records in the office of the Chief Coal Mining Inspector of the State of Colorado) of the producers of 51% or more of the tonnage in Boulder and Weld counties, not including the tonnage of the Company, is reduced below the scale of $6.77, *now paid by other companies,* the basic and general wage scale fixed by this agreement shall be likewise reduced forthwith, except that the Company will maintain a higher differential of 23 cents on such reduced scale, which is the *difference*[2] in the basic day wage *paid*[3] under this agreement *and the basic day wage now paid by other operators.*

3. If the present basic day wage of $6.77, now paid by operators other than the Company *in Boulder and Weld counties* is increased, the Company shall only be required to pay so much of the differential as is necessary to make a basic day

[1] In first agreement, "That the Company will advance the basic day wage of $6.77 to $7.00, and corresponding advances shall be made in other existing classifications of the general wage scale."

[2] In first agreement, "advance."

[3] In first agreement, "given."

wage of $7.00. No payment of differential shall be required if the basic day wage equals or exceeds $7.00.

4.[1] The parties hereto mutually agree to justify the payment of the differential in the wage scale by cooperative effort and increased efficiency.

5. In the event of the enactment of Federal legislation to improve or stabilize the coal industry, the parties hereto agree to cooperate in the enforcement of any such legislation relating to wages and working conditions.

Rates of Wages

Section 26

Subject to the foregoing wage scale and adjustment provisions, the following wages shall be paid in the mines of the Company in Weld and Boulder counties:

OUTSIDE DAY WAGE SCALE

Occupation	Rate
Hoisting Engineer 1st all Mines	$7.00
Hoisting Engineer 2nd Columbine	7.00
Hoisting Engineer 2nd Industrial	6.63
Hoisting Engineer 2nd Other Mines	6.44
Hoisting Engineer 3rd Columbine	6.71
Hoisting Engineer 3rd Industrial	6.63
Hoisting Engineer 3rd Other Mines	6.44
Box Car Loader Engineer	6.68
Car Droppers Columbine	5.08
Other Mines	6.08
Slate Pickers, Men	4.55
Old Men and Boys	3.93
Blacksmith, Head, where only one smith in shop	7.00
In charge of 2 or more men	7.13
Blacksmith, 2nd	6.08
Blacksmith Helpers	5.11
Tool Sharpener	6.43

[1] In first agreement, the following was included as "4": "No such differential shall be paid when operators, including the Company, producing 65% of the tonnage in such districts are operating under union contracts."

Occupation	Rate
Tool Sharpener Helpers	$5.11
Car Repairers, Head	6.43
Only one employed	6.08
Helper	4.55
Machinist	7.13
Machinist's Helper	5.73
Electrician, Head	7.13
Electrician Helpers	4.55
Teamsters	5.08
Bath House Tender Columbine Mine, per month	90.00
Lamp Man Columbine Mine, per month	167.50
Lamp Man Helpers	4.55
Fireman	6.23
Shoveling Box Cars	6.08
Outside Common Labor	4.55
Rock Hoist Operator	5.83
Rock Car Operators	4.55

INSIDE DAY WAGE SCALE

Occupation	Rate
Miners, take from face	7.00
Timbermen	7.00
Timbermen Helpers	6.57
Bratticemen	7.00
Track Men	7.00
Track Men Helpers	6.57
Rock Men	7.00
Rock Men Helpers	6.57
Driller, Electric Drill	7.00
Drillers, Helpers	6.57
Fire Boss Columbine	7.35
Other Mines	7.12
Shot Firers	7.25
Machine Runners by day	7.36
Machine Runners' Helpers	7.00
Machine Repairmen	7.00

Occupation	Rate
Machine Repairmen Helpers	$6.57
Wiremen	7.00
Pumpers	7.00
Pumpers, Old Men and Boys	4.55
Drivers	7.00
Cagers	7.00
Cagers' Helpers	5.08
Pushers and Spraggers	7.00
Trappers, Boys or Old Men	4.55
Motormen	7.00
Nippers capable of running motor	7.00
Nippers	5.98
Nippers, Boys	5.08
Couplers	7.00
Couplers, Boys	5.08
Inside Hoistman	7.00
Oilers and Greasers	5.08
Inside Common Labor Unclassified	6.57
Sinkers	*7.25*
Conveyor Operators (Pit car loaders)	*8.00*
Conveyor Loader, Shovelers (Pit car loaders)	*7.50*

Vulcan Mine

Mining Rate	Rate
Hand Mining, per ton	1.01
Contract Machine Loading, per ton	.745
Cutting, Air Machine or punchers to depth of *4½ feet,*[1] per face foot	.186
Narrow Work—	
Yardage, entries and crosscuts, machine work paid to loaders per lineal foot	.64
Yardage, entries and narrow crosscuts, hand mining paid to miners per lineal foot	.70
Room turning, per lineal foot for 12 feet in length	.64

[1] In first agreement, "5 feet."

Mining Rate	Rate
Dirt between coal—	
for first 6 in. in thickness, per lineal foot . . .	$.113
for each additional inch in thickness, per lineal foot	.019
Grading or Brushing—	
bottom, entry width where drilling and shooting is necessary, per lineal foot per inch in thickness .	.031

Standard Mine

Cutting, Loading, Hauling to parting and laying straight track, also timbering, per ton . . .	1.065
Grading or Brushing bottom entry width where drilling and shooting is necessary, per lineal foot per inch in thickness	.031

Industrial Mine

Hand Mining, per ton	1.02
Contract Machine Loading, per ton	.765
Electric Undercutters short wall machines, per face foot, cut to depth of 7 ft.	.175
Breast Machines, per face foot, cut to full length of cutter bar	.181
Yardage, Entries and Crosscuts, per lineal foot, to loaders	.64
Yardage, Entries and Crosscuts, per lineal foot, to loaders where shearing machine is used	.32
Room Turning, not to exceed 24 lineal ft. paid to loaders, per foot	.64
Dirt between coals, per lineal foot for first 6 inches in thickness	.113
for each additional inch in thickness, per lineal foot	.009
Grading or Brushing bottom, entry width where drilling and shooting is necessary, per lineal foot for each inch of thickness	.024
Grading or Brushing bottom, entry width where drilling and shooting is unnecessary, per lineal foot for first 6 inches in thickness	.113
for each additional inch	.019

Columbine Mine

Mining Rate	Rate
Hand Mining, per ton	$ .88
Machine Loading, per ton	.445
Contract Machine Loading, per ton	.72
Cutting and Shearing, per place to depth of 8 ft. Oldroyd Machine, 13 ft. wide	2.22
For each additional foot over 13 ft. wide	.103
Other Electric Undercutters—	
To depth of 7 ft. for 13 ft. wide	1.96
For each additional foot over 13 ft. wide	.103
Dirt between coals per car	.67
Grading or Brushing—	
Bottom, entry width where drilling and shooting is necessary	[omitted]
Grading or Brushing—	
Bottom, entry width where drilling and shooting is unnecessary, per car	.67

Grant Mine

Hand Mining, per ton	.99
Contract Machine Loading, per ton	.71
Electric Undercutters, short wall machines, per ton	.111
Arc Wall, or overcutting machine	[omitted]
Yardage, entries and crosscuts, per lineal foot paid to loaders	.563
Yardage, entries and crosscuts, per lineal foot paid to loaders where shearing machine is used	.29
Room turning, per lineal foot not to exceed 20 ft. paid to loaders	.563
Dirt between coals, per lineal foot for 6 in. thickness	.072
For each additional inch in thickness per lineal foot	.012

Alpine Mine

Section 27

In view of the general unsettled conditions now affecting the coal industry, it is understood and agreed that the wages *set forth in this agreement are contingent upon competitive conditions affecting the Company's mines. In consideration thereof it is agreed:*

1. The Company will pay a basic day wage of $6.62 and for classified work under the general wage scale will pay the rates of wages hereinafter specified.

2. If the basic day wage scale (as shown for the preceding month by the production records in the office of the Chief Coal Mining Inspector of the State of Colorado) of the producers of 51% or more of the tonnage in Gunnison County, not including the tonnage of the Company, is reduced below the scale of $6.52, now paid by other companies, the basic and general wage scale fixed by this agreement shall be likewise reduced forthwith, except that the Company will maintain a higher differential of 10 cents on such reduced scale, which is the difference in the basic day wage paid under this agreement and the basic day wage now paid by other operators.

3. If the present basic day wage of $6.52, now paid by operators other than the Company is increased, the Company shall only be required to pay so much of the differential as is necessary to make a basic day wage of $6.62. No payment of differential shall be required if the basic day wage equals or exceeds $6.62.

4. The parties hereto mutually agree to justify the payment of the differential in the wage scale by cooperative effort and increased efficiency.

5. In the event of the enactment of Federal legislation to improve or stabilize the coal industry, the parties hereto agree to cooperate in the enforcement of any such legislation relating to wages and working conditions.

Rates of Wages

Section 28

Subject to the foregoing wage scale and adjustment provisions, the following wages shall be paid in the mines of the Company in Gunnison County:

Outside Day Wage Scale

Occupation	*New Rate*
Engineer, per month	$198.00
Firemen	5.98
Box Car Loader Engineer	6.35
Dumper	6.08
Tipplemen	5.68
Box Car Shovelers	5.68
Car Trimmers	6.08
Slate (Men) Pickers	4.55
Slate Pickers (Old Men and Boys)	3.93
Car Droppers	6.08
Blacksmith	6.96
Car Repair	6.08
Carpenter, Head	6.96
Carpenter, Other	6.08
Outside Labor, Unclassified	4.55

Inside Day Wage Scale

Rope Rider	6.62
Parting Tender, Men	6.62
Parting Tender, Boys	4.04
Drivers, Men	6.62
Drivers, Boys	4.45
Cagers	6.62
Pusher, Men	6.62
Pusher, Boys	4.45
Couplers and Spraggers, Boys	4.45
Spraggers, Men	6.62
Oilers and Greasers, Boys	4.45
Trappers, Boys	3.77
Timbermen	6.62
Timbermen Helpers	6.20
Track Men	6.62
Track Men Helpers	6.20
Rock Men	6.62

Occupation	New Rate
Rock Men Helpers	$6.20
Sprinklers	6.62
Miners	6.62
Shot Firer	7.24
Fire Boss	7.40
Inside Hoistman	6.62
Pump Man	5.35
Machine Men, per day	7.45
Machine Men Helpers	6.62
Inside Common Labor, Unclassified	6.20

Mining Rates

Hand or Pick Mining, room, entries, or pillars	.985
Machine Loading	.62
Yardage Pick Mining, entries 10 ft. and crosscuts 9 ft., per foot	.72
Yardage Machine Mining, room crosscuts 9 ft. wide and under, per foot	.35
Yardage Machine Mining, room crosscuts 9 ft. wide and under per foot where shearing machines are used	.175
Room Turning, 9 ft. wide and under, per foot	.477
Room or entry crosscuts 12 ft. wide or over, no yardage	[omitted]
Electric Undercutters, per ton	.125

Section 29

This agreement shall become effective September 1, 1930,[1] and shall terminate August 31, 1932.[2]

On or before July 1, 1932,[2] both parties agree to meet in conference in Denver, Colorado, for the purpose of either extending this agreement or revising and extending it, or executing a new agreement. Any such extensions must be in writing.

If no new contract is reached at the expiration of this agreement, the mines shall continue in operation pending negotiations

[1] In first agreement, "1928."
[2] In first agreement, "1930."

or until negotiations are discontinued by either party to this agreement.

As long as the mines of the Company affected by this agreement continue in operation after the expiration of this agreement, until a new agreement is reached, the same scale of wages, contract prices and various conditions enumerated herein shall remain in effect.

In witness whereof, the parties hereto have caused this agreement to be executed by their proper officers thereunto duly authorized this *10th day of July, 1930.*[1]

UNITED MINE WORKERS OF AMERICA
By O. F. NIGRO,
International Board Member, District 15, U. M. W. of A.
By O. F. NIGRO,
President, District 15, U. M. W. of A.

LOCAL UNION NO. 84, U. M. W. OF A.
GEORGE JONES,
HARRY MCNALLY,
WM. DEPPE, SR.

LOCAL UNION NO. 1051, U. M. W. OF A.
JOSEPH MAMBOURG,
GEORGE FELL.

LOCAL UNION NO. 2883, U. M. W. OF A.
JOHN HAYES, SR.,
J. J. METZ,
JOHN DUFFY.

LOCAL UNION NO. 2483, U. M. W. OF A.
T. W. MUNRO,
WM. DAVITT,
M. P. COSGRAVE.

LOCAL UNION NO. 1388, U. M. W. OF A.
LEWIS J. EDWARDS,
NOAH DAVIS,
JAMES R. LORD.

[1] In first agreement, "16th day of August, 1928."

THE ROCKY MOUNTAIN FUEL COMPANY
By JOSEPHINE ROCHE, President.
M. D. VINCENT, Executive Vice-President.
JOHN R. LAWSON, Second Vice-President.
F. C. SPRINGER, Secretary-Treasurer.
E. P. COSTIGAN, General Counsel.
A. J. MCGUIRE, Manager of Farm Operations.
HARRY M. JONES, Chief Engineer.

The signers of the first agreement for the period from September 1, 1928, to August 31, 1930, were as follows:

UNITED MINE WORKERS OF AMERICA
By— PERCY TETLOW, International Representative,
District 15, U. M. W. of A.
By— O. F. NIGRO, President.
FELIX POGLIANO, Sec.-Treas.
LOCAL UNION No. 2883, U. M. W. of A.
LEWIS EDWARDS, Delegate.
JOHN BUTLER, Delegate.
J. B. SALAZAR, Delegate.
LOCAL UNION No. 84, U. M. W. of A.
WM. DILLEN, Delegate.
WALTER MACHIN, Delegate.
WILLIAM KERR, Delegate.
LOCAL UNION No. 2483, U. M. W. of A.
JOE KROELL, Delegate.
THOS. REES, Delegate.
LOCAL UNION No. 1388, U. M. W. of A.
FRANK MOORE, Delegate.
THOS. STOBS, Delegate.
JOHN DUFFY, L. U. 1668, Delegate.

THE ROCKY MOUNTAIN FUEL COMPANY
By— M. D. VINCENT, President.
JOSEPHINE ROCHE, 1st Vice-Pres.
JOHN R. LAWSON, 2nd Vice-Pres.
F. C. SPRINGER, Sec.-Treas.
EDWARD P. COSTIGAN, General Counsel.

R. M. MAGRAW, Manager Mine Operations.
A. J. McGUIRE, Manager of Farm Operations.

B. AGREEMENT BY AND BETWEEN THE ROCKY MOUNTAIN FUEL COMPANY AND THE UNITED MINE WORKERS OF AMERICA, DISTRICT NO. 15, AS APPLIED TO ALPINE MINE FOR PERIOD BEGINNING SEPTEMBER 1, 1928 AND ENDING AUGUST 31, 1930.

(The contract as adopted September 1, 1928 applied also to Alpine Mine, with the following variations:)

(1) In place of section headed "AGREEMENT":

AGREEMENT

This Agreement, made and entered into this 29th day of August, 1928, between The Rocky Mountain Fuel Company, party of the first part, for its Alpine Mine operated in the County of Gunnison, in the State of Colorado, said party of the first part being hereinafter for convenience referred to as the Company, and the United Mine Workers of America, with National Headquarters at Indianapolis, Indiana, and District No. 15, United Mine Workers of America, with jurisdiction in Colorado and the local Union of said The United Mine Workers of America, existing at the Alpine Mine in said County of Gunnison of said The Rocky Mountain Fuel Company, parties of the second part, WITNESSETH:

(2) In paragraph headed "CHECK-OFF ORDER" the date should be "August 29, 1928."

(3) In place of section headed "DEPARTMENT OF MEDICINE, HEALTH AND SANITATION":

MEDICAL AID

The Alpine Mine shall be equipped with one or more standard "first aid to the injured" outfits, kept at some convenient and sanitary place or places, and every such outfit shall be in charge of some competent employe of the Company.

(4) In place of section headed "Wage Scale and Methods of Adjustment":

Wage Scale and Methods of Adjustment

In view of the general unsettled conditions now affecting the coal industry, it is understood and agreed that the wages set forth in this agreement are contingent upon competitive conditions affecting the Company's mines. In consideration thereof it is agreed:

1. That the Company will advance the basic day wage of $6.52 to $6.62, and corresponding advances shall be made in other existing classifications of the general wage scale.

2. If the basic day wage scale (as shown for the preceding month by the production records in the office of the Chief Coal Mining Inspector of the State of Colorado) of the producers of 51% or more of the tonnage in Gunnison County, is reduced below the scale of $6.62, the basic and general wage scale fixed by this agreement shall be likewise reduced forthwith, except that the Company will maintain a higher differential of 10 cents on such reduced scale, which is the advance in the basic day wage given under this agreement.

3. If the present basic day wage of $6.52, now paid by operators other than the Company is increased, the Company shall only be required to pay so much of the differential as is necessary to make a basic day wage of $6.62. No payment of differential shall be required if the basic day wage equals or exceeds $6.62.

4. No such differential shall be paid when operators producing 51% of the tonnage in such district are operating under union contracts.

5. The parties hereto mutually agree to justify the payment of the differential in the wage scale by cooperative effort and increased efficiency.

6. In the event of the enactment of Federal legislation to improve or stabilize the coal industry, the parties hereto agree to cooperate in the enforcement of any such legislation relating to wages and working conditions.

Rates of Wages

Subject to the foregoing wage scale and adjustment provisions, the following wages shall be paid in the mines of the Company in Gunnison County:

OUTSIDE DAY WAGE SCALE

Occupation	New Rate
Engineer, per month	$198.00
Firemen	5.98
Box Car Loader Engineer	6.35
Dumper	6.08
Tipplemen	5.68
Box Car Shovellers	5.68
Car Trimmers	6.08
Slate (Men) Pickers	4.55
Slate Pickers (Old Men and Boys)	3.93
Car Droppers	6.08
Blacksmith	6.96
Car Repair	6.08
Carpenter, Head	6.96
Carpenter, Other	6.08
Outside Labor, Unclassified	4.55

INSIDE DAY WAGE SCALE

Rope Rider	6.62
Parting Tender, Men	6.62
Parting Tender, Boys	4.04
Drivers, Men	6.62
Drivers, Boys	4.45
Cagers	6.62
Pushers, Men	6.62
Pushers, Boys	4.45
Couplers and Spraggers, Boys	4.45
Spraggers, Men	6.62
Oilers and Greasers, Boys	4.45
Trappers, Boys	3.77

Occupation	New Rate
Timbermen	$6.62
Timbermen, Helpers	6.20
Track Men	6.62
Track Men, Helpers	6.20
Rock Men	6.62
Rock Men, Helpers	6.20
Sprinklers	6.62
Miners	6.62
Shot Firer	7.24
Fire Boss	7.40
Inside Hoistman	6.62
Pump Man	5.35
Machine Men, by day	7.45
Machine Men, Helpers	6.62
Inside Common Labor, Unclassified	6.20

Mining Rates	
Hand or Pick Mining Rooms, entries or pillars	.985
Machine Loading	.62
Yardage Pick Mining Entries 10 ft. and cross cuts 9 ft. per ft.	.72
Yardage Machine Mining, room cross cuts 9 ft. wide and under per ft.	.35
Room Turning, 9 ft. wide and under per ft.	.477
Room or entry cross cuts 12 ft. wide or over no yardage	[omitted]

This agreement shall become effective September 1, 1928 and shall terminate August 31, 1930.

Sixty days before the expiration of this agreement, both parties agree to meet in conference in Denver, Colorado, for the purpose of either extending this agreement, or revising and extending it or executing a new agreement. Any such extensions must be in writing.

If no new contract is reached at the expiration of this agreement, the Alpine Mine shall continue in operating pending negotiations or until negotiations are discontinued by either party to this agreement.

As long as the Alpine Mine affected by this agreement continues in operation after the expiration of this agreement, until a new agreement is reached, the same scale of wages, contract prices and various conditions enumerated herein shall remain in effect.

In witness whereof, the parties hereto have caused this agreement to be executed by their proper officers thereunto duly authorized this 29th day of August, 1928.

UNITED MINE WORKERS OF AMERICA
By— PERCY TETLOW
O. F. NIGRO
FELIX POGLIANO

LOCAL UNION NO. 1051, U. M. W. OF A.
By— CHARLES HORTON
J. D. ENGLAND
J. W. BENDIR

THE ROCKY MOUNTAIN FUEL COMPANY
By— M. D. VINCENT, President
JOSEPHINE ROCHE, First Vice-President
JOHN R. LAWSON, Second Vice-President
F. C. SPRINGER, Secretary-Treasurer
EDWARD P. COSTIGAN, General Counsel
R. M. MAGRAW, Manager Mine Operations
A. J. MCGUIRE, Manager of Farm Operations

C. MEMORANDUM OF CHANGES IN AGREEMENT FOR PERIOD BEGINNING SEPTEMBER 1, 1932 AND ENDING AUGUST 31, 1934.

DECLARATION OF PRINCIPLES: Unchanged.

AGREEMENT: Dated "21st day of June, 1932."

HOURS OF LABOR, Section 1: In the holidays mentioned as exceptions to the requirement for six days a week, Sundays are omitted, Armistice Day added and a slight verbal change made by placing Thanksgiving Day in its proper order in the calendar. The following statement is inserted regarding work on Sundays:

Sundays are also excepted, provided, that any mine covered by this agreement, may work Sundays, when requested by the Company, this to be decided by a majority vote of the men involved, present at the meeting, where such vote is taken. This vote, however, shall not abridge the right of the individual employe to abstain from work on Sundays.

At the end of the section the following is added:

Note—The paragraph affecting Sunday Work is not intended to create a new condition or precedent.

TURN, Section 2, par. 2: "local agreements are permitted to be worked out" changed to "local agreements may be worked out."

"among classifications of labor" changed to "among *such* classifications of labor."

PAYMENT OF WAGES, Section 3: Unchanged.

PIT COMMITTEE AND DUTIES, Section 4: The following paragraph is added:

Nothing in this agreement shall prevent the Pit Committee from taking up with the mine management, on its own initiative, any grievance, whether or not complaint has been made of it by the employe affected.

MANNER OF ADJUSTING GRIEVANCES, Section 5: Unchanged.

MANAGEMENT OF THE MINES, Section 6; Unchanged.

CHECK-WEIGHMAN, Section 7: Unchanged.

DISCIPLINE, Section 8: Unchanged.

OBSERVANCE OF MINING LAWS, Section 9: Unchanged.

CHECK-OFF, Section 10: Unchanged except for the date of the agreement referred to in the check-off order, which here becomes June 21, 1932.

DEATHS AND FUNERALS, Section 11: Unchanged.

EMPLOYES EXEMPT FROM UNION JURISDICTION, Section 12: Unchanged.

LOST COAL AND DUTIES OF MACHINE MEN RETIMBERING FOR SAFETY, Section 13: Unchanged.

Dead Work, Section 14: Unchanged.

Working Places and Material, Section 15: Unchanged.

Laying of Track, Section 16: Unchanged.

Marketable Coal, Section 17: Unchanged.

Penalties for Loading Impurities, Section 18: Unchanged.

New Mines, Section 19: Unchanged.

Mine Supplies, Section 20: Unchanged.

Miners House Coal, Section 21: Unchanged.

Bath House, Section 22: Unchanged.

Department of Medicine, Health and Sanitation, Section 23: Unchanged.

Mechanical Appliances, Section 24: Unchanged.

Wage Scale and Methods of Adjustment, Section 25:

1. The basic day wage was reduced from $7.00 to $5.25.

2. The basic day wage scale of the producers of 51 per cent or more of the tonnage in Boulder and Weld counties, not including the tonnage of the Company, is declared to be $5.00 instead of $6.77, and the higher differential which the Company agrees to maintain is raised from 23 to 25 cents.

3. The provision regarding increase by competitive companies is changed to read as follows (the paragraph as a whole being here quoted, with changes underscored):

"3. If the present basic wage of $5.00 now paid by operators other than the Company, in Boulder and Weld Counties is increased, the Company *will pay the differential of 25c on the basic wage scale until a basic wage scale of $7.00 per day is reached*. No payment of differential shall be required if the basic day wage equals or exceeds $7.00."

Rates of Wages, Section 26: The principal change in the form of the material is to omit the general wage scale for outside and inside day wages, which in the previous agreement was placed first, followed by special rates for the different mines; in the new agreement the detailed rates are given for each mine, followed merely by a few miscellaneous rates for all mines. This section is therefore printed here in full as it appears in the new agreement:

Subject to the foregoing wage scale and adjustment provisions, the following wages shall be paid in the mines of the Company in Weld and Boulder counties:

Columbine Mine

Wage Rates

Occupation

INSIDE SHIFT MEN

Shot Firer	$5.50
Fire Boss	5.50
Oilers and Greasers	3.80
Drivers	5.25
Drillers	5.25
Cagers and Couplers	5.25
Timbermen	5.25
Motormen	5.25
Trackmen	5.25
Nippers qualified to run motor	5.25
Nippers	4.50
Machine Runners	5.50
Machine Helpers	5.25
Mechanics	5.25
Underground Hoist	5.25
Unclassified Labor	5.25
Machine Boss (not scheduled)	5.60
Barn Boss, per month	108.30

OUTSIDE SHIFT MEN

Bath House Man, per month	90.00
Lamp House Man, per month	125.12
Shaker Operator	4.50
First Engineer	5.25
Second Engineer	5.25
Third Engineer	5.00
Slate Pickers, Boys	3.92
Slate Pickers, Men	4.20
Car Dropper	4.50
Car Repairmen	4.50

Weigh Boss	$5.25
Tipple Boss	5.00
Blacksmith	5.35
Blacksmith Helper	4.20
Box Car Loader Engineer	5.00
Teamster	4.20
Electrician	5.60
Electrician Helper	4.20
Tipplemen	4.50
Mechanics	5.35
Top Foreman	5.50
Unclassified Labor	4.00
Tool Sharpener	4.80
Rock Car Runner	4.50
Watchman, per month	127.00

Mining Rates

Hand Mining, per ton	.70
Contract Machine Loading, per ton	.55
Cutting, per place	
Goodman in rock	1.78
Cutting and shearing per place to depth of 8 feet, Oldroyd machine, 12 feet wide	1.66
Electric undercutter, 12 feet wide	1.46
Additional feet in places	.1057
Rock per car when loaded out	.52
Grading and Brushing—	
Rock in coal first 6 inches, per lineal foot	.113
Each in. in addition to 6 inches, per lineal foot	.019
Resetting props, each	.20

Grant Mine

Wage Rates

Occupation

INSIDE SHIFT MEN

Fire Boss	5.50
Drivers	5.25
Electrician	5.60
Trackmen	5.25

Occupation	
Timbermen	$5.25
Couplers	5.25
Pumpmen	5.25
Motormen	5.25
Machine Runner	5.50
Cager	5.25
Unclassified Labor	5.25

OUTSIDE SHIFT MEN

First Engineer and Top Foreman	5.50
Second Engineer	5.25
Blacksmith	5.35
Weighboss	5.00
Car Dropper	4.50
Car Repairman	4.50
Loader Engineer	5.00
Unclassified Labor	4.00

Mining Rate	
Hand Mining, per ton	.72
Contract Machine Loading, per ton	.54
Electric Undercutters, short wall machines, per ton	.09
Arch Wall, or over-cutting machine—	
Yardage, entries and cross cuts, per lineal foot paid to loaders	.44
Yardage, entries and cross cuts, per lineal foot paid to loaders where shearing machine is used	.217
Room Turning, per lineal foot not to exceed 20 feet paid to loaders	.44
Dirt between coals, per lineal foot for 6 inches thickness	.072
For each additional inch in thickness, per lineal foot	.012
Props—recovering	.12
Props—resetting	.12

Industrial Mine

Wage Rates

Occupation

INSIDE SHIFT MEN

Fire Boss	5.50
Electrician and Machine Boss	5.60

Occupation	
Electrician Helper	$5.25
Machine Runner	5.50
Machine Helper	5.25
Drivers	5.25
Timbermen	5.25
Trackmen	5.25
Motormen	5.25
Cagers	5.25
Bratticemen	5.25
Nippers qualified to run motor	5.25
Trappers	3.40
Unclassified Labor	5.25
Nippers	4.50

OUTSIDE SHIFT MEN

Tipple Boss	5.50
First Engineer	5.25
Second Engineer	5.00
Third Engineer	5.00
Firemen	5.00
Blacksmith	5.35
Weighboss	5.00
Loader Engineer	5.00
Car Dropper	4.50
Car Repairmen	4.50
Tipplemen	4.50
Rock Car	4.25
Slate Pickers, Men	4.20
Slate Pickers, Boys	3.14
Unclassified Labor	4.00

Mining Rate	
Hand Mining, per ton	.76
Contract Machine Loading, per ton	.585
Electric Undercutters, short wall machines, per face foot, cut to depth of 7 ft.	.131
Breast Machines, per face foot, cut to full length of cutter bar	.135
Yardage, entries and cross cuts, per lineal foot, to loaders	.478
Yardage, entries and cross cuts, per lineal foot, to loaders where shearing machine is used	.24

Room Turning, not to exceed 24 lineal ft. paid to loaders, per foot	$.478
Dirt between coals, per lineal foot for first 6 inches in thickness	.113
For each additional inch in thickness, per lineal foot	.009
Grading or brushing—bottom, entry width where drilling and shooting is necessary, per lineal foot for each inch of thickness	.018
Grading or brushing—bottom, entry width where drilling and shooting is unnecessary, per lineal foot for first 6 inches in thickness	.084
Per lineal foot for each additional inch	.014

Standard Mine

Wage Rates

Occupation

INSIDE SHIFT MEN

Fire Boss	5.50
Motorman	5.25
Drivers	5.25
Timbermen	5.25
Trackmen	5.25
Cagers	5.25

OUTSIDE SHIFT MEN

Top Foreman	5.50
Engineer	5.25
Firemen	5.00
Weighboss	5.00
Car Dropper	4.50
Box Car Men	4.50
Blacksmith	5.35
Outside Labor Unclassified	4.00

Mining Rate

Cutting, Loading, Hauling to parting and laying straight track, also timbering, per ton	.795
Grading or brushing—bottom entry width where drilling and shooting is necessary, per lineal foot per inch in thickness	.023
Dirt in coal—first 6 inches thick, per lineal foot	.113
Each additional inch thickness, per lineal foot	.019
Rock, per car	.25

Vulcan Mine

Wage Rates

Occupation

INSIDE SHIFT MEN

Fire Boss	$5.50
Timbermen	5.25
Trackmen	5.25
Shot Firer	5.50
Inside Hoist	5.25
Drivers	5.25
Cagers	5.25

OUTSIDE SHIFT MEN

Engineer	5.25
Firemen	5.00
Weighboss	5.00
Tipplemen	4.50
Lamp Man and Blacksmith	5.35
Pumpman	5.25

Mining Rate

Hand Mining, per ton	.75
Contract Machine Loading, per ton	.585
Cutting, Air Machines or punchers to depth of 4½ feet, per face foot	.155
Narrow Work—	
Yardage, entries and cross cuts, machine work paid to loaders per lineal foot	.478
Yardage, entries and narrow cross cuts, hand mining paid to miners per lineal foot	.523
Room turning, per lineal foot for 12 feet in length	.478
Dirt between coal—for first 6 in. in thickness, per lineal foot	.113
For each additional inch in thickness, per lineal foot	.019
Grading or brushing—bottom, entry width where drilling and shooting is necessary, per lineal foot per inch in thickness	.023

Alpine Mine, Section 27:

1. The basic day wage is reduced from $6.62 to $4.69.

2. The basic day wage scale of the producers of 51 per cent or more of the tonnage in Gunnison County, not including the tonnage of the Company, is declared to be $4.44 instead of $6.62, and the higher differential which the Company agrees to maintain is raised from 10 to 25 cents.

3. The provision for equaling increases by competing companies is changed by declaring the present basic day wage to be $4.44 instead of $6.52, but the maximum which the Company is required to equal is left unchanged ($6.62).

Rates of Wages, Section 28: As both the rates and the listing of occupations are changed, this section is printed here in full:

Subject to the foregoing wage scale and adjustment provisions, the following wages shall be paid in the mines of the Company in Gunnison County:

Alpine Mine

Occupation	Wage Rates
INSIDE SHIFT MEN (Basic Rate $4.69)	
Cagers	$4.82
Drivers	4.69
Drillers	4.69
Fire Boss	5.65
Inside Hoistman	4.69
Machine Runners	5.03
Machine Helpers	4.69
Rope Rider	4.69
Shot Firers	5.43
Timbermen	4.72
Trackmen	4.72
Bratticemen	4.72
OUTSIDE SHIFT MEN	
Box Car Loader Engineer	3.96
Box Car Shovellers	3.74

Occupation	
Blacksmith	$4.44
Car Dropper	3.74
Carpenter	4.30
Car Trimmers	3.74
Dumpers	3.74
Engineers, per month	140.18
Firemen	4.20
Labeler Boys	2.78
Outside Foreman	5.27
Slate Pickers, Men	3.19
Teamsters, per month	106.20
Tipplemen	4.02
Weigh Boss	4.69

Mining Rates	
Electric Undercutters, per ton	.09
Hand or Pick Mining entries or pillars	.67
Machine Loading	.49
Yardage—Pick Mining— Entries 10 ft. and Cross Cuts 9 ft.—per ft.	.51
Yardage—Machine Mining— Room Cross Cuts 9 ft. wide and under—per ft.	.25
Yardage—Machine Mining— Room Cross Cuts 9 ft. wide and under, per ft., where shearing machines are used	.12
Room Turning—9 ft. wide and under, per ft.	.34
Room or Entry Cross Cut 12 ft. wide or over—no yardage	[omitted]
Setting Cross Bars	.53

Miscellaneous Rates—All Mines

Sinkers	5.50
Conveyor Operators (Pit Car Loaders)	6.25
Conveyor Loaders (Pit Car Loaders)	5.75

Section 29: The agreement is dated to cover the period from September 1, 1932 through August 31, 1934, and the date when the parties agree to meet for revising or extending it or executing a new one is set for July 1, 1934. The date of this agreement is the 21st day of June, 1932, and the signers are as follows:

UNITED MINE WORKERS OF AMERICA

By O. F. NIGRO,
International Board Member,
District 15, U. M. W. of A.

By O. F. NIGRO,
President, District 15, U. M. W. of A.

LOCAL UNION NO. 84, U. M. W. OF A.

GEO. JONES,
JOHN GREEN,
W. J. MORRISON.

LOCAL UNION NO. 1051, U. M. W. OF A.

FRANK MARCHUN.

LOCAL UNION NO. 2883, U. M. W. OF A.

ROBERT JOHNSON,
WM. E. WELLS,
LOUIS GASPAR.

LOCAL UNION NO. 2483, U. M. W. OF A.

L. MCKAY,
ANDY DALY,
ROBERT SIMPSON.

LOCAL UNION NO. 1388, U. M. W. OF A.

J. J. METZ,
MIKE DAL SOGLIO,
JAMES LASTOKA,
WM. KELLETT.

THE ROCKY MOUNTAIN FUEL COMPANY

By—JOSEPHINE ROCHE,
President.

MERLE D. VINCENT,
Executive Vice-President.

JOHN R. LAWSON,
Second Vice-President.

F. C. SPRINGER,
Secretary-Treasurer.

HENRY THOMAS,
Superintendent, Columbine Mine.

James Schweiger,
Foreman, Columbine Mine.
D. A. Kerr,
Superintendent, Grant Mine.
Ed Hodgson,
Foreman, Grant Mine.
Thos. Gibby,
Superintendent, Industrial Mine.
Dave Henderson,
Foreman, Industrial Mine.
George Swearingen,
Superintendent, Standard Mine.
Joseph Lemberg,
Superintendent, Vulcan Mine.
James Jordan,
Superintendent, Alpine Mine.

APPENDIX IV

CODE OF TRADE PRACTICES OF THE NORTHERN COLORADO COAL PRODUCERS' ASSOCIATION

Preamble

The signers of this document, recognizing that the coal industry is entitled to a fair profit and the public to an assured supply of coal at reasonable and non-discriminatory prices, seek through the agreement hereby set forth to eliminate the wastes and the secret, discriminatory and destructive practices which have prevailed to a great extent in the Northern Colorado coal field and to establish and maintain in their place integrity, good faith, open and fair prices and constructive practices.

Convinced and agreeing that these purposes can be achieved through self-regulation sanctioned by law, the undersigned producers of the Northern Colorado coal field hereby approve and adopt the following Code of Trade Practices.

The producers and marketers of sub-bituminous coal (sometimes called Lignite coal) herein assembled and represented at this conference do hereby adopt and submit the following Code of Trade Practices for the marketing of sub-bituminous coal and respectfully request that it be approved and promulgated by the Federal Trade Commission in accordance with that Commission's rules:

1. The international misrepresentation of analysis and/or sizes or the making, causing or permitting to be made, or published, of any false, untrue, misleading or deceptive statement, by way of advertisement, invoice or otherwise, concerning the size,

quantity, character, nature, preparation or origin of any coal, bought or sold, is an unfair trade practice.

2. The making of, causing or permitting to be made, any false or deceptive statements, either written or oral, of or concerning the business policy of a competitor, his products, selling price, financial, business or personal standing, is an unfair trade practice.

3. The unauthorized use either in written or oral form of trade marks, trade names, slogans, advertising matter or descriptive terms of a competitor, is an unfair trade practice.

4. Inducing or attempting to induce, by any means or device whatsoever, the breach of contract between a competitor and his customer during the term of such contract is an unfair trade practice.

5. Cancellation of contracts, either written or oral, except for legal cause or by mutual consent, is an unfair trade practice.

6. The secret giving of any reward of any nature whatsoever, directly or indirectly, to any employe or agent of a common carrier for the purpose of or with the effect of influencing discriminatory or unequal service between shippers or receivers of coal, or for the purpose of or with the effect of acquiring information concerning a competitor's shipments or business, is an unfair trade practice.

7. The secret giving of any rewards of any character whatsoever, directly or indirectly, to a competitor's employes, or to a competitor's customers or his employes, in order to secure business, or to obtain information concerning a competitor's business, is an unfair trade practice.

8. Selling of coal below cost for the purpose of injuring a competitor, and with the effect of materially lessening competition, is an unfair trade practice.

9. The effecting of adjustments of claims with purchasers of coal in such manner as to grant excessive allowances, excessive rebates or excessive concessions, with the intent or effect of creating price discrimination, is an unfair trade practice.

10. The payment of freight charges by a seller of coal for

the purpose or with the effect of inducing the purchase of coal, and/or for the purpose or with the effect of creating a discrimination in price and terms of credit, is an unfair trade practice, excepting only that shipments to destination where there is no station agent are not an unfair trade practice.

11. The giving of any form of adjustments, allowances, discounts, credits or refunds to purchasers or sellers of coal, for the purpose or with the effect of altering retroactively the price quoted, thereby creating a price discrimination, is an unfair trade practice.

12. The device of postdating or predating any invoice or contract for the purchase or sale of coal with the intent or effect of discriminating in price between purchasers is an unfair trade practice.

13. The furnishing of trucks, the furnishing or leasing of scales, or other equipment, the furnishing of yards or yard facilities, without fair consideration and remuneration, or the renting of yard facilities for storage purposes, for the purpose or with the effect of according a purchaser of coal the equivalent of a discount on coal purchases, with the effect of creating price discrimination, is an unfair trade practice.

14. The granting by any producer of prices and terms of sale not extended concurrently to all his customers under like conditions, with the effect of materially lessening competition or creating a monopoly, is a discriminatory and unfair trade practice.

15. Each producer and seller of coal shall determine independently the prices and terms of sale under which he shall operate, but all prices and terms of sale shall be open. The granting of secret rebates, secret concessions, secret allowances or secret discounts, or the use of any device which conceals the true price or terms of sale, is an unfair trade practice.

16. Coal producers and/or producers' agents independently shall post in their respective sales offices, in a conspicuous place accessible to the public, and shall quote the trade the prices and terms of sale of coal. The posting or quoting of any false

or fictitious price or terms of sale and/or the failure to post and/or quote the prices charged and the terms of sale has a tendency toward and often the effect of creating discrimination in price and terms of sale and is condemned by the industry as an unfair trade practice.

17. The consigning of coal otherwise than on bona fide orders has a tendency to create discriminations and is detrimental to both the industry and the public; therefore, the consignment of coal to producers, producers' agents, or dealers, or to consumers with the intent to divert en route, is condemned by the industry as an unfair trade practice.

Definitions

The expression or term "the industry" as used in this Code refers to the business of mining and selling of sub-bituminous coal (sometimes called Lignite coal) in Weld, Boulder and Jefferson Counties, in the State of Colorado.

The industry hereby reports its approval of the definition of a producer to be any person, firm or corporation engaged in mining and selling coal to industrial consumers, public utilities, railroads and governmental agencies which have adequate trackage facilities for delivery, qualified wholesalers, or to the legitimate retail trade, in not less than car-load lots.

The industry hereby records its approval of the definition of a retail dealer to be any person, firm or corporation engaged in the sale of coal as a regular business, buying to sell at retail, who shall own and/or operate a yard, keep an office and display a sign, having a stock of coal adequate to take care of his trade at all times and the proper scales on which to weigh the same.

It is to the interest of both the public and the industry that descriptive terms be fixed for various preparations of coal produced in Weld, Boulder and Jefferson Counties sold to the domestic trade, and the industry hereby records its approval of the following terms as distinguishing and identifying sizes for domestic trade.

DUST	Coal passing through 1¼-inch screen.
SCREENED SLACK	Coal passing over 1¼-inch screen and through 2½-inch screen.

And the following all over and through round-holed shaker screens:

SLACK	Through 2½-inch screen.
NUT	Over 2½-inch screen and through 4-inch screen.
EGG	Over 2½-inch screen and through 6-inch screen.
LUMP	Over 2½-inch screen.
MINE RUN . . .	Unscreened coal.

THE ROCKY MOUNTAIN FUEL COMPANY
By M. D. VINCENT, President

BOULDER VALLEY COAL COMPANY
By P. M. PELTIER, President

NATIONAL FUEL COMPANY
By W. S. ILIFF, President

THE WILLIAM E. RUSSELL COAL CO.
By W. E. RUSSELL, President

LILEY COAL AND LAND COMPANY
By CHARLES LILEY, President

McNEIL COAL CORPORATION
By A. M. McNEIL, Vice-President

THE IMPERIAL COAL COMPANY
By JAMES BRENNAN, President

SHAMROCK COAL COMPANY
By THOMAS MORGAN

THE CONSOLIDATED COAL & COKE CO.
By CARSON W. SMITH

THE CLAYTON COAL COMPANY
By H. B. CRANDELL,
Secretary-Treasurer

APPENDIX V

REPORT ON EFFORTS TO IMPROVE OUTPUT AT THE VULCAN MINE OF THE ROCKY MOUNTAIN FUEL COMPANY

Prepared by John Green, Acting President of the Local Union; usually employed as miner in Industrial Mine

JANUARY 19, 1932

AT THE VULCAN TO IMPROVE OUTPUT THROUGH CO-OPERATION:

Present for the company all of the time were John R. Lawson and Supt. Bertram and part of the time (in East)[1] Joe Lemberg. For the miners all of the time Jack Green, Jimmy Graham and George Drysdale and part of the time (in East) Joe Devitsky, of the Pit Committee.

We received production figures from the mine clerk per loader for the months of November, December and 14 working days to date in January, as follows:

			TONS
Nov.	7.3	tons per loader per day and total	5,914
Dec.	7.75	" " " " " " "	6,594
Jan.	7.84	" " " " " " " for 14 days	3,721

34 loaders on the payroll with about 4 per cent absentees daily average for this period. This day (January 19, 1932) 306 tons were hoisted for 33 loaders or an average of 9 1/3 tons per loader, showing a substantial tonnage that should be entirely satisfactory if maintained and further showing conclusively that at times bad days are experienced that lower this 9 1/3 tons considerably, when averages are compiled. Owing to the

[1] Refers to a section of the mine.

restricted territory available for the mining of coal (the mine is on the retreat everywhere) this is in some degree to be expected, but with mutual cooperation these bad days can be reduced and the good correspondingly increased, making possible quite an aggregate gain. All of the men, without exception, expressed a willingness to cooperate and gave their opinions of things in general, freely and unafraid.

Starting in the East portion of the mine, it at once became apparent that haphazardness was present in all of the places, as men cross-shifting each other were not working to mutual advantage. Each man was getting through his shift without giving consideration to the oncoming shift and a rough estimate of the time thus lost, coupled with other matters which were brought out, caused almost the loss of a full shift of loading in a week's time.

To offset this, reorganization of the working force is necessary and a thorough discussion developed feasible plans that yet remain to be worked out.

One man (Drysdale) stated he had shot a place down (giving 14 cars) at the close of his shift, returned next day and found it cleaned up and not even cut, a loss to him of $1.30 in powder and about the same amount in labor. This same practice, in varying degrees during the past, had resulted in losses all round, men and company both, as men were loath to shoot coal unless they were sure of loading it out themselves. Hours of labor were lost by men (almost all of them) at some time or other, coming on shift, finding their places not cut, and in many instances where there was coal, no cars to load the coal in for some length of time. Further, it developed men were losing half a working day each week changing places. Also, the statement was made by the superintendent that some loaders were quitting before 3 o'clock while they yet had coal and cars to put the coal in.

Also that at times the machine man had nothing to do and then three or four places cleaned up simultaneously. When this occurred some of the loaders cut their own coal, as manifestly the wait for coal would be too long. A concrete favorable suggestion from the men themselves was that change over of working places be made every three weeks instead of the present weekly change, and was agreed to unanimously. This should be put in effect immediately.

Also a suggestion that 8 men should cross-shift another 8 men, always retaining the same buddies. This would enable men to work to each other's benefit, of course, with the men working nights, week about. As this would throw some men days continuously, the superintendent stated he could make arrangements whereby even these could do their turns at night work. This is worth a trial and comes as near as cross-shifting can be worked out fair to all, including the Company.

Arrangements must be made to get men at work loading upon entering the mine at the commencement of the shift, as laying around at any time and particularly at that period lessens a man's efficiency considerably. There is quite a volume of cold air in this portion of the mine and every opportunity to keep at productive labor is certain to be appreciated by the men and of great benefit to the general cause, as it would result in an increase of production.

A place cleaned up at the end of a shift should be cut before the next shift comes on and an empty car in each working place to start with and thus costly waiting avoided. Where the working places are very limited and a large comparative overhead, such as is the case here, there should be no waiting for anything on the part of the loaders. All of the places were timbered in good shape and the coal being extracted with a minimum of loss. The state of the working places proves the efficiency of the men, all of whom, without exception, are first-class miners.

Down the Slope in the Afternoon:

There are only three working places down here and each set of men cut and load their own coal. Difficulties are enormous, water and heaving bottom being extremely troublesome. In the laying out of this work, the entries were driven too close together, leaving a small chain pillar of 26 feet between the entries, when twice that would not have been sufficient, considering the nature of the roof and bottom, which are of a soft nature. The problem here is one entirely of how to keep the place dry and the roadways open. Five company men (including the drivers) for these three working places, are as little as can be used and production go on.

A suggestion to use the company men at grading on the graveyard shift was made, as on this shift there men could work untrammeled and do better work. Of course, the superintendent is in a better position to judge than any casual visitor.

More visits to this mine and incidentally other mines (during working hours) by the higher officials of the company would be of immense benefit, as John Lawson was listened to attentively and his suggestions received in the same friendly spirit they were offered.

No criticism was made. As a matter of fact criticism is a superfluity when the difficulties of this operation are considered. We venture to assert that if this mine had been worked under the present union cooperative management plan during its entire producing life, it would yet have been a valuable property.

Lamenting over the dead past doesn't help, but we can profit by experience and in this particular mine full cooperation is one of the chief essentials for successful operation.

APPENDIX VI

REPORT OF LOCAL SCALE CONFERENCE FOR COLUMBINE MINE, AUGUST TO OCTOBER, 1930

A. Agenda.

Questions for discussion, September 16, 1930

1. Pulling track and timber.
2. 44½-cent coal. (Settled) Also pay for dirt.
3. Clearance above car.

To Be Resumed Thursday, September 18, at 10 a.m.

4. Loaders laying track to face. (Settled)
5. Question of loading road dirt. (O.K., to remain as heretofore done)
6. Inspection Committee. (Settled)
7. Timbers and lagging. (Settled)
8. Shot firers, face bosses doing driver's work. (O.K.—out)
9. Loaders driving mules, drivers loading coal. (O.K.—same as formerly)
10. Miners making local agreement. (O.K.—covered by agreement)
11. Division of work during slack season. (O.K.—settled)
12. No coal to be loaded on idle days except emergency work. (O.K.—same as formerly)
13. Driver boss dropping cars. (O.K.—will join union (?))

Adjourned to Saturday, 10 a.m.

14. Night men working double shift. (Will be adjusted—will adjust itself)
15. Two men for two places. (Settled—will work this out)
16. Company to furnish jumper rails. (O.K.—attended to)

17. All places under 12′ to pay yardage. (Remain same)
18. Price of rock car $.67 to $1.00. (Remain same)
19. Night and day shift alternate work. (Night men will take the place of day men whenever day men quit)
20. Help for heavy timber and heavy steel. (Recommendation, not matter of agreement)
21. Miners pushing cars upgrade. (Company does not either require nor desire men to push cars without help)
22. Night shift made up equal with day men. (Company will keep shifts as equal as possible)
23. Not enough cars for low coal district. (An effort will be made to adjust this matter)
24. Price for coal where bottom heaves. (Company will strive to shoot places as soon as cut)

ADJOURNED TO FIRST IDLE DAY NEXT WEEK

CONVENED THURSDAY, OCTOBER 9, AT 10 A.M.

25. Setting of cross-bars and timber near face.
26. Need of sanitation committee.
27. First Aid teams.
28. Machine-men not getting full shift.
29. Increased wage for top-man now getting $4.55.
30. Half pay for lamps and bath-house.
31. Pay for shearing rock.
32. 2 places for 2 men in low coal and rock except in case of fire.
33. Raise pay of bath-house men.

B. Minutes.

The first meeting of the Local Scale Conference for Local Union No. 2883 and The Rocky Mountain Fuel Company was held at the Casino, Serene, August 22nd.

Representing the Company were Mr. Merle Vincent, Mr. John R. Lawson, Mr. Henry Thomas and Mr. James Swigert.

Representing the Local Union were Messrs. Louis Gaspar, James R. Lord, Noah Davis, Lewis Edwards, Grant MacConnell, Ralph MacConnell, Ben Wright, George Ferris, John Macarelli, Thomas Coughlin and Thomas Wakely.

Louis Gaspar for miners was elected Chairman of conference and James R. Lord as Secretary.

The first matter for discussion was brought forward by Mr. Vincent in regard to mine committees accompanying mine inspectors in mine examinations, and the question of such committees securing first-hand information in mine accidents. This discussion resulted in complete understanding by all on this question.

The question of separation of shotfirers' and face bosses' titles was discussed thoroughly.

The low coal district came in for an extended discussion, including bad physical conditions and various proposed methods of rates.

These discussions were harmonious and educational and were taken part in by all in the conference. The atmosphere was undoubtedly cleared for many on both sides, but no definite determination was arrived at when the conference adjourned at 6:30 p.m.

The Local Joint Conference again met at the Patterson Building, Denver, at 10:30 a.m. on September 6th, 1930.

Chairman Gaspar read in sequence all the details involved in the matter of the 44.5 cent coal proposition. A general discussion ensued, including miners' proposals, the Company's ideas and various methods and production costs. This session adjourned at 12:40 p.m.

Conference convened at 2:45 p.m., Louis Gaspar in chair. Discussion of payment for rock and impurities in coal took place. The Company offered the Vulcan method of payment on this matter. The miners countered by demanding 25 cents an inch up to 6 inches, and 4 cents an inch per lineal foot on each additional inch thereafter. Later the miners modified this demand by asking 25 cents an inch per lineal foot up to 6 inches and 3 cents for each additional inch thereafter. The discussion was then changed by Mr. Vincent's proposing the contract system become general. That is to say, the contract system carrying the 72 cents a ton rate supersede those districts where the 44.5 cent had formerly applied, with this exception, that in all coal measuring five feet six or under, the Company would drill at its expense the three top holes, leaving the miner to drill the two breaking or snubbing holes. The miners proposed the Company drill all the holes in such places inasmuch as not much more time would be required. After a long discussion this was agreed to, as was the rate of payment for rock and impurities in the coal seam which exists at the Vulcan Mine agreed to for the Columbine Mine, except that in case it is necessary to load a car of rock after it has been gobbed from the face or in front of a lift, when directed to do so by the management, loader will be paid for loading such rock at the rate of 67 cents a car.

It was agreed that for brushing, where drilling and shooting is necessary, the rate shall be, per lineal foot per inch in thickness 031

Where grading and brushing bottom does not require drilling and shooting, the rate shall be, per lineal foot for first 6 inches 113

And for each additional inch 119

It was further agreed to furnish point rails of suitable length to loaders.

This session adjourned at 6:30 p.m. subject to call from Chairman Gaspar.

On September 16, 1930, the conference again met at the Patterson building at 3:15 p.m., Louis Gaspar in chair.

Chairman Gaspar presented in their order the rest of the local proposals. Discussion arose on question of Mine Committee accompanying State Mine Inspector in mine examinations and in case of accidents to go to the scene of the accident to get first-hand information as to the existing conditions surrounding the accident. This matter was adjusted satisfactorily.

A general discussion then ensued on the local proposals, and took the direction of need of first aid, rescue work and training. The Company promised their fullest cooperation in these matters and pointed out they had formerly tried to get teams started to take this training, even to paying them wages for time spent in so doing, but not enough men showed enough interest to take such training, even when paid to do so.

The question of pulling rails and timbers was thoroughly discussed, resulting in the Company's proposal that the present system be continued, with the change that in the pulling of turns the basis of pay shall be fifty cents a turn instead of two props being allowed, as was the former custom, and all turns being pulled back clear of expected falls being adopted.

In regard to the proposal of one foot clearance between pit car and roof it was decided that inasmuch as we fail to agree on this definite demand, each case of extremely difficult loading should be taken up for joint adjudication, the thought being that the miner and company representative could best determine whether top or bottom be brushed if it is necessary.

The representatives of the Company made it very plain, as they did in the general wage conference, they would not countenance any proposed change that materially increased costs, while the coal market is in such a demoralized condition, and non-union competition all around them, in and out of the state, and they frankly showed us figures to bear this out. There is no question but they have to pocket a loss at this time, and have for some time past, for every operating day. Last year the mines were going full blast before this month but this has not materialized this year. It is sure that all companies operating in this field sustain operating losses during summer, which have to be made good in winter. Added to this general condition in this field, which no one can escape under present economic conditions, The Rocky Mountain Fuel Company carries the additional burden of the differential which means higher wages paid, higher mining costs, insofar as wages count in cost, which no competitor now carries. The miners' representatives on the joint scale committee understand this, they have understood it, and it represents an acute problem to us as well as to the Company.

At 6:30 p.m. the conference adjourned to meet at 10 a.m. Thursday, September 18.

On September 18, 1930, the conference went into session at 11 a.m., Louis Gaspar in the chair.

Cleaning roadways at rate per car was discussed.

The representatives of the Company set forth that nippers cleaning switches were paid at their day wage rate; that road cleaners usually made more than the day wage, often making the wage in six hours. They also pointed out that if this work were put on the day wage basis some men would load more than others, some less, and it is impossible to keep a man supervising this work. They proposed placing all this work in the hands of men who would do nothing else, which would, of course, mean that motormen, drivers or other day men would never get any of this work. They also pointed out that motormen and nippers have been repeatedly asking Mr. Swigert why the road cleaning was taken away from them and given to one man who did no other kind of work, and that they were satisfied to keep this work as it had been done in the past.

It was agreed after much discussion the present method be continued.

Track laying:

It was explained by representatives of the Company that in regard to paragraph 16 of the general agreement, that when under the former general agreement, which expired the first of September, 1930, miners were changed from the 44.5 status to the 72 cent status, or what is known as the "contact system," these men, so changed, voluntarily agreed to lay their track even where rails exceeded 20 pounds per lineal yard. In this connection, the Company promised to ask permission of the State Mine Inspector to use blow torch to cut rails measuring 30 feet in two, making 15 foot rails. This permission is necessary as the Columbine is a closed light mine. The Company also promises to furnish straight rails.

There being no water bailing problem in the Columbine at this time, no action was taken on this matter.

Timbering:

After 12 feet back from the working face, where timbering has to be renewed or reset, men will be paid at the rate of 25 cents a prop, or if mutually agreed, by days wages.

Shot firers doing other work:

Inasmuch as shotfirers no longer act as face bosses, no further action was taken.

Drivers and loaders:

In case there is not enough night coal to be loaded to justify a driver working steadily as such, the driver will pull coal and load. Whenever such driver feels he is not paid enough it will be adjusted so he gets the estimated rate it costs for day drivers.

The Company stated that whenever men have worked shifts on idle days it has been on account of nearby fire. The Company also agrees that the bin coal business will be equitably distributed in the mine, and we agreed that emergency places be continued as formerly, four loaders to get a steady driver, where there are less than four loaders, driver to load with loaders. And all local agreements must be rendered in writing.

The division of work was settled in the General Conference.

Emergency work:

There was wide discussion on this question and all those things that have created so much dissension were aired, all of which was answered by the Company, after which the Company pledged themselves to work this matter out as fairly as possible.

Boss driver dropping cars:

It is agreed that inasmuch as this man does not have authority to hire or discharge, and inasmuch as this matter will adjust itself in a few weeks as soon as tonnage increases and he will discontinue dropping cars. If he performs any work of any character the U. M. W. of A. has jurisdiction over, he shall joint the Local Union.

Two men in two places:

Discussion on this matter was still on when conference adjourned at 6:10 p.m.

September 24, 1930.

Conference called to order at 10:35 a.m., Louis Gaspar in the chair.

Grant McConnell, Noah Davis, Louis Gaspar, Thomas Coughlin and James R. Lord represented the miners, and John R. Lawson, Henry Thomas and James Swigert represented the Company.

The former session had adjourned on question of two men in two places being discussed. The Company pointed out that the present condition of 3 men sometimes working in 2 places was caused by the change recently made wherein several day men had been set loose from their jobs or former work and had to be taken care of as loaders, or laid off. They expressed the thought that it is not their purpose to compel 3 men to work in 2 places where two men can demonstrate they can clean up such places, but to enforce the rule now would result in some men being laid off now. They further pointed out that on account of the rotation of the retreat in the low coal district great care must be taken so the wrong section be not brought back too rapidly for practical purposes.

Night men working double shift:

The Company agrees that hereafter it will be their endeavor to divide up extra time for night company men on their regular shift, insofar as it is practicable, rather than make them double back on the day shift.

Places under 12 feet wide to be paid yardage:

It was pointed out that while there is room for argument on this question, it is unwise and impossible to change the present method at this time. This one item constitutes a robust cost in production.

Price of rock:

Inasmuch as this matter has been jointly agreed on, no action could be taken. It is agreed as a matter of record, however, that it is optional with mine foreman whether the rock shall be put in the gob at the rate agreed on or loaded in car. It is also distinctly understood that any rock that has been put in the gob with the approval of mine management, such rock will be paid for at the rate of 67 cents a car when ordered to be loaded out.

Alternating work:

After a varied discussion, in which it was brought out that some men on night shift are sometimes not qualified to perform certain kinds of work on the day shift as it occurs. It is agreed that when openings occur on day shift some qualified night man will be given preference over a new employe.

Help for timbermen and track layers:

The Company takes the position this is a management proposition and problem, and where it is necessary or in special work, two timbermen do and will work together.

Miners pushing cars upgrade:

The Company points out that drivers are instructed to help miners push cars in, or use the mule if necessary.

Night shift to be made up in extra time to day shift (day men):

It was explained there is no such question involved since the new agreement has been negotiated and in existence, but every endeavor will be made to avoid having this question arise in the future. Any day man getting behind his turn for two days should immediately take this matter up with the mine management.

Lack of cars in low coal district:

The Company will put forth every effort to remedy this matter.

Price for coal where bottom heaves and binds shots:

The Company will strive to have these places shot as soon as possible after they are cut.

The conference adjourned at 5 p.m., to meet on the first idle day of next week.

(Sgd) JAMES R. LORD

October 9, 1930
Local Union No. 2883
Patterson Bldg.
Denver, Colo.

Meeting of Miners' Representatives and The Rocky Mountain Fuel Company, Columbine Mine, Serene, Colorado

Meeting was called to order at 10:30 a.m. with Louis Gaspar, Thos. Wakely, Thos. Coughlin, Grant McConnell and District President, Mr. Nigro, representing the miners and Mr. John Lawson, Mr. Thomas and Mr. Swigert representing the company.

Question: Setting of X-bars at working face:

This question was thoroughly discussed and inasmuch as it is not the practice in any of the other mines in the northern fields to pay for X-bars, it was decided to drop the question, although Mr. Lawson agreed that such kind of work should be paid for, but as it would increase the cost of production they could not see their way clear to do it *at the present time.*

Question: Sanitation and medical program:

On account of the present depression in the coal trade this could not be taken care of at this time, but the Company agrees to take care of it as soon as they can. The Company expressed themselves as perfectly willing to open up joint meetings for general discussions.

Question: Machine men getting full time:

This case was given a great deal of discussion. The management, Mr. Thomas and Mr. Swigert, said the average pay for these men for the month was $9.05 per shift. They said they had given them work when they had it for them and would continue to do so at Company work.

Question: Increased pay for top men now getting $4.55 per day:

This question was passed over the same as other questions which would increase the cost of production for future consideration.

Question: Half pay for bathhouse and lamps during slack time, or when man works less than 14 days per month—spring and summer:

It was agreed that during the slack time of spring and summer half pay should be charged for lamps and bathhouse for men working less than 14 days per month.

Question: Machine men getting pay for shearing rock:

Inasmuch as there is a scale provided for this work in the contract this case was dropped.

Question: Two men for two places:

This question was decided on previously in other conferences.

Question: Bathhouse man:

A raise in wages at the present time could not be considered.

Question: Changing the payment for rock from yardage to the old system of paying for it by the car as before:

This question was given considerable consideration and it was the Company's viewpoint that the measuring system had not yet been given a fair trial and it was decided to give it another two weeks or another measurement trial and, if not proven satisfactory, the question can be taken up again.

(Sgd.) THOS. WAKELY
Acting Secretary

APPENDIX VII

INDUSTRIAL COMMISSION OF COLORADO, AWARD IN THE MATTER OF PROPOSED REDUCTION OF WAGES BY OPERATORS IN THE NORTHERN FIELD, MAY 7, 1932

STATE OF COLORADO, s. s.
BEFORE THE INDUSTRIAL COMMISSION OF COLORADO

FILE NO. 1899

IN THE MATTER OF THE NATIONAL FUEL COMPANY; McNEIL COAL COMPANY; BOULDER VALLEY COAL COMPANY; LILEY COAL AND LAND COMPANY; WILLIAM E. RUSSELL COAL COMPANY; IMPERIAL COAL COMPANY; CLAYTON COAL COMPANY; DAVID ALLEN; SHAMROCK COAL COMPANY; LEYDEN LIGNITE COMPANY; BLACK DIAMOND FUEL COMPANY; CONSOLIDATED COAL AND COKE COMPANY; and LOUISVILLE-LAFAYETTE COAL COMPANY, Employers, *vs.* EMPLOYES EMPLOYED IN THE COAL MINES OF THE ABOVE NAMED EMPLOYERS, Employes.	FINDINGS AND AWARD

The above entitled matter came on for hearing before the Industrial Commission of Colorado on the 28th day of April, 1932, at ten o'clock a.m., in the Union Hall, at Lafayette, Colorado, pursuant to notices duly issued and served upon the parties hereto.

The employers appeared as follows:

The McNeil Coal Corporation, by A. M. McNeil.
The William E. Russell Coal Company, by William E. Russell.
The Boulder Valley Coal Company, by Peter M. Peltier.

The Louisville-Lafayette Coal Company, by Morton Montgomery.

The Liley Coal and Land Company, by J. A. Carveth.

The Imperial Coal Company, by James Brennan.

The Shamrock Coal Company, by P. H. Powers.

The Crown Mine, by David Allen.

The Black Diamond Fuel Company, by T. W. Thurmon.

The Consolidated Coal and Coke Company, by C. W. Smith.

The Leyden Lignite Company, by Harry Nash.

The Clayton Coal Company, by Clayton Morrison.

The National Fuel Company, by Harry C. Balek.

N. C. Brooks, Secretary of the Northern Colorado Coal Producers' Association, attended all meetings of the Commission.

The employes were represented by O. F. Nigro and John E. Gross.

The employers contended that it is necessary to reduce wages in order to successfully meet competition from employers in other parts of the state who are paying a lower wage scale; that the operators in the Northern lignite fields of Colorado are entitled to the same wage scale paid by the Colorado Springs mine owners and coal operators in El Paso County and other parts of Colorado; that they are entitled to this reduction in wages as a matter of self-protection; they contend further that at the present time they are paying the highest wage scale of any coal operators in this state; several of the operators said that it was impossible to ship coal outside of Colorado into Iowa and Nebraska and meet competition unless the cost of production could be reduced; they also informed the Commission that a contract for 35,000 tons of slack coal has recently been let by a consumer in the City of Denver to coal operators in El Paso County.

The employers also called the attention of the Commission to the competition of oil and gas which at this time is encroaching upon their markets; they further called attention to the number of institutions in the City of Denver that have discontinued the use of coal and who are using gas in its place. One operator testified that gas competition had replaced coal in many places and that the sales of coal for 1931 were 30 per cent less than during 1930.

The employes contended that the present wage is not sufficient to produce a decent living, when the number of days they are employed per annum is taken into consideration. Some of the employes testified that a number of the mines required their employes to work over eight hours per day underground, which is a violation of the eight-hour law of this state. Several of the men testified that they were not getting a square deal on weights and that there were times when the coal companies did not weigh the loaded cars but simply guessed at the weights. Many of the employes claimed that at some of the mines no checkweighman was employed; that when the men proposed to elect a checkweighman it was necessary for them to elect one by petition and this petition was presented to the employer.

Some of the men testified that the manner of selecting a checkweighman was not fair and if the man selected did not meet with the approval of the employer he would not be placed upon the tipple.

All the employes testified, as did all of the employers, without exception, that the men were not consulted when the employers decided to file a notice with the Industrial Commission of their intention to reduce wages.

All the above named companies filed notice with this Commission of their intention to make a reduction in wages: said notices were practically identical and were based upon a wage of $5.00 per day as the basic wage scale.

Later on we received protests from all the mines owned and operated by the above named employers, said protests containing the names of 634 employes who protested against said wage reduction as proposed by the employers.

Several petitions were received from Boulder, Longmont, Louisville and Fort Lupton, protesting against the proposed wage reductions, which were signed by business men, professional men and citizens of the above named towns.

All of the large coal companies operating in the Northern Colorado coal field filed notices of their intention to make a reduction in the wages of their employes, except the Rocky Mountain Fuel Company.

After receiving protests from the employes the Commission held a hearing in this matter as above noted.

At this hearing several of the operators testified that the Rocky Mountain Fuel Company was the first coal company in the Northern Colorado field to cut the price of coal, which made it necessary for the rest of the companies operating to do the same thing. Many of the operators claimed that slack coal was a by-product and was usually sold for any price that could be obtained.

After this evidence had been submitted to the Commission, Mr. Merle D. Vincent, Executive Vice-President of the Rocky Mountain Fuel Company, appeared before the Commission and testified that the Rocky Mountain Fuel Company was not the first company in the Northern Colorado coal field to reduce the price of coal; that slack coal was not a by-product; that the first step in the price war in Northern Colorado was the cut of 20 cents per ton in the price of slack coal and this seemed to be one of the chief difficulties in stabilizing conditions in the Northern coal field; that the basis upon which a price for all grades of coal should be fixed is the cost of production and that it is wrong for any producer to sell to any consumer any grade of coal for less than it costs to produce it; that during the last five years there has not been a time when the industrial consumers of slack coal have not had requirements to exceed the annual production in the normal course of mining; that there were seasons when there was a surplus, but there were also seasons when there was a shortage, with the result that some five or six operators, including the Rocky Mountain Fuel Company, in the Northern field have had crushers installed in order to take care of the demand when the normal supply of slack coal was not sufficient to meet the market demands; that many consumers of steam coal pulverize their coal because they will not use the larger sizes of coal and would crush their coal in case of a shortage of slack; that 50 per cent of the coal produced in Northern Colorado is slack coal and is insufficient for the normal annual needs of industrial consumers, and that the only sound economic basis upon which to make prices for this class, or any other class of coal, is to start with the cost of production.

Mr. Vincent, as the representative of the Rocky Mountain Fuel Company, also said:

> What we are trying to do is not to maintain a battle with other operators, but to maintain peace under circumstances that will permit everybody connected with the industry to live; to create living conditions for operators, for investors, and for the men working in the mines. It is perfectly possible to do so if the operators in this district were put on the same voluntary contractual basis, upon the same negotiated wage scales arising out of a conference in which both sides were represented through their own chosen representatives and sit there with co-equal rights until a voluntary agreement was arrived at; you would stabilize costs. That would be the first step. Nobody then would have any cost advantage over another. Next, if then a trade practice were adopted and put into effect that inasmuch as all classes of coal produced in this mine are essentially either for domestic trade or industrial consumption and the cost of production shall be the basis from which all prices proceed and that no class or grade of coal should be sold below the cost of production; if those two things were done, this field alone, regardless of the economic conditions prevailing in other parts of the United States, in one season can be put on a stable, economic basis which will yield an income to permit men to live under a proper standard of living and operators to make a reasonable margin of profit. In my judgment, the barrier that stands between the present demoralized condition and such a stabilized condition as I have described is simply an ancient hang-over prejudice or closed mind and an unwillingness to concede that if a man is necessary to mining coal he is just as indispensable as the money that provides the property and machinery, and that the laborer that does the work and the technician that manages the property, the investor in the property, all are entitled to the security of an annual income and no one of them to a prior security over another.

The Commission wishes to recommend the suggestions of Mr. Vincent to the favorable consideration of the other operators in the Northern field.

The employers have an association known as the Northern Colorado Coal Producers' Association; they employ a secretary; they have meetings to discuss matters, and it seems only right and just that the employes should be entitled to have an organization of their own. This is a day of organization—there are banking associations, chambers of commerce, retail grocers' associations, etc.—employers' unions, if you please, and why should labor be denied the right to organize unions of their own? We believe that the employes are entitled to the same rights and privileges as the employers.

We would recommend to the employers that they urge their employes to have some kind of an organization of their own for collective bargaining.

Labor is entitled to a living wage and the employer to a fair return on his investment. Labor and capital are necessary for the success of any kind of an industrial enterprise. One is as necessary as the other. They should work in harmony if labor is to receive a living wage and the employer is to receive a fair return on the investment. To secure these ends it would seem that some system of collective bargaining should be used. Experience has shown that it is not to the best interests of the employes to leave their welfare exclusively in the hands of the employer. While it is true that many of the employers protect the interests of their employes, there are others who do not. The only safe and sure protection for the employe consists of his ability to bargain collectively.

Labor organizations are as much the product of modern industrial life as the corporation. There was a time when the individual workman could bargain with his employer on something like equality. Industrial development has reached a point where it is impossible in many cases for the employe to deal as an individual with his employer. Under these conditions it is impossible for the individual workman to bargain on an equal basis. In such a case it is no bargain at all. The individual workman can accept the conditions named by the employer or look for other employment. Very little freedom of contract can exist between a man who has nothing but his labor to sell and the employer who can do without the labor of any particular individual. Freedom of contract under such conditions is little more than an idle dream, because of the self-evident inequality.

The right of the miners to bargain collectively should not be denied or abridged by any employer. It is one of their rights and the one principle that will settle many industrial controversies. There should be no opposition on the part of the employers to this principle. It seems to us it is one of the very best and safest instruments for the attainment of industrial peace and justice.

From the evidence submitted by the employers it would appear that a majority of these employers have no objection to the employment of a checkweighman. A large number of the miners' witnesses complained about weights and expressed a desire for a checkweighman. Many of these men objected to the present method of selecting a man for that position because it was necessary that they sign petitions and when these petitions were presented to the employer he could see how every man voted.

We would recommend that the men elect a checkweighman by secret ballot and that the officials of the company take no part in such election—that both nomination and election should be by secret ballot under conditions that insure freedom of choice and an impartial count.

We would also recommend that Section 87 of the Coal Mining Laws of Colorado be made effective. This reads as follows:

Miners May Appoint Committee to Examine Mine

Section 87. The miners employed in a mine may from time to time appoint two of their number to act as a committee to inspect, not oftener than once every month, mine and the machinery connected therewith and to measure the ventilating current, and they shall notify the owner and if the owner so desires, he may accompany said miners. The owner shall afford every necessary facility for making such inspection and measurement and the committee so appointed shall forward to the offices of the Chief Inspector of Coal Mines a written report as to the results of such inspection.

In all the testimony presented to this Commission by the miners we fail to find any showing where any attempt has been made to put this section of the law in force by any operator.

We would recommend that the provisions of this law be put in force and that the two men elected act as a conciliation committee to represent the men. The employes can then present their complaints and grievances to such committee and it should be the duty of this committee to investigate any reasonable complaint and endeavor to make a settlement that will be satisfactory to both the employes and the employer. We believe such a system would go a long way toward peace and harmony and would bring about friendly co-operation between the employer and employes. This committee should be selected in the same manner as the checkweighman is selected—by secret ballot.

The evidence before the Commission from both the employers and employes showed that the employes were not consulted regarding the proposed reduction in wages. It seems to the Commission that this is absolutely unfair to the wage earner and that the men should have something to say as to the conditions under which they will labor and as to what wages they shall receive for that labor.

The men should have been consulted before the proposed wage scales were filed with the Commission. When questioned by the Commission at the recent hearing the operators showed no disposition to make a compromise of any kind with the employes. This would only be fair to the employes. These men are as much interested in matters of this kind as the employers. We cannot believe that any employer has a right to request any employe to work for a wage or under conditions that he would not be willing to accept himself were he in the employe's place.

The operators testified that the reduction proposed by them would make a difference of only 30 to 35 cents per ton in the cost of production. When we take into consideration the difference between the freight rates from Colorado Springs to Denver and the rates between the Northern Colorado coal fields and this city, there seems to be very little danger of competition from El Paso County. The operators gave no assurance that the price of coal would be reduced to the consumer, if the proposed wage reduction is adopted.

Practically all of the operators called the attention of the Commission to an order for 35,000 tons of coal that was secured by a coal operator in El Paso County from a Denver consumer. The records of the Coal Mine Inspector of this state show that the production of the Northern coal field for 1931 was over 2,300,000 tons of coal. It would seem that the order for 35,000 tons of slack coal is but a very small item when we consider the very large production of the Northern field. The Northern coal field seems to have a monopoly upon the coal business of Denver and Northern Colorado.

The evidence shows that only about 10 per cent of the coal produced in the Northern Colorado field is shipped outside of this state. This is the same percentage that the operators claimed at a hearing before this Commission some three years ago. Therefore there seems to be no change in that part of the business. It would seem to us that the small percentage shipped outside of this state is in a very large measure due to freight rates and not to the wages paid to the employes at this time.

It would seem to the Commission that it might be well if the coal operators would stop price-cutting and not sell any kind of coal at a price less than the cost of production; get into closer touch with their employes; talk over matters of common interest with them; give them the same rights they claim for themselves; remember that labor should be the first charge against industry; that men are entitled to a living wage. These are a few things that should not be forgotten by the employers of labor.

The payrolls of many of the employers showed that a majority of the miners under the present wage scale are working for less than a living wage. When the number of days they work per annum and the amount they earn is taken into consideration, the Commission cannot understand how they can live on a less wage.

Under the conditions prevailing in this country today it is the opinion of the Commission that it is a mistake to reduce the wages of any man who is not earning a living wage.

THEREFORE, The Commission finds that there is no justification for the reduction in the wage scale as proposed by the above named employers, and it is the DECISION of the Commission that the reduction be not approved.

IN WITNESS WHEREOF, The Industrial Commission of Colorado has caused these presents to be duly executed this 7th day of May, A.D. 1932.

INDUSTRIAL COMMISSION OF COLORADO

THOMAS ANNEAR
Chairman

W. H. YOUNG
W. E. RENSHAW
Commissioners

ATTEST:
FRANCES K. TRAEGER
Acting Secretary

APPENDIX VIII

INDUSTRIAL COMMISSION OF COLORADO, FINDINGS AND AWARD IN THE MATTER OF THE COLORADO FUEL AND IRON COMPANY VS. ITS EMPLOYES, JUNE 17, 1932

STATE OF COLORADO, s. s.
BEFORE THE INDUSTRIAL COMMISSION OF COLORADO

FILE NO. 1959

IN THE MATTER OF THE COLORADO FUEL AND IRON COMPANY, Employer, *vs.* EMPLOYES OF THE ABOVE NAMED EMPLOYER, Employes.	FINDINGS AND AWARD

On May 12, 1932, the Commission received the following letter, dated May 11, 1932:

MR. THOMAS ANNEAR
COLORADO INDUSTRIAL COMMISSION
DENVER, COLORADO

DEAR MR. ANNEAR:

As I advised you and your associates verbally, it is the intention of the Company to post a notice addressed to all employes of the Colorado Fuel and Iron Company and subsidiaries, excepting only the employes of the Colorado & Wyoming Railway Company—who are members of the Railroad Brotherhoods—to the effect that a reduction of 15 per cent in wages and salaries will be made effective June 16th, 1932.

Enclosed I hand you copy of the notice signed by our President and addressed to all employes, which you will note is to the effect that the employes will have to take a 15 per cent reduction in wage and salary rates, effective June 16th. The President's notice will be posted in the General Office on May 12th. It will also be sent to various members of our selling organization in outlying districts. It is being discussed today in Trinidad and Walsenburg districts with the coal miners, and will be discussed with the steel workers tomorrow in Pueblo.

Also enclosed is a copy of Mr. Maxwell's notice, to the same effect, which notice will be posted at all mines, quarries and at the steel plant on May 13th.

Very truly yours,

(Signed) J. C. HAMILTON

Secretary

Petitions were later received from the employes of the above named employer, protesting the wage reduction. The employes who signed these petitions said: "We are unable to make a living at the present wages." Two hundred thirty-five employes of the above company signed the protest at the Morley Mine; 195 employes at the Valdez or Frederick Mine; 157 employes signed at the Kebler Mine, and 180 at Farr, making a total of 695 employes who signed the petition protesting against any reduction in wages.

The Commission, therefore, decided to hold a hearing in the matter at the Court House, Walsenburg, Colorado, at 9:00 o'clock a.m., June 13, 1932, and at the Court House, Trinidad, Colorado, at 10:00 o'clock a.m., June 14, 1932.

Mr. Fred Farrar appeared for the employer.

Mr. O. F. Nigro and Mr. John E. Gross appeared in behalf of the employes.

The employer contends that it operates the largest steel plant in the West and is the largest producer of coal in Colorado; that the steel plants operating in the Eastern part of the United States have made a reduction of 15 per cent in the wages of their employes; that therefore it is necessary that this company make a like reduction in order to meet competition; that many of the Eastern steel plants ship their products to the Pacific Coast through the Panama Canal and undersell the Colorado manufacturers of steel; that there is not as large a demand for iron and steel in the West as there is in the Eastern part of our country, due in a large measure to a much smaller population; that under present conditions this company finds it impossible to ship any of its products East of the Missouri River; that 50 per cent of the coal produced in its mines is used in the steel plant in Colorado; that there is no market in Denver for Southern Colorado coal, because lignite coal is cheaper and has the advantage of lower freight rates, and that competition in coal from the non-union coal fields of Arkansas, Oklahoma and other non-union coal fields makes it impossible to sell coal in many places where it was sold in former years; that it has more employes than jobs; that many of its coal mines are shut down permanently; that it is necessary to make the proposed reduction if it is to continue to operate its mines; that this 15 per cent reduction includes the executive officers and all the employes except the employes of the Colorado & Wyoming Railroad, who are members of the Railroad Brotherhoods.

The employes contend that they are unable to make a living at the present wage and that it will be impossible for them to live if their wages are reduced 15 per cent as proposed. Many of the employes testified to an earning of $25 to $55 per month under the present wage scale. The Commission examined a number of wage statements and found the same condition. A large majority of these employes are married and have families of two to six children. Many are indebted to the company store at this time. Several of the witnesses who testified were representatives of the men under the Industrial Representation Plan of the Colorado Fuel and Iron Company, and these men also signed the protest petition.

The Commission has given the evidence of both the employer and the employes very careful consideration. We can see some reason why a reduction in the wages of the employes of the steel plant might possibly be justified; however, we cannot see any reason for or justice in the proposition to reduce the wages of the employes in the coal mines 15 per cent, when the evidence shows those men are not receiving a living wage under the present wage scale. We cannot understand how they can live if the proposed reduction in the wage scale is put into effect. The Colorado Fuel and Iron Company is the first company to propose this 15 per cent reduction in wages. Naturally, its action will force the other bituminous coal mine operators to do the same thing. Since this notice was filed with the Commission by this company we have received several proposals for wage reductions from the large producers of bituminous coal. The condition existing among these miners is deplorable and will be much worse when this reduction is put into effect; slowly the coal miner is being driven into industrial slavery. If the coal companies would make an effort to stabilize coal prices and would discontinue the cutting of prices, it would seem to us that they could pay a living wage to their employes, and, in a measure, lighten the human price of coal.

The employer informs the Commission that the 15 per cent reduction includes the executive officers of the company as well as the men employed in the mines. We do not believe it is fair or just to reduce the wages of the men receiving less than a living wage and then reduce the salaries of the executive officers only in the same per cent. The officers are undoubtedly receiving large salaries and if the company wishes to reduce expenses we would suggest that it should first reduce the salaries of those men who can stand a reduction of a much larger per cent than the men who are not making a living wage.

NOW, THEREFORE, It is the award of the Commission that the proposed reduction be and the same is hereby disapproved.

IN WITNESS WHEREOF, The Industrial Commission of Colorado has caused these presents to be duly executed this 17th day of June, 1932.

INDUSTRIAL COMMISSION OF COLORADO

THOMAS ANNEAR
Chairman

W. H. YOUNG
W. E. RENSHAW
Commissioners

ATTEST:
FRANCES K. TRAEGER
Acting Secretary

NOTE ON VOTE BY EMPLOYES OF THE COLORADO FUEL AND IRON COMPANY FOR OFFICIALS OF THE UNITED MINE WORKERS TO REPRESENT THEM, NOVEMBER, 1933

On November 1, 1933, the New York Times carried an announcement that under the procedure of the National Recovery Administration employes of the Colorado Fuel and Iron Company had had an opportunity to vote for "representatives of their own choosing." The right of employes "to organize and bargain collectively" was guaranteed in section 7 (a) of the National Industrial Recovery Act of June, 1933. The vote was 877 to 273 in favor of officials of the United Mine Workers as their representatives, instead of employes' representatives under the Industrial Representation Plan.

The Colorado Fuel and Iron Company, however, appears not to have regarded this vote as putting an end to the Industrial Representation Plan. In the New York Herald Tribune for November 11, 1933, a statement dated Denver, November 10, by Arthur Roeder, receiver for the Company, which was then in bankruptcy, was quoted as follows:

> Recent press dispatches state that the Colorado Fuel and Iron Company is abandoning at its coal mines its industrial representation plan, established in 1915 and sometimes called the "Rockefeller plan." This is not true. The exceptionally satisfactory relationship between men and management that has existed since the adoption of the plan still continues. It is true, however, that at a special election recently held under the provisions of the plan, and in line with the national recovery act, a majority of the men at the six coal camps now in operation voted to be represented by the United Mine Workers of America in negotiations having to do with wages and hours.
>
> For eighteen years the industrial plan of the Colorado Fuel and Iron Company has furthered successful contact between men and management. This co-operative effort has not only been the medium for adjustment of wages and hours, but has also proved invaluable in securing arrangements mutually satisfactory to employes and management in regard to housing, sanitation, medical service, accident prevention, school and recreational progress and the many other things

which affect work relationships in the coal mining camps and which ordinarily lie outside the scope of collective bargaining.

The operation of the industrial representation plan at the company's steel plant is in no way affected by the action taken at the coal mines. To give up the many advantages of the industrial plan because wages and hours at the coal mines may become matters of collective bargaining with the union would be to withdraw opportunities for future development in important fields. Such a step backward is not contemplated.

Nevertheless the company shortly afterward signed a trade-union agreement with the United Mine Workers. This was brought about under the code for the bituminous coal industry, as adopted in accordance with the National Industrial Recovery Act.

APPENDIX IX

NOTES ON LEGISLATION RELATED TO A DRAFT PROPOSAL FOR A TRUSTEESHIP FOR THE BITUMINOUS COAL INDUSTRY IN THE UNITED STATES

BY MERLE D. VINCENT, COUNSELOR AT LAW, DENVER, COLORADO, JUNE, 1933

POWER OF CONGRESS TO DETERMINE PUBLIC POLICY

The express power of Congress to declare public policy and enact statutes to execute public policy respecting economic questions and conditions which interrupt, retard or burden interstate and foreign commerce and affect "the general welfare of the United States" is above judicial control.

Article 1, section VIII, U. S. Constitution.

Judicial Interpretation

"Whether the free operation of normal laws of competition is a wise and wholesome rule for trade and commerce is an *economic question* which this court need not consider or determine."

Northern Securities Case. 193 U. S. 197.

The court's views are "controlled by the recognized purpose of the Sherman Act itself."

United States vs. Trenton Potteries Co. 273 U. S. 392.

The basis of the anti-trust laws is the principle that acts in competition "to the prejudice of public interest" may be condemned and forbidden.

Standard Oil and Tobacco Cases. 221 U. S. 1-106.

"As is well said in the brief prepared by the late Solicitor General: 'Interstate commerce—if not always, at any rate when the commerce is transportation—is an act. Congress, of course, can do anything which, in the exercise by itself of a fair discretion, may be deemed appropriate to save the act of interstate commerce from prevention or interruption, or make that act more secure, more reliable or more efficient. The act of interstate commerce is done by the labor of men and with the help of things; and these men and things are the agents and instruments of the commerce. If the agents or instruments are stopped; if the agents or instruments are interrupted, commerce is interrupted; if the agents or instruments are not of the right kind or quality, commerce in consequence becomes slow or costly or unsafe or otherwise inefficient; and if the conditions under which the agents or instruments do the work of commerce are wrong or disadvantageous, those bad conditions may and often will prevent or interrupt the act of commerce or make it less expeditious, less reliable, less economical, and less secure. Therefore, Congress may legislate about the agents and instruments of interstate commerce, and about the conditions under which those instruments perform the work of interstate commerce, whenever such legislation bears, or, in the exercise of a fair legislative discretion, can be deemed to bear, upon the reliability or promptness or economy or security or utility of the interstate commerce act.' "

Mondou *vs.* New York, New Haven & Hartford Railroad Co. 223 U. S. 1.

The use of the powers discussed to provide for government administration of the coal industry will, of course, be questioned. The old constitutional objection will be raised. The briefest analysis of such objection will dismiss it from serious consideration. It has neither leg or crutch upon which to stand.

Construction of language is resorted to only to ascertain its meaning. When the intent and meaning are clear, free from ambiguity or contradiction, judicial construction or interpretation are unnecessary and unauthorized.

It is held and declared, and no contrary opinion is admissible, that when a constitutional provision grants a discretionary power, to be exercised when and under such circumstances as those charged with such power may deem necessary, advisable or expedient, the meaning and construction given such provisions by those charged with power and responsibility for their use is conclusive, not subject to judicial review even when the discretion is erroneously exercised. This rule applies to congressional power and discretion. The President and Congress need seek no other sanction than their own judgment for such measures as they deem the common defense and general welfare require of them. The same authority is vested in them to deal with a condition which affects interstate and foreign commerce. The limitation upon their power is that in exercising it they may not alter the fundamental nature of the government nor their own official functions.

Legislative Precedents

For substance and form of congressional declaration of public policy and executing statutes.

Sherman Anti-Trust Act.
Federal Employers' Liability Act.
Anti-Injunction Act. March 23, 1932. (*Re* freedom of contract and labor freedom to organize.)
Reconstruction Finance Corporation Act.
Agricultural Loan Relief Act.
Tennessee Valley Authority Act (Muscle Shoals).
National Industrial Recovery Act.
Port Authority of New York.
Conservation Acts of Congress:
  Act of March 3, 1891 (Forest Reservations).
  Act of February 25, 1920 (To Promote the Mining of Coal, etc., . . . on the Public Domain).
  Act of June 4, 1920 (Setting Aside Naval Petroleum Reserves).
  Act of June 10, 1920 (Creating Federal Power Commission for the Development of Water Power).

Source of Authority of Government to Acquire, Construct, Own and Operate Public Utilities, and to Retain, Acquire, Own, Operate and Administer Non-replaceable Natural Resources

We are all familiar with those private trusts and trusteeships into which a person or the law places money or property for the use and benefit of another. Title is held by the trustee and the trust property is administered for the use and benefit of the beneficiary. Likewise there are no better known and needed rules of law or equity than those which enforce resulting and constructive trusts upon property which rightfully belongs to one person, when another person happens to hold title and possession. It does not matter whether the party who holds title came by it lawfully as an agent or fraudulently. If the holder of the title refuses to account to the real party in interest, the equitable owner as he is called, the equity courts enforce a trust against the property in the hands of the holder of title, declare him to be a trustee for the benefit of the rightful owner, and require of him a strict accounting of his trusteeship.

Some trusteeships are inherent, such as that of a government like ours. With us there is no sovereign who holds state property as his own royal estate. Our public property is held by the United States as trustee for the people. The public domain and the natural resources contained in it are so held in trust for the people, as Congress and our courts have declared. This is with us a settled principle. We have, as public interest and public security required, widened the application of this principle to apply to privately owned property and service facilities and agencies when a public interest developed and appeared to be affected by the private operation of such property, facilities and agencies. It is now well settled public policy that such properties as railroads, the telephone and telegraph, electric power systems, water works, etc., and the services they render, are public utilities, affected with a public interest, and subject to such governmental regulation and control as the protection of public interest requires.

Moreover it is a settled principle that the federal government, states and municipalities may own and operate such public utilities. Many water works and electric lighting and power systems are so owned and operated. A recent and notable exercise of this public right is the Act of Congress creating the "Tennessee Valley Authority" to further develop the government-owned Muscle Shoals power plant, and to generate, sell and distribute electric current for all purposes, to manufacture and sell fertilizer, and to exercise other important powers as trustee for the use and benefit of the public in execution of a declared public policy in that particular industrial field. The exercise of these powers by the government was called forth by uneconomic practices and mismanagement of private ownership which the nation, the Executive and Congress felt to be a menace to public interest and security.

Still more significant in some features are the more limited government controls in the National Industrial Recovery Act, just enacted by Congress, because of the declaration of policy made to justify the Act. Congress finds as a fact and declares the existence of an emergency "productive of widespread unemployment and disorganization of industry." It then declares the policy of Congress to promote "the organization of industry—the fullest possible utilization of the present production capacity of industry—to increase the consumption of industrial and agricultural products by increasing purchasing power, to reduce and relieve unemployment, to improve standards of living," etc. If the achievement of these objects is necessary to the security of "the general welfare" as declared by Congress—and that is not seriously challenged in any quarter—then it may be said with finality that government is obligated to achieve those objects. If the controls of the Recovery Act are insufficient, then government must employ adequate power to prevent such a degree of collapse of normal business and social processes as will affect any substantial number of its people. In such a crisis and in the organic law there are no limitations upon the express power of Congress to safeguard and defend "the general welfare" against the inevitable consequences of private management and governmental inaction. In the face of such fundamental obligation there is no room for narrow legalistic concepts of restraint upon the express power and inherent obligation of government to act.

The Recovery Act justifiably extends its controls beyond natural resource industries to include related industries, which are also declared to "affect the general welfare." Nor is this action of the government without precedent, in so far as either natural resources and the general welfare are affected.

Conservation of Natural Resources

Timber

The Conservation Act contained the first provisions for a comprehensive administration of government-owned natural resources. The Act of Congress of March 3, 1891 authorizes the President by proclamation to set aside public lands for national forests and to provide for administration of them. Primarily these Acts were to conserve timber, water sheds, water flow, and grazing forage for livestock. These Acts have been supplemented by subsequent Acts of Congress until government administration of certain natural resources has become a settled policy and a normal function.

Under government administration tree planting and timber production, the sale of products of the national forests and the leasing of grazing rights is every-day government business. The constitutionality of exercising these administrative and operating powers by the government was challenged and the Act sustained in the case of Light *vs.* U. S., 120 U. S. 523 (Colorado, 1911).

In another early case, Ex parte Hyde 194 Fed. 207 (California, 1904) the court said of this Act that its purpose

> is to preserve the remaining forests on the public lands of the United States from depredation and destruction, and to accomplish this object all lands within forest reservations should belong to the United States for complete administration and control.

Mineral Deposits

Until the Act of Congress of February 25, 1920, it had long been the policy of the government to allow its citizens to acquire, by compliance with the land laws, complete title to unappropriated lands of the public domain and to the mineral deposits contained in such lands, such as coal, oil, etc. By that Act such mineral deposits were withdrawn from entry. Public lands containing coal deposits and oil are not now subject to private entry and acquisition of title. They can be operated only under lease and subject to terms fixed by the government. In leasing such deposits the government regulates the operation. Employment of children under sixteen years of age and of women is prohibited. All control of safety and mining methods is exercised by the government to safeguard health and prevent waste. Hours of work are limited, bi-monthly pay days specified. Accurate measurements and weights of coal are required. Reasonable prices to the public are enjoined, and provision is made for safeguarding "the public welfare."

This Act specifically provides that deposits of coal, etc., which may be reserved from public lands disposed of, shall be "subject to such conditions as are or may hereafter be provided by such laws reserving such deposits." In passing upon these provisions of the Act of 1920 the courts in West *vs.* Clark, 271 U. S. 689, observed that these provisions may be regarded as the expression of a new policy for the disposition of public lands open to exploration or entry by leave instead of by complete alienation.

Naval Petroleum Reserves

Still further expanding the application of the government's powers as a trustee of natural resources the Act of Congress of June 4, 1920 authorized the Secretary of the Navy, in administering reserves containing petroleum, to conserve, develop, use, and operate the properties in the naval reserves either *directly* or by contract, lease, or otherwise. Here we have the government function of production for use. If production and use for government needs do not balance, leaving a surplus, it would doubtless be sold in the open market, as the Secretary of the Interior sells government royalties under authority of the Act of February 25, 1920.

Water Power

Continuing to enlarge the application of the government's powers as trustee, Congress by the Act of June 10, 1920, creating the Federal Power Commission, with authority to license private operations, took the further step of providing "the right of the United States or any state or municipality to *take over, maintain, and operate any project* licensed under this Chapter at any time by condemnation proceedings upon the payment of just compensation is hereby expressly reserved."

In this provision we have the government, as trustee for the whole people, providing for the entire series of functions from holding as trustee down through operation, production, distribution, use, and sale. This growing application of the principle of trustee obligation to conserve and utilize natural resources ripened into the "Tennessee Valley Authority," enacted by the last session of Congress, by which the government will add to and operate the Muscle Shoals power plant, generate, distribute and sell electric current to public and private consumers, and manufacture and sell fertilizer.

This power is inherent in a free government. In our organic law this power is expressly granted in the Constitutional authority to provide for "the Common Defense," and in still broader terms for "the general welfare." Congress has resorted to this power, and the courts have concurred in its exercise.

There are certain natural resource industries which form the foundations of our industrial life. They can no longer be treated as purely private business enterprises without duties or responsibilities to the public. Coal, oil, steel, timber and water power may be mentioned as among those indispensable to the economic life and general welfare of our people. The United States Coal Commission observed that "if the coal mines were closed the people of the United States would soon be cold, idle and hungry," and that "food and water alone outrank coal among the necessities of life." Such is the indispensable nature of one only of these natural resources.

The default of private ownership management of natural resource industries in establishing and maintaining essential securities for the continued operation of such industries with safety to our economic and public life requires that the government impress a trusteeship upon them.

If coal, for example, is indispensable to life on the farms and in cities, to transportation, to manufacturing, any exploitation, mismanagement, abuse or waste of it by private enterprise and ownership which threatens the stability of our business and menaces the general welfare, are clearly acts which imperatively dictate the exercise of the government's powers to enforce a trust in public interest upon that industry.

When we ask ourselves the question, what form should such action take, we can find perhaps the simplest and most practicable and fundamental basis from which to proceed if we treat the ownership and administration of such a non-restorable natural resource as coal as being held, whether by private or public ownership, in trust for the use and benefit and general welfare of the public. This does not mean either destruction or confiscation of actual private investment in such a resource or in an industry developed by the use and employment of such a resource. It does clearly mean, however, that just as the government will hold and administer unappropriated natural resources of this nature for the public use and benefit, under such terms and conditions as public interest requires, so also will the government administer or take over privately owned natural resources and provide for the administration of them, including in such administration the entire series of functions of production, distribution and sale.

The machinery for such administration of the trust, whether by government commission, government trustees, or otherwise, is merely an incident to the execution of the trust. Nor can the execution of such a trust be treated from a state or local municipal standpoint. Such natural resources as coal, steel, timber and the industries developed upon them are interstate in their commerce and operation, and nation-wide in effect, and consequently administration of them must be national and not local.

This review of government powers may well close with a reference to the Port Authority of New York. In this we find a long-continued public administration of functions provided for by co-ordinating legislative acts of the States of New York and New Jersey, confirmed by Act of Congress.

APPENDIX X. STATISTICAL TABLES

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE

A. Rocky Mountain Fuel Company, All Mines

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1928			1929				1930			
Jan.	$57,008	851	34,662	$55,734	6,947	699	37,626	$65,110	8,217	750	44,472
	61,304	906	36,667	57,099	7,217	702	38,808	88,293	11,069	811	61,459
Feb.	55,367	920	33,197	68,329	8,647	707	46,780	63,837	8,153	779	39,819
	54,668	908	34,612	59,834	7,581	721	40,498	28,827	3,590	738	17,683
Mar.	54,523	798	34,073	53,542	6,640	690	35,398	42,030	5,248	753	26,838
	52,838	874	33,268	41,603	5,216	690	26,765	42,665	5,334	718	27,239
Apr.	40,064	723	22,586	38,762	4,859	490	23,889	32,881	4,182	678	18,417
	25,060	746	14,241	39,547	4,957	492	24,629	28,685	3,652	634	16,763
May	26,106	657	12,790	41,374	5,179	485	25,554	31,579	3,882	569	19,104
	18,603	659	9,160	29,682	3,735	471	18,412	37,951	4,691	605	21,907
June	33,899	636	18,198	26,860	3,431	470	14,086	30,569	3,797	594	18,075
	35,025	608	19,955	26,607	3,396	455	15,654	33,191	4,095	584	20,191
July	25,017	596	13,786	29,664	3,749	471	17,394	28,590	3,573	570	16,985
	38,107	601	20,985	39,765	5,060	473	23,400	34,666	4,353	616	20,310
Aug.	36,999	646	21,933	33,800	4,391	501	19,328	35,717	4,525	654	20,270
	46,696	667	26,711	43,666	5,716	552	24,330	34,461	4,406	679	19,294
Sep.	49,405	698	27,617	55,241	7,175	691	34,927	38,117	4,801	704	22,508
	48,917	734	27,867	67,695	8,841	771	42,140	44,267	5,519	699	26,555
Oct.	42,206	764	23,476	67,311	8,588	799	43,846	51,274	6,367	730	33,283
	52,760	790	30,917	72,323	9,206	822	47,880	63,978	7,921	771	41,850
Nov.	52,349	810	31,363	80,054	10,111	852	53,028	57,047	7,024	766	38,566
	46,667	805	27,927	78,983	9,968	861	52,690	57,862	7,152	790	38,498
Dec.	54,387	792	33,709	72,664	9,003	863	49,170	64,829	8,093	769	44,294
	51,348	763	32,323	71,291	8,845	848	47,612	66,120	8,297	775	45,374
Total	$1,059,323	–	622,023	$1,251,430	158,458	–	803,844	$1,102,546	137,941	–	699,754
Average	–	748	–	–	–	649	–	–	–	698	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1931				1932[c]			
Jan.	$63,042	7,841	756	42,483	$123,398	15,708	777	81,892
	55,064	6,869	750	36,417	–	–	–	–
Feb.	38,653	4,867	750	24,472	112,119	14,146	774	74,851
	38,254	4,786	751	24,372	–	–	–	–
Mar.	47,994	6,093	745	31,942	99,652	12,625	762	64,943
	54,311	6,874	748	37,076	–	–	–	–
Apr.	44,224	5,607	735	28,898	59,905	7,868	672	33,839
	46,167	5,881	745	30,044	–	–	–	–
May	40,382	5,253	739	24,935	38,259	5,965	561	22,505
	25,502	3,285	711	15,981	–	–	–	–
June	26,149	3,495	689	15,946	32,935	5,322	569	19,646
	27,279	3,587	677	17,268	–	–	–	–
July	23,825	3,164	612	15,056	37,006	6,235	590	26,194
	30,157	3,872	659	19,535	–	–	–	–
Aug.	27,953	3,709	651	18,561	47,521	7,884	620	34,737
	36,443	4,764	715	22,198	–	–	–	–
Sep.	39,442	5,173	734	25,317	66,086	11,164	659	51,949
	55,603	7,159	742	35,233	–	–	–	–
Oct.	52,749	6,892	747	35,966	83,209	13,265	690	70,712
	62,074	7,990	754	42,417	–	–	–	–
Nov.	54,041	6,656	755	37,280	84,023	13,312	703	75,280
	66,951	8,312	770	46,344	–	–	–	–
Dec.	74,907	9,268	769	50,835	93,411	15,629	747	81,144
	57,828	7,164	776	39,582	–	–	–	–
Total	$1,088,994	138,581	–	718,158	$877,524	129,123	–	637,692
Average	–	–	728	–	–	–	677	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *continued*

B. Alpine Mine

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1928			1929				1930			
Jan.	$5,268	65	3,196	$3,580	475	61	1,643	$3,840	557	73	1,699
	7,071	70	3,925	3,990	553	57	1,820	4,713	683	68	2,088
Feb.	3,848	64	2,065	3,498	489	56	1,554	3,229	499	72	1,344
	4,401	64	2,394	3,287	433	58	1,446	2,161	251	55	899
Mar.	2,963	57	1,326	2,943	412	57	1,207	2,034	279	64	828
	1,778	61	794	2,920	408	56	1,196	2,763	378	47	1,127
Apr.	3,313	57	1,680	3,018	393	55	1,306	1,469	207	51	522
	2,172	63	1,100	3,055	397	54	1,320	2,826	397	45	1,003
May	1,887	44	742	2,969	414	53	997	3,427	470	50	1,334
	1,842	54	724	2,141	299	53	719	1,306	179	40	508
June	2,177	50	976	3,535	529	51	732	2,451	342	50	907
	2,312	51	1,035	765	114	45	159	2,087	291	46	774
July	1,180	47	480	1,899	279	52	510	1,513	211	49	518
	3,111	49	1,268	3,247	478	49	874	2,500	351	46	855
Aug.	1,260	50	508	3,499	513	53	1,091	2,689	374	52	863
	3,056	48	1,234	3,686	540	57	1,148	1,734	241	45	556
Sep.	3,665	58	1,600	4,155	596	63	1,610	2,643	346	52	1,136
	1,687	31	0[d]	5,979	858	74	2,318	2,773	362	48	1,191
Oct.	1,768	36	0[d]	4,906	710	82	1,922	2,805	384	57	1,227
	4,329	66	1,650	5,948	860	79	2,325	3,555	487	63	1,555
Nov.	4,152	60	1,749	6,444	944	82	2,420	3,290	417	59	1,601
	4,200	62	1,896	5,761	844	93	2,165	4,204	532	60	2,049
Dec.	5,094	62	2,408	2,829	407	85	1,143	4,242	545	61	2,058
	3,949	64	1,784	5,743	825	77	2,316	3,010	386	60	1,459
Total	$76,483	–	34,534	$89,797	12,770	–	33,941	$67,264	9,169	–	28,101
Average	–	56	–	–	–	63	–	–	–	55	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
		1931				1932		
Jan.	$4,189	548	61	1,972	$8,751	1,152	66	4,306
	3,034	396	59	1,426	–	–	–	–
Feb.	2,392	314	57	1,012	8,760	1,114	67	4,412
	2,571	338	57	1,089	–	–	–	–
Mar.	2,385	313	55	977	5,632	725	66	2,436
	2,319	305	55	951	–	–	–	–
Apr.	1,893	264	53	614	4,021	532	59	1,530
	1,955	272	54	638	–	–	–	–
May	4,251	576	55	1,902	4,447	596	58	1,653
	1,264	173	51	571	–	–	–	–
June	2,048	289	55	631	4,125	583	58	1,760
	2,049	291	55	634	–	–	–	–
July	576	133	15	0[d]	2,844	516	52	1,228
	2,332	285	52	873	–	–	–	–
Aug.	1,645	236	51	619	3,691	673	58	1,974
	1,770	235	52	615	–	–	–	–
Sep.	2,112	279	52	880	6,028	1,068	70	4,148
	3,596	475	53	1,505	–	–	–	–
Oct.	677	89	52	318	6,777	1,183	66	4,869
	5,774	748	56	2,722	–	–	–	–
Nov.	4,966	638	69	2,344	5,970	1,046	64	4,097
	3,761	483	65	1,775	–	–	–	–
Dec.	5,982	756	64	2,926	6,875	1,156	65	4,991
	2,598	334	60	1,290	–	–	–	–
Total	$66,049	8,770	–	28,284	$67,921	10,344	–	37,404
Average	–	–	55	–	–	–	62	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *continued*

C. Columbine Mine

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1928			1929				1930			
Jan.	$27,012	407	16,775	$23,283	2,782	252	17,147	$23,827	2,975	254	17,841
	26,369	403	17,208	21,565	2,715	247	15,110	31,843	3,976	272	23,833
Feb.	23,782	389	15,371	25,688	3,209	241	18,396	28,170	3,527	267	19,320
	19,248	378	12,788	21,018	2,626	247	14,958	7,624	955	247	5,215
Mar.	23,499	305	16,127	23,718	2,930	230	16,722	13,990	1,663	271	9,441
	22,668	339	15,485	17,747	2,193	246	12,496	14,619	1,738	259	9,856
Apr.	16,816	261	10,572	16,999	2,041	181	12,032	12,072	1,461	252	7,528
	8,775	271	5,641	18,864	2,265	188	13,380	11,414	1,382	232	7,109
May	10,217	238	6,101	19,725	2,359	185	14,180	7,800	950	201	4,686
	7,614	254	4,459	15,499	1,854	182	11,152	13,396	1,632	201	8,052
June	18,393	277	12,259	12,253	1,410	179	8,370	10,542	1,304	199	6,496
	22,209	281	14,822	13,984	1,609	182	9,557	11,239	1,390	187	6,932
July	15,452	278	10,305	15,020	1,813	184	10,502	11,083	1,360	195	6,975
	22,144	280	14,778	20,156	2,433	179	14,105	13,115	1,609	197	8,269
Aug.	19,284	267	12,948	15,892	1,960	189	10,628	14,450	1,815	216	9,010
	21,486	270	14,402	15,087	1,860	188	10,085	15,717	1,974	239	9,796
Sep.	19,763	264	12,371	18,003	2,252	207	12,800	14,057	1,712	240	9,364
	16,499	254	10,338	24,158	3,021	242	17,190	18,110	2,206	221	12,047
Oct.	15,592	251	10,149	25,204	3,178	251	18,304	19,584	2,350	221	13,571
	27,389	253	17,873	26,978	3,401	266	19,562	27,269	3,272	233	18,870
Nov.	23,352	264	15,662	26,270	3,140	272	19,017	23,574	2,768	237	16,556
	20,344	262	13,679	27,894	3,335	277	20,202	23,200	2,725	244	16,285
Dec.	22,591	258	16,108	26,821	3,105	280	19,974	27,082	3,221	238	19,132
	22,787	250	16,138	28,253	3,270	284	21,002	25,099	2,985	241	17,754
Total	$473,285	–	312,359	$500,079	60,761	–	356,871	$418,876	50,950	–	283,938
Average	–	290	–	–	–	224	–	–	–	232	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
		1931				1932		
Jan.	$24,723	2,926	240	16,995	$46,239	5,257	231	33,350
	25,222	2,986	239	17,373	–	–	–	–
Feb.	13,685	1,713	233	8,800	44,608	5,107	225	32,005
	15,126	1,893	231	9,709	–	–	–	–
Mar.	19,885	2,466	234	13,578	41,019	4,787	226	28,782
	18,136	2,249	231	12,391	–	–	–	–
Apr.	17,889	2,169	231	11,982	25,335	3,078	213	15,143
	18,470	2,240	236	12,370	–	–	–	–
May	12,908	1,541	238	8,018	17,727	2,596	198	12,675
	8,606	1,028	225	5,451	–	–	–	–
June	8,854	1,070	220	5,746	15,274	2,286	199	10,874
	11,737	1,418	217	7,604	–	–	–	–
July	9,715	1,211	215	5,934	13,395	2,106	188	9,846
	9,447	1,177	222	5,771	–	–	–	–
Aug.	8,068	995	213	4,895	19,688	2,889	197	16,059
	11,563	1,425	218	7,017	–	–	–	–
Sep.	10,229	1,251	219	6,919	25,470	3,851	193	21,997
	19,803	2,365	221	13,084	–	–	–	–
Oct.	19,779	2,321	223	14,119	33,790	4,859	214	32,327
	23,692	2,780	221	16,937	–	–	–	–
Nov.	19,610	2,181	227	14,421	34,011	4,934	237	32,556
	25,060	2,787	229	18,465	–	–	–	–
Dec.	26,992	3,009	229	20,061	35,050	5,211	240	33,580
	24,226	2,701	232	17,997	–	–	–	–
Total	$403,425	47,902	–	275,637	$351,606	46,961	–	279,194
Average	–	–	227	–	–	–	213	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *continued*

D. Grant Mine

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
		1928			1929				1930		
Jan.	$10,147	136	8,456	$10,149	1,164	117	8,475	$10,768	1,253	124	9,243
	6,138	129	4,513	13,367	1,641	125	11,274	18,413	2,142	153	15,807
Feb.	4,892	110	3,719	15,249	1,775	134	12,717	6,579	770	135	4,971
	7,839	107	6,630	12,277	1,429	133	10,246	5,254	614	130	3,964
Mar.	5,472	94	4,312	11,422	1,283	136	8,901	8,890	1,005	124	7,255
	6,852	122	5,403	6,425	722	133	4,993	9,289	1,050	123	7,590
Apr.	5,583	110	4,031	4,278	499	43	2,853	5,812	684	124	4,264
	3,407	107	2,377	4,525	528	45	3,019	5,474	645	103	4,004
May	2,128	94	1,225	5,187	621	46	3,299	9,706	1,099	108	7,795
	2,162	84	1,256	1,766	211	44	1,125	7,909	895	113	6,345
June	2,279	82	1,349	780	100	41	400	7,004	798	112	5,519
	1,798	77	1,062	2,970	376	37	1,521	8,701	992	118	6,831
July	1,287	75	576	2,872	350	41	1,479	6,058	698	114	4,459
	1,313	77	586	1,588	193	45	816	6,510	750	123	4,796
Aug.	2,102	80	1,337	1,876	244	47	1,094	6,280	727	125	4,214
	2,370	82	1,506	4,419	576	72	2,576	3,533	409	125	2,371
Sep.	3,586	77	2,141	10,758	1,348	132	7,898	4,445	482	127	2,941
	3,601	110	2,149	7,822	980	143	5,747	6,318	685	141	4,179
Oct.	3,565	115	2,451	13,205	1,661	153	10,554	11,199	1,338	161	8,764
	5,238	114	3,594	17,433	2,193	160	13,923	13,687	1,636	170	10,725
Nov.	5,411	121	3,753	17,622	2,181	183	14,395	15,159	1,848	174	12,352
	5,935	123	4,275	17,135	2,121	176	13,973	13,937	1,699	178	11,339
Dec.	7,069	119	5,115	14,770	1,751	180	12,074	16,035	1,999	177	13,140
	6,192	107	4,868	12,838	1,521	180	10,489	17,938	2,237	179	14,721
Total	$106,366	–	76,684	$210,733	25,468	–	163,841	$224,898	26,455	–	177,589
Average	–	102	–	–	–	106	–	–	–	136	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1931				1932			
Jan.	$17,112	2,067	171	13,643	$15,834	2,078	185	12,062
	9,013	1,088	169	7,185	–	–	–	–
Feb.	10,027	1,231	170	7,928	13,447	1,706	179	10,540
	9,907	1,216	173	7,825	–	–	–	–
Mar.	10,658	1,318	171	8,624	11,687	1,453	171	9,107
	17,763	2,196	176	14,371	–	–	–	–
Apr.	11,381	1,373	173	8,912	4,760	652	122	2,966
	11,613	1,400	177	9,093	–	–	–	–
May	9,798	1,252	176	7,826	1,764	294	56	262
	8,238	1,055	172	6,150	–	–	–	–
June	8,273	1,131	170	6,561	1,765	289	66	340
	8,785	1,200	173	6,958	–	–	–	–
July	7,802	1,006	174	6,545	8,091	1,288	118	7,941
	11,606	1,496	175	9,732	–	–	–	–
Aug.	10,824	1,331	170	8,593	7,855	1,221	113	6,872
	5,558	683	174	4,408	–	–	–	–
Sep.	6,234	808	170	4,369	4,909	806	120	4,017
	6,309	817	170	4,310	–	–	–	–
Oct.	8,727	1,151	172	6,946	10,343	1,685	121	10,795
	12,982	1,713	174	10,721	–	–	–	–
Nov.	11,929	1,486	173	9,730	16,278	2,413	111	18,564
	13,079	1,629	177	10,649	–	–	–	–
Dec.	13,630	1,693	185	10,159	11,509	1,949	117	11,873
	5,786	719	182	4,594	–	–	–	–
Total	$247,025	31,059	–	195,832	$108,242	15,834	–	95,339
Average	–	–	174	–	–	–	123	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *continued*

E. Industrial Mine

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1928			1929				1930			
Jan.	$4,112	65	2,312	$7,530	971	125	4,286	$14,031	1,851	163	8,491
	6,537	89	3,725	8,269	1,001	126	5,040	17,714	2,336	168	10,741
Feb.	6,821	87	3,908	10,888	1,419	127	6,594	11,862	1,572	161	6,503
	7,258	90	3,771	11,469	1,496	136	7,033	3,912	519	156	2,143
Mar.	6,096	101	3,060	5,283	635	125	2,886	7,071	895	148	3,752
	7,913	99	3,977	5,076	611	120	2,774	5,856	742	145	3,104
Apr.	4,698	86	2,319	5,418	586	93	2,898	4,080	532	117	1,064
	5,582	85	2,747	4,292	465	91	2,296	525	68	122	137
May	4,924	84	2,345	4,012	505	89	1,810	1,662	220	79	627
	2,699	84	1,286	2,641	333	84	1,190	6,861	908	123	2,586
June	4,367	84	1,881	3,273	454	90	1,133	3,343	448	104	1,165
	1,962	87	843	1,026	230	82	573	2,391	320	105	835
July	1,253	82	560	2,201	287	83	626	2,789	396	86	941
	4,657	83	2,083	2,274	294	85	642	3,354	476	125	1,130
Aug.	6,365	124	3,498	2,885	392	92	1,398	3,467	507	133	1,263
	10,385	139	5,713	8,747	1,189	111	4,242	4,788	700	146	1,730
Sep.	13,927	156	7,857	10,906	1,518	146	6,426	8,797	1,214	159	4,648
	12,560	154	8,232	15,824	2,203	171	9,326	8,452	1,166	164	4,472
Oct.	9,507	159	5,282	8,996	1,210	170	4,779	7,533	1,021	163	4,059
	4,212	156	2,335	7,331	986	170	3,897	8,393	1,137	175	4,528
Nov.	5,407	154	2,843	15,002	2,019	176	9,008	5,748	760	170	2,983
	5,553	154	3,145	15,739	2,119	174	9,435	7,227	955	176	3,758
Dec.	6,597	150	3,722	15,323	2,025	174	9,049	7,364	1,028	165	4,229
	5,608	139	3,051	11,559	1,527	166	6,838	9,373	1,308	169	5,373
Total	$149,000	–	80,495	$185,964	24,475	–	104,179	$156,593	21,079	–	80,262
Average	–	112	–	–	–	125	–	–	–	143	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1931				1932			
Jan.	$7,935	1,125	157	4,304	$31,522	4,479	189	19,975
	6,924	981	159	3,760	–	–	–	–
Feb.	5,981	830	162	3,138	25,521	3,643	188	16,430
	4,313	599	162	2,259	–	–	–	–
Mar.	6,251	872	161	3,516	22,674	3,262	187	13,797
	6,745	941	160	3,794	–	–	–	–
Apr.	4,557	640	153	2,580	12,338	1,770	158	6,912
	7,279	1,022	155	4,124	–	–	–	–
May	6,782	931	151	3,682	6,173	1,087	145	3,198
	4,121	601	147	2,242	–	–	–	–
June	4,402	637	138	1,960	4,306	817	141	2,150
	1,522	220	133	678	–	–	–	–
July	2,523	360	130	1,224	4,478	848	129	2,088
	3,465	491	130	1,670	–	–	–	–
Aug.	4,595	670	139	2,844	7,258	1,420	147	3,865
	10,859	1,580	153	6,699	–	–	–	–
Sep.	13,635	1,914	174	8,988	17,184	3,287	167	12,592
	16,464	2,311	193	10,846	–	–	–	–
Oct.	14,629	2,180	196	9,345	15,889	2,947	176	11,057
	10,550	1,573	201	6,732	–	–	–	–
Nov.	8,334	1,249	185	5,180	13,305	2,453	177	9,800
	14,374	2,155	192	8,929	–	–	–	–
Dec.	16,814	2,370	187	10,767	25,022	4,744	208	19,977
	15,708	2,215	191	10,041	–	–	–	–
Total	$198,762	28,467	–	119,302	$185,670	30,757	–	121,841
Average	–	–	163	–	–	–	168	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *continued*

F. Standard Mine

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1928			1929				1930			
Jan.	$3,020	48	1,007	$4,304	512	46	2,522	$4,733	515	51	3,074
	5,084	58	2,276	3,791	402	44	2,174	6,617	721	51	4,926
Feb.	4,434	58	2,230	4,860	571	46	2,681	5,505	627	50	3,411
	3,413	52	1,763	4,173	491	45	2,304	4,308	491	52	2,668
Mar.	4,546	49	2,584	3,593	454	45	1,895	4,194	569	52	2,514
	3,572	51	2,031	3,110	393	42	1,638	3,487	474	49	2,094
Apr.	2,084	28	444	2,859	401	34	1,530	3,126	451	48	1,785
	140	31	30	3,098	435	35	1,661	2,817	406	45	1,609
May	949	14	148	3,961	459	36	2,309	2,860	339	44	1,628
	814	12	126	2,951	342	35	1,720	2,848	338	42	1,623
June	579	10	265	2,793	330	36	1,421	2,519	298	46	1,501
	940	8	0[d]	2,527	299	36	1,284	2,729	323	43	1,626
July	731	6	286	2,482	313	37	1,362	2,345	275	46	1,412
	1,249	10	0[d]	4,032	508	37	2,214	2,925	342	43	1,764
Aug.	877	12	323	3,365	414	40	2,109	2,850	340	46	1,649
	1,227	8	0[d]	4,498	553	41	2,813	2,873	342	43	1,662
Sep.	713	13	0[d]	4,052	472	45	2,461	2,655	316	45	1,531
	3,402	34	1,909	5,053	589	48	3,071	3,116	371	46	1,794
Oct.	3,544	43	1,744	5,614	593	47	3,665	3,070	364	47	1,676
	4,110	38	2,024	6,106	644	50	3,979	3,339	396	49	1,823
Nov.	4,150	45	2,247	5,846	655	50	3,498	3,181	360	46	1,819
	3,565	46	1,858	4,745	531	48	2,843	2,925	331	49	1,670
Dec.	4,111	44	2,191	4,894	575	49	2,981	3,249	359	48	1,951
	4,338	50	2,567	5,218	612	49	3,184	3,302	365	46	1,986
Total	$61,792	–	28,053	$97,925	11,548	–	57,319	$81,573	9,713	–	48,566
Average	–	32	–	–	–	43	–	–	–	47	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
	1931				1932			
Jan.	$2,949	321	45	1,741	$9,192	1,197	42	5,195
	3,095	336	45	1,825	–	–	–	–
Feb.	2,155	214	47	1,256	8,433	1,076	50	4,788
	2,470	245	47	1,438	–	–	–	–
Mar.	3,005	310	47	1,892	7,726	960	47	4,545
	3,444	356	46	2,171	–	–	–	–
Apr.	3,792	483	47	2,300	5,312	651	57	2,935
	2,305	293	46	1,397	–	–	–	–
May	2,798	362	44	1,440	2,667	459	45	1,431
	1,094	139	44	562	–	–	–	–
June	767	108	39	157	2,805	506	46	1,632
	610	86	31	125	–	–	–	–
July	464	67	6	0[d]	3,555	643	44	2,283
	669	71	7	186	–	–	–	–
Aug.	450	66	5	0[d]	3,774	676	45	2,626
	2,096	255	44	1,163	–	–	–	–
Sep.	3,088	372	45	1,903	5,836	914	47	4,655
	4,851	585	44	2,991	–	–	–	–
Oct.	4,238	526	45	2,518	6,885	1,069	48	5,441
	3,538	440	45	2,104	–	–	–	–
Nov.	4,211	435	44	2,643	6,541	1,064	48	4,912
	5,605	580	45	3,514	–	–	–	–
Dec.	5,678	642	44	3,468	6,148	999	47	6,084
	4,128	467	47	2,519	–	–	–	–
Total	$67,500	7,759	–	39,313	$68,874	10,214	–	46,527
Average	–	–	40	–	–	–	47	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *continued*

G. Vulcan Mine

Month	Total earnings	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
		1928			1929				1930		
Jan.	$3,461	68	1,389	$6,888	1,043	98	3,553	$7,911	1,066	85	4,124
	5,639	84	2,947	6,117	905	103	3,390	8,993	1,211	99	4,694
Feb.	5,609	86	2,930	8,146	1,184	103	4,838	8,492	1,158	94	4,270
	5,864	82	3,455	7,610	1,106	102	4,511	5,568	760	98	2,794
Mar.	6,857	77	4,048	6,583	926	97	3,787	5,851	837	94	3,048
	4,885	80	2,918	6,325	889	93	3,668	6,651	952	95	3,468
Apr.	2,846	67	1,262	6,190	939	84	3,270	6,322	847	86	3,254
	2,112	72	937	5,713	867	79	2,953	5,629	754	87	2,901
May	2,363	71	976	5,520	821	76	2,959	6,124	804	87	3,034
	1,569	62	648	4,684	696	73	2,506	5,631	739	86	2,793
June	2,390	59	1,175	4,226	608	73	2,030	4,710	607	83	2,487
	3,851	51	1,891	5,335	768	73	2,560	6,044	779	85	3,193
July	2,868	56	1,315	5,190	707	74	2,915	4,802	633	80	2,680
	4,780	61	2,196	8,468	1,154	78	4,749	6,262	825	82	3,496
Aug.	5,229	70	2,709	6,283	868	80	3,008	5,981	762	82	3,271
	6,213	73	3,223	7,229	998	83	3,466	5,816	740	81	3,179
Sep.	6,215	87	3,010	7,367	989	98	3,732	5,520	731	81	2,888
	8,796	102	4,255	8,859	1,190	93	4,488	5,498	729	79	2,872
Oct.	6,869	110	3,495	9,386	1,236	96	4,622	7,083	910	81	3,986
	5,995	111	3,054	8,527	1,122	97	4,194	7,735	993	81	4,349
Nov.	7,598	115	4,033	8,870	1,172	89	4,690	6,095	871	80	3,255
	5,912	108	2,885	7,709	1,018	93	4,072	6,369	910	83	3,397
Dec.	7,555	109	3,829	8,026	1,140	95	3,949	6,857	941	80	3,784
	5,984	99	2,850	7,680	1,090	92	3,783	7,398	1,016	80	4,081
Total	$121,460	–	61,430	$166,931	23,436	–	87,693	$153,342	20,575	–	81,298
Average	–	82	–	–	–	88	–	–	–	85	–

Month	Total earnings	Number of shifts	Number of men	Payroll tonnage	Total earnings	Number of shifts	Number of men	Payroll tonnage
		1931				1932		
Jan.	$6,134	854	82	3,828	$11,858	1,545	64	7,003
	7,776	1,082	79	4,848	–	–	–	–
Feb.	4,413	565	81	2,338	11,350	1,500	65	6,677
	3,867	495	81	2,052	–	–	–	–
Mar.	5,810	814	77	3,355	10,913	1,438	65	6,276
	5,904	827	80	3,398	–	–	–	–
Apr.	4,712	678	78	2,510	8,138	1,185	63	4,353
	4,545	654	77	2,422	–	–	–	–
May	3,854	592	75	2,067	5,481	933	59	3,286
	2,179	289	72	1,005	–	–	–	–
June	1,805	260	67	891	4,660	841	59	2,888
	2,576	372	68	1,269	–	–	–	–
July	2,745	387	72	1,353	4,643	834	59	2,809
	2,638	372	73	1,303	–	–	–	–
Aug.	2,371	411	73	1,610	5,257	1,005	60	3,341
	4,597	586	74	2,296	–	–	–	–
Sep.	4,144	549	74	2,258	6,658	1,238	62	4,540
	4,580	606	61	2,497	–	–	–	–
Oct.	4,699	625	59	2,720	8,626	1,522	65	6,224
	5,538	736	57	3,201	–	–	–	–
Nov.	4,991	667	57	2,962	7,919	1,402	66	5,352
	5,072	678	62	3,012	–	–	–	–
Dec.	5,901	798	60	3,454	8,808	1,570	70	4,638
	5,382	728	64	3,141	–	–	–	–
Total	$106,233	14,625	–	59,790	$94,311	15,013	–	57,387
Average	–	–	71	–	–	–	63	–

For footnotes see p. 350.

TABLE 1.—TOTAL EARNINGS, NUMBER OF SHIFTS,[a] NUMBER OF MEN RECEIVING PAY, AND PAYROLL TONNAGE[b] FOR EACH SEMI-MONTHLY[c] PAYROLL PERIOD FROM JANUARY, 1928, TO DECEMBER, 1932, FOR THE ROCKY MOUNTAIN FUEL COMPANY AS A WHOLE AND FOR EACH MINE *concluded*

Month	H. Acme Mine[e] Total earnings	H. Acme Mine[e] Number of men	H. Acme Mine[e] Payroll tonnage	I. Forbes Mine[f] Total earnings	I. Forbes Mine[f] Number of men	I. Forbes Mine[f] Payroll tonnage
		1928			1928	
Jan.	$656	12	45	$3,132	50	1,482
	1,861	29	879	2,605	44	1,194
Feb.	4,252	79	2,271	1,729	47	703
	4,448	79	2,725	2,197	56	1,086
Mar.	3,482	72	1,928	1,608	43	688
	3,581	80	1,979	1,589	42	681
Apr.	2,895	72	1,480	1,829	42	798
	2,062	73	1,055	810	44	354
May	2,345	68	927	1,293	44	326
	1,219	67	481	684	42	180
June	2,166	27	–	1,548	47	293
	361	4	–	1,592	49	302
July	255	4	–	1,991	48	264
	295	4	–	558	37	74
Aug.				1,882	43	610
				1,959	47	633
Sep.				1,536	43	638
				2,372	49	984
Oct.				1,361	50	355
				1,487	52	387
Nov.				2,279	51	1,076
				1,158	50	189
Dec.				1,370	50	336
				2,490	54	1,065
Total	$29,878	–	13,770	$41,059	–	14,698
Average	–	–	–	–	47	–

[a] A shift is a "man-day," or one man's work in one day. "Number of shifts" represents the total number of times in the payroll period that the given number of workers entered the mine and worked. This item was not recorded in 1928.

[b] Payroll tonnage is the production on which payment of wages is based; that is, the number of tons credited to the workers when the coal in the mine cars is weighed in contrast to the tonnage after screening.

[c] Owing to a change in the method of keeping books the figures for 1932 are for the month, although the practice of paying semi-monthly was in force.

[d] In this payroll period Standard Mine was not producing coal.

[e] Acme mine was closed May 31, 1928. The small group of employes retained thereafter was engaged in closing the mine.

[f] Forbes Mine was closed December 31, 1928.

TABLE 2.—COAL PRODUCTION, IN TONS, OF MINES OF ROCKY MOUNTAIN FUEL COMPANY, COMPARED WITH TOTAL COAL PRODUCTION OF COLORADO, BY MONTHS, 1928 TO 1932

Month	State tonnage[a]	Rocky Mountain Fuel Company		State tonnage[a]	Rocky Mountain Fuel Company		State tonnage[a]	Rocky Mountain Fuel Company	
		Tonnage	Per cent of state		Tonnage	Per cent of state		Tonnage	Per cent of state
		1928			1929			1930	
Jan.	1,003,407	71,329	7.0	1,217,210	76,434	6.5	1,281,019	105,931	8.5
Feb.	848,966	67,809	8.0	1,160,310	87,278	7.5	744,227	57,502	7.5
Mar.	749,665	67,341	9.0	696,860	62,163	9.0	589,196	54,077	9.0
Apr.	708,773	36,827	5.0	612,730	48,518	8.0	386,704	35,180	9.0
May	617,345	21,950	3.5	541,384	43,966	8.0	491,763	41,011	8.5
June	559,522	38,153	7.0	435,875	29,740	7.0	393,195	38,266	9.5
July	635,964	34,771	5.5	495,821	40,794	8.0	448,161	37,295	8.5
Aug.	764,070	48,644	6.5	614,930	43,658	7.0	436,165	39,564	9.0
Sep.	899,285	55,484	6.0	905,368	77,067	8.5	675,227	49,063	7.5
Oct.	983,114	54,393	5.5	994,530	91,726	9.0	893,588	75,133	8.5
Nov.	1,003,363	59,290	6.0	1,147,795	105,718	9.0	856,970	77,064	9.0
Dec.	1,148,111	66,032	5.5	1,111,251	96,782	8.5	1,041,879	89,668	8.5
Total	9,921,585	622,023	6.5	9,934,064	803,844	8.0	8,238,094	699,754	8.5
		1931			1932				
Jan.	824,707	78,900	9.5	762,239	81,892	10.5			
Feb.	516,376	48,844	9.5	599,171	74,851	12.5			
Mar.	619,204	69,018	11.0	552,904	64,943	11.5			
Apr.	398,297	58,942	15.0	275,701	33,839	12.5			
May	396,374	40,916	10.5	206,853	22,505	11.0			
June	306,266	33,214	11.0	210,129	19,646	9.5			
July	281,365	34,591	12.5	176,195	26,194	15.0			
Aug.	429,542	40,759	9.5	275,860	34,737	12.5			
Sep.	604,538	60,550	10.0	530,101	51,949	10.0			
Oct.	702,506	78,383	11.0	648,832	70,712	11.0			
Nov.	729,582	83,624	11.5	599,932	75,280	12.5			
Dec.	795,306	90,417	11.5	778,608	81,144	10.5			
Total	6,604,063	718,158	11.0	5,616,525	637,692	11.5			

[a] Figures for state tonnage from annual reports of Colorado State Inspector of Coal Mines.

TABLE 3.—COAL PRODUCTION, IN TONS, OF MINES OF ROCKY MOUNTAIN FUEL COMPANY, COMPARED WITH TOTAL COAL PRODUCTION OF COUNTIES IN WHICH THEY ARE LOCATED, 1928 TO 1932

County and mine	1928		1929		1930		1931		1932	
	Tons	Per cent of county	Tons	Per cent of county	Tons	Per cent of county	Tons	Per cent of county	Tons	Per cent of county
Boulder County										
All mines	434,995	100.0	479,643	100.0	428,051	100.0	499,133	100.0	571,534	100.0
R.M.F. Co. mines										
Industrial	80,492	18.5	103,873	21.5	79,647	18.5	119,020	24.0	121,416	21.0
Vulcan	61,422	14.0	87,655	18.5	81,693	19.0	59,188	12.0	58,983	10.5
Standard	28,063	6.5	58,097	12.0	49,066	11.5	38,941	8.0	45,364	8.0
Acme	13,772	3.0	–	–	–	–	–	–	–	–
Gunnison County										
All mines	460,805	100.0	521,401	100.0	498,724	100.0	404,209	100.0	404,714	100.0
R.M.F. Co. mine										
Alpine	34,580	7.5	33,891	6.5	6,563	1.5	28,299	7.0	37,276	9.0
Las Animas County										
All mines	2,944,211	100.0	2,564,897	100.0	1,970,599	100.0	1,333,999	100.0	858,537	100.0
R.M.F. Co. mine										
Forbes	13,902	0.5	–	–	–	–	–	–	–	–
Weld County										
All mines	1,943,313	100.0	2,167,116	100.0	1,893,780	100.0	1,686,313	100.0	1,470,030	100.0
R.M.F. Co. mines										
Columbine	313,154	16.0	365,699	17.0	282,776	15.0	275,072	16.5	278,678	19.0
Grant	76,872	4.0	163,508	7.5	177,309	9.5	195,757	11.5	95,134	6.5

TABLE 4.—CUMULATIVE DISTRIBUTION OF WORKERS OTHER THAN SUPERINTENDENTS AND FOREMEN, IN ALL MINES OF THE ROCKY MOUNTAIN FUEL COMPANY, BY AMOUNT OF ANNUAL GROSS EARNINGS, 1928 AND 1931[a]

Summary of Table 5

Annual gross earnings	All workers other than superintendents and foremen				Miners only				Workers other than miners, superintendents and foremen			
	1928		1931		1928		1931		1928		1931	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Less than $ 500	1,017	59.8	136	15.7	798	66.7	73	13.4	219	43.5	63	19.6
" " 1,000	1,304	76.7	273	31.5	995	83.1	162	29.7	309	61.3	111	34.6
" " 1,500	1,518	89.2	605	69.8	1,121	93.7	407	74.5	397	78.8	198	61.7
" " 2,000	1,623	95.4	791	91.2	1,175	98.2	520	95.2	448	88.9	271	84.4
" " 2,500	1,684	99.0	847	97.7	1,192	99.6	542	99.3	492	97.6	305	95.0
" " 3,000	1,701	100.0	867	100.0	1,197	100.0	546	100.0	504	100.0	321	100.0

[a] The fact that this table includes workers employed any portion of the year explains the contrast between 1928 and 1931. The reverse contrast, for workers employed in all months of the year, is shown in Table 7.

TABLE 5.—ANNUAL GROSS EARNINGS OF WORKERS IN ALL MINES OF THE ROCKY MOUNTAIN FUEL COMPANY, BY NUMBER OF MONTHS DURING WHICH PAY WAS RECEIVED, 1928 AND 1931

A. Miners Only, 1928

Annual gross earnings	Number of months during which pay was received												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
	Number of men												
Less than $10	46	1	.	.	.	.	.	.	.	.	.	.	47
$10 and under 25	57	6	.	.	.	.	.	.	.	.	.	.	63
25 " " 50	48	17	.	.	.	1	.	.	.	.	.	.	66
50 " " 75	47	35	6	1	.	.	.	.	.	.	.	.	89
75 " " 100	25	15	9	.	.	1	.	.	.	.	.	.	50
100 " " 150	23	51	17	8	1	.	.	.	1	.	.	.	101
150 " " 200	11	26	35	9	4	1	.	.	.	.	.	.	86
200 " " 300	2	23	46	23	9	4	5	.	.	1	3	3	119
300 " " 400	.	10	22	39	17	9	2	1	1	1	2	1	105
400 " " 500	.	2	9	24	15	8	4	4	2	2	1	1	72
500 " " 600	.	.	1	14	14	4	2	2	7	3	1	3	51
600 " " 700	.	1	2	9	7	.	8	8	4	8	2	3	52
700 " " 800	.	.	1	2	4	3	3	6	3	5	1	4	32
800 " " 900	.	.	1	1	2	2	3	8	4	.	5	4	30
900 " " 1,000	.	.	.	1	.	1	4	1	4	5	5	11	32
1,000 " " 1,100	.	.	.	.	1	2	2	3	2	5	5	11	31
1,100 " " 1,200	.	.	.	.	.	1	1	2	.	6	5	11	26
1,200 " " 1,300	.	.	.	.	.	.	2	2	2	3	5	5	19
1,300 " " 1,400	.	.	.	.	1	.	2	3	.	5	.	12	23
1,400 " " 1,500	.	.	.	.	.	.	.	.	1	2	4	20	27
1,500 " " 1,600	.	.	.	.	.	.	.	1	.	2	4	8	15
1,600 " " 1,700	.	.	.	.	.	.	.	.	1	.	1	14	16
1,700 " " 1,800	.	.	.	.	.	.	.	.	.	1	1	8	10
1,800 " " 1,900	.	.	.	.	.	.	.	.	1	2	1	5	9
1,900 " " 2,000	.	.	.	.	.	.	.	.	.	.	2	2	4
2,000 " " 2,100	.	.	.	.	.	.	.	.	.	.	2	4	6
2,100 " " 2,200	.	.	.	.	.	.	.	.	.	.	.	3	3
2,200 " " 2,300	.	.	.	.	.	.	.	.	.	.	.	4	4
2,300 " " 2,400	.	.	.	.	.	.	.	.	.	.	1	1	2
2,400 " " 2,500	.	.	.	.	.	.	.	.	.	.	1	1	2
2,500 " " 2,600	.	.	.	.	.	.	.	.	.	.	1	.	1
2,600 " " 2,700	.	.	.	.	.	.	.	.	.	.	1	1	2
2,700 " " 2,800	.	.	.	.	.	.	.	.	.	.	.	1	1
2,800 " " 2,900	.	.	.	.	.	.	.	.	.	.	1	.	1
2,900 " " 3,000	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	259	187	149	131	75	37	38	41	33	51	55	141	1,197

TABLE 5 *continued*

B. Miners Only, 1931

Annual gross earnings	Number of months during which pay was received												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
	Number of men												
Less than $10	3	.	.	.	.	.	.	.	.	.	.	.	3
$10 and under 25	5	.	.	.	.	.	.	.	.	.	.	.	5
25 " " 50	.	.	.	.	.	.	.	.	.	.	.	.	.
50 " " 75	2	.	.	.	.	.	.	.	.	.	.	.	2
75 " " 100	2	1	.	.	.	.	.	.	.	.	.	.	3
100 " " 150	9	3	.	.	.	.	.	.	.	.	.	.	12
150 " " 200	.	2	.	.	.	.	.	.	.	.	.	.	2
200 " " 300	.	2	5	5	1	1	.	.	.	.	.	.	14
300 " " 400	.	1	2	9	3	.	1	1	2	.	.	.	19
400 " " 500	.	.	1	5	2	2	2	1	.	.	.	.	13
500 " " 600	.	.	1	2	1	1	3	.	.	1	.	.	9
600 " " 700	.	.	.	2	2	1	1	3	2	.	2	4	17
700 " " 800	.	.	.	.	2	2	.	2	4	2	.	3	15
800 " " 900	.	.	.	.	.	.	2	4	4	2	.	12	24
900 " " 1,000	.	.	.	.	.	1	1	3	1	4	1	13	24
1,000 " " 1,100	.	.	.	.	.	.	.	.	.	4	10	41	55
1,100 " " 1,200	.	.	.	.	.	.	.	.	.	2	5	34	41
1,200 " " 1,300	.	.	.	.	.	.	.	.	1	.	4	40	45
1,300 " " 1,400	.	.	.	1	.	.	.	.	.	2	5	48	56
1,400 " " 1,500	.	.	.	.	.	.	.	.	.	.	18	30	48
1,500 " " 1,600	.	.	.	.	.	.	.	.	1	1	5	21	28
1,600 " " 1,700	.	.	.	.	.	.	.	.	.	.	4	26	30
1,700 " " 1,800	.	.	.	.	.	.	.	.	.	2	.	23	25
1,800 " " 1,900	.	.	.	.	.	.	.	.	.	.	.	15	15
1,900 " " 2,000	.	.	.	.	.	.	.	.	.	.	.	15	15
2,000 " " 2,100	.	.	.	.	.	.	.	.	.	.	.	5	5
2,100 " " 2,200	.	.	.	.	.	.	.	.	.	.	.	2	2
2,200 " " 2,300	.	.	.	.	.	.	.	.	.	.	.	9	9
2,300 " " 2,400	.	.	.	.	.	.	.	.	.	.	.	5	5
2,400 " " 2,500	.	.	.	.	.	.	.	.	.	.	.	1	1
2,500 " " 2,600	.	.	.	.	.	.	.	.	.	.	.	3	3
2,600 " " 2,700	.	.	.	.	.	.	.	.	.	.	.	.	.
2,700 " " 2,800	.	.	.	.	.	.	.	.	.	.	.	.	.
2,800 " " 2,900	.	.	.	.	.	.	.	.	.	.	.	1	1
2,900 " " 3,000	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	21	9	9	24	11	8	10	14	15	20	54	351	546

TABLE 5.—ANNUAL GROSS EARNINGS OF WORKERS IN ALL MINES OF THE ROCKY MOUNTAIN FUEL COMPANY, BY NUMBER OF MONTHS DURING WHICH PAY WAS RECEIVED, 1928 AND 1931 *continued*

C. Workers Other Than Miners, Superintendents and Foremen, 1928

Annual gross earnings[a]	Number of months during which pay was received												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
	Number of men												
Less than $10	2	.	.	.	.	.	.	.	.	.	.	.	2
$10 and under 25	11	3	1	.	.	.	.	.	.	.	.	.	15
25 " " 50	15	1	1	.	.	.	.	.	.	.	.	.	17
50 " " 75	8	5	2	.	.	.	.	.	.	.	.	.	15
75 " " 100	3	3	1	2	.	.	.	.	.	.	.	.	9
100 " " 150	7	11	.	1	1	.	1	1	.	.	.	.	22
150 " " 200	4	15	3	.	.	1	.	.	.	.	.	.	23
200 " " 300	.	19	11	12	2	2	.	1	.	.	.	.	47
300 " " 400	.	8	8	10	6	3	3	1	.	1	.	1	41
400 " " 500	.	1	2	14	7	2	1	.	1	.	.	.	28
500 " " 600	.	.	1	5	4	5	1	.	.	1	.	.	17
600 " " 700	.	.	2	3	5	4	1	3	6	1	2	2	29
700 " " 800	.	.	.	2	1	.	.	1	3	2	.	6	15
800 " " 900	.	.	.	.	1	3	3	4	1	2	.	4	18
900 " " 1,000	.	.	.	.	.	.	4	2	2	1	.	2	11
1,000 " " 1,100	.	.	.	1	.	.	2	2	2	1	2	8	18
1,100 " " 1,200	.	.	.	1	.	3	.	5	3	4	.	5	21
1,200 " " 1,300	.	.	.	.	.	.	2	2	.	4	6	8	22
1,300 " " 1,400	.	.	.	.	.	.	.	.	.	2	4	6	12
1,400 " " 1,500	.	.	.	.	.	.	.	.	.	1	4	10	15
1,500 " " 1,600	.	.	.	.	.	.	.	.	.	3	2	6	11
1,600 " " 1,700	.	.	.	.	.	.	.	.	.	.	1	9	10
1,700 " " 1,800	.	.	.	.	.	.	.	.	.	1	2	6	9
1,800 " " 1,900	.	.	.	.	.	.	.	.	.	1	1	14	16
1,900 " " 2,000	.	.	.	.	.	.	.	.	.	.	.	5	5
2,000 " " 2,100	.	.	.	.	.	.	.	.	.	.	2	7	9
2,100 " " 2,200	.	.	.	.	.	.	.	.	.	.	2	11	13
2,200 " " 2,300	.	.	.	.	.	.	.	.	.	.	.	2	2
2,300 " " 2,400	.	.	.	.	.	.	.	.	.	.	.	10	10
2,400 " " 2,500	.	.	.	.	.	.	.	.	.	.	2	8	10
2,500 " " 2,600	.	.	.	.	.	.	.	.	.	.	.	2	2
2,600 " " 2,700	.	.	.	.	.	.	.	.	.	.	.	4	4
2,700 " " 2,800	.	.	.	.	.	.	.	.	.	.	.	5	5
2,800 " " 2,900	.	.	.	.	.	.	.	.	.	.	.	.	.
2,900 " " 3,000	.	.	.	.	.	.	.	.	.	.	.	1	1
Total	50	66	32	51	27	23	18	22	18	25	30	142	504

TABLE 5 *continued*

D. Workers Other Than Miners, Superintendents and Foremen, 1931

Annual gross earnings	Number of months during which pay was received												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
	Number of men												
Less than $10	3	.	.	.	.	.	.	.	.	.	.	.	3
$10 and under 25	2	1	.	.	.	.	.	.	.	.	.	.	3
25 " " 50	5	2	.	1	1	.	.	.	.	.	.	.	9
50 " " 75	7	.	.	.	.	.	.	.	.	.	.	.	7
75 " " 100	2	.	.	.	.	.	.	.	.	.	.	.	2
100 " " 150	1	2	1	.	.	.	.	.	1	.	.	.	5
150 " " 200	1	6	1	1	.	.	.	.	.	.	.	.	9
200 " " 300	.	1	2	6	1	.	.	.	.	.	.	1	11
300 " " 400	.	.	5	2	.	.	1	.	.	.	.	.	8
400 " " 500	.	.	.	3	1	1	.	.	1	.	.	.	6
500 " " 600	.	.	.	4	1	.	.	2	.	.	.	.	7
600 " " 700	.	.	.	.	2	3	2	2	2	.	.	1	12
700 " " 800	.	.	.	2	1	.	.	.	.	2	.	6	11
800 " " 900	.	.	.	.	.	.	.	.	2	2	1	5	10
900 " " 1,000	.	.	.	.	.	.	.	.	2	.	1	5	8
1,000 " " 1,100	.	.	.	.	.	.	.	1	1	.	2	12	16
1,100 " " 1,200	.	.	.	1	.	.	.	2	.	1	.	10	14
1,200 " " 1,300	.	.	.	.	.	1	.	1	.	.	1	15	18
1,300 " " 1,400	.	.	.	.	.	.	.	.	.	3	4	18	25
1,400 " " 1,500	.	.	.	.	.	.	1	.	.	1	1	11	14
1,500 " " 1,600	.	.	.	.	.	.	.	.	.	1	2	5	8
1,600 " " 1,700	.	.	.	.	.	.	.	.	.	.	1	15	16
1,700 " " 1,800	.	.	.	.	.	.	.	.	.	.	2	22	24
1,800 " " 1,900	.	.	.	.	.	.	.	.	.	.	2	13	15
1,900 " " 2,000	.	.	.	.	.	.	.	.	.	.	1	9	10
2,000 " " 2,100	.	.	.	.	.	.	.	.	.	.	.	7	7
2,100 " " 2,200	.	.	.	.	.	.	.	.	.	.	.	5	5
2,200 " " 2,300	.	.	.	.	.	.	.	.	.	.	.	4	4
2,300 " " 2,400	.	.	.	.	.	.	.	.	.	.	.	11	11
2,400 " " 2,500	.	.	.	.	.	.	.	.	.	.	.	7	7
2,500 " " 2,600	.	.	.	.	.	.	.	.	.	.	.	6	6
2,600 " " 2,700	.	.	.	.	.	.	.	.	.	.	.	7	7
2,700 " " 2,800	.	.	.	.	.	.	.	.	.	.	1	1	2
2,800 " " 2,900	.	.	.	.	.	.	.	.	.	.	.	.	.
2,900 " " 3,000	.	.	.	.	.	.	.	.	.	.	.	1	1
Total	21	12	9	20	7	5	4	8	9	10	19	197	321

TABLE 6.—CUMULATIVE DISTRIBUTION OF WORKERS OTHER THAN SUPERINTENDENTS AND FOREMEN, IN ALL MINES OF THE ROCKY MOUNTAIN FUEL COMPANY, BY NUMBER OF MONTHS IN WHICH PAY WAS RECEIVED, 1928 AND 1931

Number of months in which some pay was received	All workers other than superintendents and foremen				Miners only				Workers other than miners, superintendents and foremen			
	1928		1931		1928		1931		1928		1931	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
12	283	16.6	548	63.2	141	11.8	351	64.3	142	28.2	197	61.4
11 or more	368	21.6	621	71.6	196	16.4	405	74.2	172	34.1	216	67.3
10 " "	444	26.1	651	75.1	247	20.6	425	77.8	197	39.1	226	70.4
9 " "	495	29.1	675	77.9	280	23.4	440	80.6	215	42.7	235	73.2
8 " "	558	32.8	697	80.4	321	26.8	454	83.2	237	47.0	243	75.7
7 " "	614	36.1	711	82.0	359	29.9	464	85.0	255	50.6	247	77.0
6 " "	674	39.6	724	83.5	396	33.1	472	86.5	278	55.2	252	78.5
5 " "	776	45.6	742	85.6	471	39.3	483	88.4	305	60.5	259	80.7
4 " "	958	56.3	786	90.7	602	50.3	507	92.9	356	70.6	279	86.9
3 " "	1,139	66.9	804	92.8	751	62.7	516	94.5	388	77.0	288	89.8
2 " "	1,392	81.8	825	95.2	938	78.3	525	96.1	454	90.0	300	93.5
1 " "	1,701	100.0	867	100.0	1,197	100.0	546	100.0	504	100.0	321	100.0

TABLE 7.—MEDIAN AND QUARTILE ANNUAL GROSS EARNINGS OF WORKERS OTHER THAN SUPERINTENDENTS AND FOREMEN WHO WERE ON MINE PAYROLLS OF THE ROCKY MOUNTAIN FUEL COMPANY IN TWELVE MONTHS, 1928 AND 1931

	All workers other than superintendents and foremen		Miners only		Workers other than miners, superintendents and foremen	
	1928	1931	1928	1931	1928	1931
Lower quartile	$1,142	$1,177	$1,048	$1,143	$1,294	$1,262
Median	1,504	1,415	1,408	1,359	1,767	1,663
Upper quartile	1,918	1,777	1,663	1,666	2,168	1,997
Number of workers on payroll in 12 months	283	548	141	351	142	197
Workers on payroll in 12 months as per cent of all workers during year	16.6	63.2	11.8	64.3	28.2	61.4

TABLE 8.—NUMBER OF WORKERS OTHER THAN SUPERINTENDENTS AND FOREMEN WHO WERE ON MINE PAYROLLS OF THE ROCKY MOUNTAIN FUEL COMPANY IN 1928, IN 1931, AND IN BOTH YEARS

Mine	All workers other than superintendents and foremen			Miners only			Workers other than miners, superintendents and foremen		
	1928	1931	Both years	1928	1931	Both years	1928	1931	Both years
Acme	54	–	–	40	–	–	14	–	–
Alpine	102	76	33	55	31	15	47	45	18
Columbine	634	241	167	451	162	106	183	79	61
Forbes	105	–	–	91	–	–	14	–	–
Grant	249	218	91	181	142	61	68	76	30
Industrial	252	201	101	171	135	62	81	66	39
Standard	106	50	40	75	31	24	31	19	16
Vulcan	194	78	46	130	43	22	64	35	24
Not stated	5	3	1	3	2	1	2	1	0
All mines	1,701	867	479	1,197	546	291	504	321	188
Per cent of number in 1928	100.0	–	28.2	100.0	–	24.3	100.0	–	37.3
Per cent of number in 1931	–	100.0	55.2	–	100.0	53.3	–	100.0	58.6

TABLE 9.—AVERAGE NUMBER OF EMPLOYES, INCLUDING SUPERINTENDENTS AND FOREMEN, DAYS MINE WORKED, SHIFTS WORKED, TOTAL GROSS EARNINGS, AND AVERAGE GROSS EARNINGS PER SHIFT, OF WORKERS IN ALL MINES OF THE ROCKY MOUNTAIN FUEL COMPANY, 1928 TO 1932[a]

Mine[b]	Average number of employes	Days mine worked	Shifts worked[c]	Total gross earnings	Average gross earnings per shift
1928					
Alpine	48	141	–	$76,482.90	–
Columbine	265	229	–	473,482.37	–
Grant	94	102	–	106,365.34	–
Industrial	99	179	–	148,719.75	–
Standard	26	182	–	61,792.38	–
Vulcan	63	233	–	121,458.51	–
Total	595	–	–	$988,301.25	–
Average	–	178	–	–	–
1929					
Alpine	53	144	12,772	$89,798.90	$7.03
Columbine	203	278	60,807	500,078.60	8.24
Grant	101	212	25,466	210,730.85	8.27
Industrial	118	149	24,485	186,592.83	7.62
Standard	39	258	11,546	97,925.95	8.48
Vulcan	81	256	23,436	166,929.91	7.12
Total	595	–	158,512	$1,252,057.04	–
Average	–	216	–	–	$7.90
1930					
Alpine	54	92	9,165	$67,163.25	$7.33
Columbine	209	201	50,951	418,878.22	8.22
Grant	119	189	26,573	224,898.90	8.46
Industrial	128	120	21,079	156,591.81	7.43
Standard	41	186	9,709	81,573.38	8.40
Vulcan	72	247	20,340	153,340.44	7.54
Total	623	–	137,817	$1,102,446.00	–
Average	–	172	–	–	$7.99
1931					
Alpine	51	90	8,780	$66,050.23	$7.52
Columbine	185	223	47,902	403,426.56	8.42
Grant	150	182	31,056	247,026.19	7.95
Industrial	138	165	28,447	198,762.70	6.99
Standard	36	178	7,758	67,303.43	8.68
Vulcan	55	240	14,625	106,235.13	7.26
Total	615	–	138,568	$1,088,804.24	–
Average	–	180	–	–	$7.86
1932					
Alpine	54	124	10,344	$67,921.32	$6.57
Columbine	164	239	46,961	351,605.83	7.49
Grant	80	165	15,834	108,241.44	6.84
Industrial	139	169	30,757	185,669.94	6.04
Standard	42	212	10,214	68,874.47	6.74
Vulcan	52	240	15,013	94,310.98	6.28
Total	531	–	129,123	$876,623.98	–
Average	–	192	–	–	$6.79

For footnotes see bottom of p. 362.

TABLE 10.—SELECTED OPERATING AND FINANCIAL STATISTICS OF THE ROCKY MOUNTAIN FUEL COMPANY FOR THE YEARS 1928 TO 1932

	1928	1929	1930	1931	1932
Tons sold	602,386	781,768	680,288	693,757	621,215
Value of sales	$1,463,157	$1,634,954	$1,467,535	$1,486,238	$1,321,604
Mine operating cost[a]	1,185,320	1,390,257	1,217,342	1,193,439	975,773
Mine operating profit	277,837	244,697	250,193	292,800	345,831
Other charges[b]	247,611	242,317	219,942	200,159	179,719
Extraneous revenue	202,960	197,474	166,655	153,454	116,004
Profit available for bond interest and financial items	233,186	199,853	196,905	246,094	282,116
Tons produced per man per day	5.27	5.98	6.49	6.20	6.30
Ratios per ton:					
Value of sales	$2.43	$2.09	$2.16	$2.14	$2.13
Mine operating cost[a]	1.97	1.78	1.79	1.72	1.57
Mine operating profit	.46	.31	.37	.42	.56

[a] Plus or minus coal inventory adjustment.
[b] Includes general and administrative expenses.

TABLE 11.—ESTIMATED DISTRIBUTION OF TONNAGE SOLD BY THE ROCKY MOUNTAIN FUEL COMPANY IN THE YEARS 1928 TO 1931[a]

Year	Domestic users	Industrial users	Railroads	Total
1928	169,391	189,914	229,108	588,413[b]
1929	182,255	348,873	250,640	781,768
1930	197,082	312,969	170,237	680,288
1931	168,509	397,649	127,599	693,757
Total	717,237	1,249,405	777,584	2,744,226

[a] The estimate is based upon the assumption that, after separating out the orders for railroads, all sizes of coal except pea and slack were used as domestic, while all pea and slack were considered as industrial.
[b] Total tonnage does not include Forbes Mine.

FOOTNOTES TO TABLE 9

[a] The data of this table are taken from a statement prepared by the company. The figure for average number of employes, as explained by the company's general auditor, is computed "by adding together the number of employes working each day that the mine operates during the month. This total is then divided by the number of days the mine worked." It is not the same figure as "Average number of men" shown in Table 1, which refers to the total number of individuals on the payroll regardless of length of employment.

[b] Acme and Forbes mines, which were closed, respectively, on May 31 and December 31, 1928, are not included in the figures for that year, as it seemed best to include only the mines for which the statistics are given for the entire period.

[c] "Shifts worked" and "Average gross earnings per shift" were not obtainable from the records for 1928.

TABLE 12.—MONTHLY PRODUCTION OF BITUMINOUS COAL IN THE UNITED STATES, 1913 TO 1932[a]

Thousand net tons

Month	1913	1914	1915	1916	1917	1918	1919
Jan.	42,274	40,191	37,194	46,593	47,969	42,227	42,193
Feb.	37,057	35,472	29,321	45,187	41,353	43,777	32,103
Mar.	37,536	45,455	31,801	43,828	47,869	48,113	34,293
Apr.	34,169	23,609	29,968	33,628	41,854	46,041	32,712
May	37,205	28,551	30,938	38,804	47,086	50,443	38,186
June	37,405	31,412	33,957	37,742	46,824	51,138	37,685
July	38,858	34,305	35,573	38,113	46,292	54,971	43,425
Aug.	41,590	37,751	38,161	42,696	47,372	55,114	43,613
Sep.	41,424	39,019	40,964	42,098	45,108	51,183	48,209
Oct.	46,164	37,685	44,198	44,807	48,337	52,300	57,200
Nov.	43,233	33,392	44,737	44,927	47,690	43,895	19,006
Dec.	41,519	35,862	45,814	44,097	44,037	40,184	37,235
Total	478,434	422,704	442,626	502,520	551,791	579,386	465,860

Month	1920	1921	1922	1923	1924	1925	1926
Jan.	49,748	41,148	38,930	51,944	52,507	51,640	53,205
Feb.	41,055	31,524	42,425	43,645	47,302	38,770	46,180
Mar.	47,850	31,054	51,936	48,446	41,288	37,416	45,744
Apr.	38,764	28,154	16,335	44,057	30,429	33,514	39,738
May	39,841	34,057	21,005	47,690	32,276	35,276	38,727
June	46,095	34,635	23,096	47,083	31,458	36,960	41,635
July	45,988	31,047	17,602	46,707	33,346	39,362	43,102
Aug.	49,974	35,291	26,755	50,578	35,923	44,633	45,957
Sep.	50,241	35,870	42,463	47,841	42,376	46,556	48,559
Oct.	53,278	44,687	46,733	50,907	48,414	52,907	54,127
Nov.	52,576	36,805	46,900	44,425	42,102	50,497	59,213
Dec.	53,257	31,650	48,088	41,242	46,266	52,522	57,180
Total	568,667	415,922	422,268	564,565	483,687	520,053	573,367

Month	1927	1928	1929	1930	1931	1932
Jan.	56,660	44,925	52,398	50,414	38,949	27,892
Feb.	52,697	42,022	48,137	40,060	31,737	28,013
Mar.	59,911	44,668	40,068	36,230	34,226	32,250
Apr.	34,538	32,710	37,565	36,318	28,777	20,300
May	35,256	37,218	40,908	36,413	28,613	18,384
June	36,483	36,546	38,771	34,145	29,491	17,749
July	33,505	36,864	41,379	35,158	30,103	17,857
Aug.	41,541	41,774	44,695	36,117	30,858	22,489
Sep.	41,763	41,971	45,334	39,126	32,255	26,314
Oct.	43,827	51,176	52,174	44,714	36,075	32,677
Nov.	40,468	46,788	46,514	38,609	30,426	30,632
Dec.	41,114	44,083	47,046	40,222	30,579	31,110
Total	517,763	500,745	534,989	467,526	382,089	305,667

[a] Data from reports of U. S. Bureau of Mines.

TABLE 13.—AVERAGE NUMBER OF DAYS WORKED AND OF DAYS LOST BY BITUMINOUS COAL MINES IN THE UNITED STATES, 1890 TO 1931[a]

Year	Average number of days operated	Average number of days lost[a]	Year	Average number of days operated	Average number of days lost[a]
1890	226	82	1911	211	97
1891	223	85	1912	223	85
1892	219	89	1913	232	76
1893	204	104	1914	195	113
1894	171	137	1915	203	105
1895	194	114	1916	230	78
1896	192	116	1917	243	65
1897	196	112	1918	249	59
1898	211	97	1919	195	113
1899	234	74	1920	220	88
1900	234	74	1921	149	159
1901	225	83	1922	142	166
1902	230	78	1923	179	129
1903	225	83	1924	171	137
1904	202	106	1925	195	113
1905	211	97	1926	215	93
1906	213	95	1927	191	117
1907	234	74	1928	203	105
1908	193	115	1929	219	89
1909	209	99	1930	187	121
1910	217	91	1931	160	148

[a] Data from reports of U. S. Bureau of Mines.
[b] Based on potential full year of 308 days.

TABLE 14.—CALCULATED CAPACITY OF BITUMINOUS COAL MINES IN THE UNITED STATES WITH THE EXISTING LABOR FORCE, ASSUMING 308 WORKING DAYS A YEAR, 1890 TO 1931[a]

Year	Million net tons	Year	Million net tons	Year	Million net tons
1890	152	1904	425	1918	717
1891	163	1905	460	1919	736
1892	178	1906	496	1920	796
1893	194	1907	520	1921	860
1894	214	1908	531	1922	916
1895	215	1909	560	1923	970
1896	221	1910	592	1924	871
1897	232	1911	593	1925	822
1898	243	1912	622	1926	821
1899	254	1913	635	1927	835
1900	279	1914	668	1928	760
1901	309	1915	672	1929	752
1902	348	1916	673	1930	770
1903	387	1917	699	1931	736

[a] Data from reports of U. S. Bureau of Mines.

TABLE 15.—NUMBER OF TONS OF COAL PRODUCED IN ROCKY MOUNTAIN FUEL COMPANY MINES AND IN STATE OF COLORADO PER ACCIDENT AND PER FATAL ACCIDENT, 1928 TO 1932[a]

	Tons produced	Number of accidents			Number of tons produced	
		Total	Fatal	Non-fatal	Per accident	Per fatal accident
1928						
R. M. F. Co.	622,257	142	3	139	4,382	207,419
Colorado	9,921,585	1,845	35	1,810	5,378	283,474
1929						
R. M. F. Co.	803,723	148	3	145	5,431	267,908
Colorado	9,934,064	1,779	53	1,726	5,584	187,435
1930						
R. M. F. Co.	699,228	118	0	118	5,926	–
Colorado	8,238,094	1,558	36	1,522	5,288	228,836
1931						
R. M. F. Co.	716,277	124	3	121	5,776	238,759
Colorado	6,604,063	1,260	22	1,238	5,241	300,184
1932						
R. M. F. Co.	636,851	113	0	113	5,636	–
Colorado	5,516,525	1,112	29	1,083	5,051	193,673

[a] Data from annual reports of State Inspector of Coal Mines.

TABLE 16.—BITUMINOUS COAL PRODUCTION, IN TONS, IN THE UNITED STATES, IN COLORADO, AND IN THE ROCKY MOUNTAIN FUEL COMPANY, 1928 TO 1932

Year	United States	Colorado	R. M. F. Co.	Per cent change from previous year		
				United States	Colorado	R. M. F. Co.
1928	500,745,000	9,921,585	622,023			
1929	534,989,000	9,934,064	803,844	+ 6.8	+ .1	+29.2
1930	467,526,000	8,238,094	699,754	−12.6	−17.1	−12.9
1931	382,089,000	6,604,063	718,158	−18.3	−19.8	+ 2.6
1932	305,667,000	5,616,525	637,692	−20.0	−15.0	−11.2

APPENDIX XI

NATIONAL RECOVERY ADMINISTRATION TRANSCRIPT OF PROCEEDINGS, COAL CODE HEARING FOURTH DAY, AUGUST 12, 1933, MORNING SESSION

STATEMENT OF DR. ALEXANDER SACHS

In approaching the problem of coal, I am reminded of a saying of Justice Holmes, that "there are times when education in the obvious is far more important than investigation of the abstruse."

So I want to warn you from the start that this reference to an economic and statistical study will not deal with the complicated, but with the very basic and obvious features of the coal industry.

The problem of coal is not a problem of the present depression.

Depression in coal—progressive unemployment and loss of business and profits—has been with us throughout the preceding decade of industrial prosperity and even boom. In the new era feast, coal was like the mummy carried around with the various courses at an Egyptian banquet. In the language of economics the coal depression has been structural rather than the result of the business cycle.

Since the war the coal industry has been overexpanded, has been in a continuous state of warfare, and all three parties, owners, workmen and consumers, have been complaining that they were not getting their due. It has been not only an overdeveloped, but, if I may use the terms in a descriptive sense and not at all in a derogatory sense, an underorganized and underplanned industry in relation to the problems that have confronted it in the post-war period and are confronting it today.

The much discussed "coal problem" is but one of the end-products of our national policies or lack of policies relating to the ownership and development of the country's natural resources. The United States possesses within its borders approximately half of the coal resources in the world, and except for relatively inaccessible portions of the public domain in the Rocky Mountains practically all of this vast storehouse is privately owned. Measured in terms of annual needs, these reserves represent hundreds of years of supply. But under unregulated and unplanned competition, the urge of the present generation of owners has been to reduce these resource assets into current income, and in many cases the burden of coal land taxes and of carrying charges on investments already incurred compel owners to develop properties without regard to the economic timeliness of their exploitation. This is one of the underlying causes of the large number of mines in operation, their aggregate excess capacity compared to consumptive demand, low prices for coal, with resulting starved wages for workers, bankruptcy and reorganization of operating properties.

The causes of the chronic state of virtual chaos in the bituminous coal industry in the past decade may be listed as follows:

(1) Excess capacity stimulated by the Great War;

(2) Transportation differentials unco-ordinated and inequitable in terms of the whole economy and the use of the fuel in the varying markets;

(3) Wage differentials unco-ordinated and inequitable in terms of the whole economy from the point of view both of competing operators and competing workers;

(4) Uneven technological improvements in coal production in the various fields, which unequally increased supplies. This tendency to overproduction was in turn fostered and aggravated by the wage and freight differentials;

(5) Technological economies in the use of coal which have continuously and markedly reduced the demand;

(6) More importantly revolutionary technical displacements of the demand and the outlets for coal by reason of the develop-

ment of competitive fuels under conditions of competitive and wasteful exploitation of natural resources, which, while increasingly hard on the substitutes, have been crushing on the older fuel thus displaced;

(7) Legal restraints hitherto existing which prevented agreements for the organization of the industry, the marketing of the product, and the balancing of production with consumption and co-ordination of such production with that of substitute and competing fuels.

The much discussed "coal problem" is thus but one of the end-products of our national policies or rather lack of policies relating to the ownership and development of the country's natural resources.

1. *Excess Capacity*

The condition of overdevelopment in the bituminous coal industry dates back many years. It existed before the war, as shown by the fact that in the twenty years ending 1913 the mines averaged only 213 days out of a possible 308. Among the causes of overdevelopment were:

The great abundance of the natural resource, accessible at small cost;

The common law concept that transferred ownership of mineral with the original grant of the surface land, causing title to the underlying reserves to pass into the hands of some millions of separate owners, each of whom naturally wanted to profit from his ownership;

Pressure on the operator to open additional mines in order to meet carrying charges on his investment;

A system of freight rates that favored development of remote localities through low charges per ton-mile;

Periodic shortage of railroad cars, which drove prices to attractive levels and induced further development; and, not least,

Biennial strikes or suspensions in the union fields, which stimulated expansion in the non-union areas of the South.

To this general picture must be added the intensifying influence of unusual external and internal factors. The World War created a shortage of coal, due not to lack of mine capacity but to congestion of transport and to associated strikes. The resulting increase in price caused a great increase in the number of mines, the attachment of great numbers of workers to the industry, and enormous expansion in capacity. Thus the war gave a stimulus to coal mining from which the industry cannot be said to have ever fully recovered.

Capacity reached its peak in 1923. In that year there were 9,331 commercial mines in operation (not to mention thousands of wagon mines) and the capacity was sufficient to produce 970,000,000 tons in a 308-day year.

In 1923 coal was being produced in 92 commercial fields in 32 States and Alaska. Many of the fields had been developed in regions relatively remote from markets and could continue to exist only by paying wages lower than the rates prevailing in the fields lying closer to the markets. These wages and freight differentials arose, for which the industry has hitherto found no satisfactory solution. As wage constitutes 65 per cent of the cost of production, f.o.b. mine, the fixing of the wage rate in any field at a competitive level becomes a matter of economic life and death. With a chronic surplus of labor the non-union mines of the South found they could obtain all necessary workers at much less than 1924 wages of $7.50 a day under the ill-fated Jacksonville Agreement.

Thus was created a situation wherein the last quarter of 1924 operators in the Central Competitive Field paid $7.50 for an eight-hour day, while operators in West Virginia paid the equivalent of $4.79 a day.

Lower labor costs enabled them to capture much of the business of the northern mines. While the South increased its production enormously, the unionized mines languished.

Accordingly, one of the great tasks in framing a code of fair competition for the bituminous coal industry is to reach agreement on an equitable set of wage differentials that will give each field a reasonable share of the market.

2. *Transportation Differentials*

Similarly, the schedules of rail rates have developed without the benefit of a continuous policy or a local basis. Differentials in rates have been granted in order to compensate for the disadvantage of greater distances to market, often without full appreciation of their ultimate effects. Once fixed and a new field developed, the rate becomes a vested interest, which can be changed only with the greatest difficulty. Increases and decreases have been added until a curious pattern has been achieved, and original inequities have been lost and found and pyramided in the maze of the present rate structure.

In addition to the complexity of rate schedules, the rates on coal have advanced from time to time until the railroads have acquired the position of having a greater stake in the bituminous industry than the coal operators themselves. In 1929, when the average f.o.b. mine realization per ton was $1.80, the revenue received by the railroads was apparently 1.3 times as great as the revenue coal handled. With the average mine realization much lower for 1932, the average revenue per ton for the railroads was probably twice as great as that to the operator.

With such relationships it is obvious that the coal problem is not that of production alone, but one including transportation as well. If the rates are excessive (a matter of determination quite outside the scope of this statement), then the coal industry is penalized by the railroads in favor of competing fuels and energy. And it may well be that the railroads are penalizing themselves in terms of net revenue through the loss of this tonnage which the high rates have fostered.

3. *Shift of Tonnage*

The combination of wage differences between the northern and southern fields with transportation and labor differences is one of the causes of the shifting of tonnage during the past ten years and since the war, as shown by the charts presented at this hearing. Of course there are numerous other factors involved, such as the excellent quality of many southern coals; shifts in market preference; displacement of beehive with by-product coke; differences in natural conditions of mining, such as height of seams, roof conditions, timber requirements, etc., and comparatively heavier overhead costs in the North, such as taxes, depletion and insurance.

One has to remember that much of the growth of the South represents the natural expansion of an industry in its early youth. Some of the important fields of the South were developed only a few years before the World War. Modern plants for mining and preparation, together with aggressive marketing methods and the opening afforded by the factors mentioned above, gave the southern fields opportunities of which they took free advantage.

A statement compiled by a colleague of the Bureau of Mines shows the production of the principal fields east of the Mississippi River for the years 1923 and 1932.

The statement shows that while production of coal by western Pennsylvania and Ohio mines in 1932 was 39.4 per cent and 36.9 per cent, respectively, of their production in 1923, the high volatile mines in southern West Virginia produced in 1932 89.7 per cent, the low volatile mines in southern West Virginia 97.1 per cent, and the eastern Kentucky mines 76.4 per cent of their 1923 production. Similarly, Illinois production in 1932 was 41.8 per cent of 1923, while western Kentucky was 86.8 per cent by the same comparison.

4. *Technological Changes*

While technological change is a continuous process in our industrial life, the last decade has witnessed a very rapid advance of mechanization.

Mine power is now generally electrified. The mine mule has been largely displaced by the electric locomotive. The proportion undercut by machine has jumped from 56 per cent in 1918 to over 80 per cent in 1932, and in many fields the cutting machine is now universally employed. Machines to replace the heavy labor of hand shoveling were placed on the market about 1922. From 1,880,000 tons loaded by machine in 1923, mechanized bituminous tonnage has increased to 47½ million tons in 1929. This 25-fold growth in eight years has represented a mechanical revolution in underground methods. Mechanical loading has been introduced chiefly in the union fields paying high wages, where the savings in labor cost are naturally greatest. Power shovels were brought in and stimulated strip mining, and the output produced by stripping has jumped from 1,300,000 tons in 1914 to over 20,000,000 tons in 1932. The savings through mechanization are shown in the increased production per worker, which has grown from 3.8 tons in 1918 to 5.4 in 1932, an increase of 42 per cent since the war. The number of men displaced by machines is not known accurately, but Mr. Hewell D. Alford estimates that in the last ten years the numbers displaced by stripping, by mechanized loading, were 50,000. The displacement has fallen unequally, but most of it has occurred in the high-wage-rate fields of the Middle West and the Rocky Mountains.

And yet, to my mind, this affords no warrant for outlawing machinery. On the contrary, it is a challenge to better economic planning to make technology contribute, as it has in the past, to the general welfare.

5. *Technological Economies*

Of the forces that have tended to curtail drastically the demand for coal since 1920, progress in the art of converting fuel into mechanical power has been the most important single factor. The average percentage reduction in fuel consumed per unit of product from the beginning of the fuel economy movement in 1909 to the end of the post-war boom in 1929 may be summarized as follows:

	Percentage reduction
Electric public utility power plants	66
Steam railroads	40
Petroleum refining	36
Iron furnaces, steel works, and rolling mills	25
Cement mills	31
Other manufacturing, approximately	21

The average reduction in all industrial and railroad uses combined is 33 per cent. Stated in another way, had there been no advance in thermal efficiency during the twenty years, and had the efficiencies of 1909 continued without change, American business would have consumed 210,000,000 tons more of bituminous coal in 1929 than were in fact required. Savings during this period were due not so much to the appearance of epoch-making inventions like those of Watt and Neilson as to the cumulative effect of many small economies and to the general application of improvements and practices which the best plants had already shown to be profitable.

6. *Inter-Fuel Competition*

The relative significance of the different fuels may be had by comparing their total heat values on a B.t.u. basis. By thus converging the quantities of the several fuels to a common basis, the trend and relative importance of each may be shown over a period of years.

Bituminous coal supplies

	Per cent
1913	72.7
1918	72.3
1923	63.5
1929	57.0
1930	55.7
1931	48.7
1932	44.9

Corresponding percentages of the total energy supply contributed by competitive sources of fuel and energy are as follows:

	Petroleum	*Gas*	*Hydroelectric*
1899	4.6	3.3	1.8
1909	7.7	3.7	2.9
1913	8.3	3.5	3.3
1918	9.8	3.6	3.8
1923	18.0	4.5	4.6
1929	22.8	7.7	7.3

	Petroleum	Gas	Hydroelectric
1930	22.5	8.8	7.8
1931	24.8	8.8	8.4
1932	26.3	9.1	10.7

These data are graphically presented in the artistically colored chart on the wall. While these figures indicate a declining significance in the total energy supply of coal, it should be pointed out that all the growth of petroleum, gas and hydroelectricity cannot be said to have displaced coal. Of the total quantity of petroleum produced in 1929 (1,007,000,000 barrels), only 372,000,000 barrels of fuel oil, or 36.9 per cent of the total production, were consumed. Of this 372,000,000 barrels, 93,000,000 barrels were used by steamships and tankers, and 56,000,000 barrels were used as fuel by oil companies. Eliminating these two items as apart from the domestic competitive picture, leaves 223,000,000 barrels, or the equivalent of 51,860,460 tons of coal, which may more properly be considered as in competition with coal. Thus the proportion of the segment is reduced by over 87 per cent. There are two other considerations which should be taken into account. Of the residual 223,000,000 barrels thus calculated, a large portion was consumed in areas non-competitive with coal. California alone consumed for all purposes 90,000,000 barrels and Texas 52,000,000 barrels. Thus the apparent magnitude of the displacement of coal must be carefully examined in terms of the nature of its use as well as the geography of its consumption. In a study prepared by the National Industrial Conference Board, entitled "The Competitive Position of Coal in the United States," the following conclusion is stated:

"What proportion of the 314 million barrels of oil used outside oil company uses in 1929 actually displaced coal is difficult to say, but it is probably less than one-fourth."

On this basis the coal equivalent of this estimated displacement would be less than 20,000,000 tons. Statement of this estimate is not intended to imply its final acceptance. It is given merely to suggest the necessity of accurate and complete findings on the growth and magnitude of the competition suffered by coal due to the incursions of fuel oil.

Another aspect of the growth of energy represented by petroleum should be mentioned. The bulk of energy derived from petroleum is represented by gasoline. Undoubtedly the use of gasoline in internal combustion engines has adversely affected coal consumption through personal travel and trucking which have reduced the rail traffic burden and in turn the consumption of coal by railroads. However, it is highly inconceivable that we may ever hope to outlaw the use of the automobile; such losses as are due to this factor appear to be lost without any hope of redemption.

The losses sustained by coal through this change in habits of transportation are nevertheless very real.

The really important fuel competitor is natural gas.

The output of natural gas in 1929 was 1,918 billion cubic feet, or the equivalent of 83 million tons of coal, on the basis of 23,000 cubic feet of gas as the equivalent in the heat value of a ton of coal. Not all the natural gas that is produced and utilized enters into competition with coal. For purposes of the present analysis, the consumption of natural gas in 1929 may be classified as follows:

	Million cubic feet	
Non-competitive with coal		
Carbon black manufacture . . .	261,107	
Field and refinery use	808,812	1,069,919
Competitive with coal		
Public utility use	112,707	
Domestic use	359,853	
Industrial use	374,972	847,532
Total		1,917,451

The use of natural gas in carbon black manufacture and in field and refinery use may be regarded as non-competitive with coal. Carbon black at existing prices can be produced only in isolated localities where gas can find no other outlet. The use of gas in field and refinery operations is competitive with fuel oil rather than with coal. An indirect competition with coal may ensue if the fuel oil released by the substitution of natural gas finds its way into the competing coal market.

There remain 848 billion cubic feet used in public utilities, domestic heating and cooking, and industrial fuel. A computation of gas consumption in 1929 in the three producing states for the uses mentioned shows a total of 335 billion cubic feet of gas. If to this is added the consumption of gas in Arkansas, Louisiana, and Kansas, where it also competes with fuel oil, it appears that probably one-half of the 848 billion cubic feet of gas, or roughly the equivalent of 20 million tons of coal, enters directly into competition with coal.

Since 1929 the competition of gas has been extremely acute in certain markets. Instances have been called to the attention of the Administration in which gas has been offered to consumers at rates at which it would be necessary to sell coal at approximately the cost of transportation to the market, or at best only a few dimes or nickels per ton at the mine to the producer. The offering of gas (and also oil) in some of the established coal markets at prices representing practically "dumping" figures, has wrought price slashes in coal out of all proportion to the quantity of the newcomer fuel so introduced.

But this, in the writer's opinion, affords no warrant for the proposal of suffering such fuel competition. Rather it is a challenge to the organization of an agency to relate, plan and deal with the problems presented in these several classes.

Results of Disorganization

The consequences of this excess productive capacity magnified by the new technology during the last decade have been to create, in this always competitive industry, an economic warfare for markets. Price cut has followed price cut, and large consumers have been able practically to set their own price.

Operators have been compelled to run at a loss; and balance sheets, broadly speaking, have shown red figures since 1923.

The effect of disorganization has been particularly severe upon employment. In 1923 the industry employed 704,793 wage-earners. In 1931 the figure was 450,213. In 1932 employment in all territory east of the Mississippi was 346,058. The total reduction since the peak year 1923 has amounted to about 50 per cent. But even that does not adequately represent the loss in employment. It is man hours and man days that tell the story. Not only has the number employed been drastically reduced, but the working time has also been curtailed. For a period of 32 years ending in 1921, bituminous mines worked on an average of 213 days per year. In no year during that period did the mines as a whole average as much as 250 days. Since 1921 the situation has become much worse, the nine-year period, 1922 to 1930, showing an average working time of 189 days. In 1931 the working time was 160 days; and in 1932, 145 days.

If one assumes that the production during the next six months will amount to as much as 200,000,000 tons (which is only slightly higher than the current rate, if continued, would produce), a rough estimate of employment to be expected can be made. If 32 hours were set as the maximum working time and an average working time of 30 hours was achieved, the average number of workers required would be approximately 385,000 men. If the average attained were but 28 hours, the average number required would be 412,000 men. If the average time achieved were 35 hours (approximately the same as for 1929), the average number employed would total only 330,000 workers. These numbers compare with 503,000 men employed in 1929.

Conclusion

The coal industry thus presents the spectacle of an over-developed, undermanaged industry, in continuous state of internal and external economic struggle.

The secret, if it is a secret after years of publicity given to the problems of the coal industry, lies in the fact that, under the régime of competitive individualism to the limit, no one mine, no one company, could alleviate the handicaps alone. In fact, any forward step made by one mining company, good by itself, brings about conditions that are prejudicial to the industry as a whole, and makes the inherent contradictions only more acute.

And even if by the move of a magic wand the demand for coal should double, and the partly idle mines begin to cover the financial charges on their past excessive investments and even show some profit, then bankrupt mines will be reopened and new mines will be opened and the competitive war will go merrily on. Then retrenchment, wage cuts, strikes, unemployment, cut-throat competition, bankruptcies, commence all over again. The old, squeaky merry-go-round will again commence its cycle; too many mines, too many miners, too much equipment, too little management, no planning, no profits, no living wages.

Despite the obvious need for control of production, collective action to limit output or control of markets was blocked by the anti-trust laws. Direct agreement to apportion the market was illegal. Indirect understandings of a kind reached in some other industries were impossible among thousands of mines driven on by the remorseless pressure of overhead and fighting for a limited market.

Is it possible to add a few lines or mere hints of consolation to the book of lamentation that the economists can write on the industry? Speaking in a personal capacity, it seems to me indisputably clear that the only solution lies in organization and planning for the industry as a whole, and not through continuing the laissez-faire, cut-throat competition.

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