



TRANSVAAL AND ORANGE FREE STATE
CHAMBER OF MINES

SEVENTY-FIRST ANNUAL REPORT
YEAR 1960

TRANSVAAL AND ORANGE FREE STATE CHAMBER OF MINES

REPORT OF THE EXECUTIVE COMMITTEE

MEMBERSHIP

The following companies were admitted to ordinary membership of the Chamber during 1960:—

Central Mining Finance, Limited. *Representative:* N. W. S. Lewin. *Alternate:* J. V. Harris.

The Consolidated Gold Fields of South Africa, Limited. *Representative:* J. B. Bocoek. *Alternate:* A. F. Lawson.

The following companies withdrew from ordinary membership of the Chamber during 1960:—

Anglo-French Exploration Company, Limited.
New Consolidated Gold Fields, Limited.

On 31st December, 1960, there were 105 ordinary members, five honorary members and three corresponding members. The classification of ordinary members was:—

Gold mining members	..	..	..	..	66
Coal mining members	..	..	..	..	26
Financial corporation members	..	..	..	..	13
					<u>105</u>

FINANCE

The Financial Statements embodied in this report show that expenditure for the year 1960 amounted to £1,444,283. Income in the form of subscriptions from members, administration fees, etc., totalled £1,437,494, resulting in an excess of expenditure over income of £6,789.

Expenditure for 1960 incurred under the following main headings (for comparative purposes the figures for 1959 are also quoted):—

	1960	1959
General Services and Administration	£636,598	£568,623
Administration of Social Services and Benefits to Employees	149,219	151,811
Prevention of Accidents and Mine Ambulance Competitions	57,477	49,709
Training and Educational Schemes Administration and Grants .. .	89,587	90,462
Recruiting (Europeans)	19,643	30,514
Research	448,057	406,058
Publications Issued	43,702	46,445
TOTAL	<u>£1,444,283</u>	<u>£1,343,612</u>

MEETINGS

During the year the following meetings were held:—

Members of the Chamber	..	..	..	1
Executive Committee	..	..	..	4
Gold Producers' Committee	..	..	..	58
Collieries Committee	..	..	..	17
Technical Advisory Committee	..	..	..	50
Sub-Committees, conferences, deputations, etc. ..	..	..	..	769
Organizations associated with the Chamber	..	..	..	115
				<u>1,014</u>

In addition, 229 meetings of various associations and societies connected with the mining industry were held in the Chamber of Mines Building during 1960.

GOLD PRODUCTION

The gold output in the Transvaal and Orange Free State for the years 1959 and 1960 was:—

	YIELD Ounces Fine		VALUE £	
	1959	1960	1959	1960
Res. members of the Chamber	19,635,299	20,943,741	244,772,195	262,503,509
Other producers	428,876	442,373	5,346,356	5,644,590
TOTAL	<u>20,064,105</u>	<u>21,386,114</u>	<u>250,118,551</u>	<u>268,048,099</u>

The highest and lowest of the monthly averages of non-Europeans in service, including contractors' labour, during each of the years 1959 and 1960, were as follows:—

Lines	Highest		Lowest	
	1959	1960	1959	1960
Lines ...	395,232 (June)	399,344 (April)	342,446 (January)	369,577 (January)
Lines ...	37,902 (February)	37,573 (October)	35,884 (December)	34,691 (April)
...	432,158 (May)	434,202 (March)	379,873 (January)	405,602 (January)

PATENTS

During the year 5,298 patent applications were filed in the Union. The Patents Committee examined 454 of these applications covering subject matter of interest to the mining industry on ventilation, dust, rock drills, haulages, metallurgy, iron, steel, coal, cement and explosives. No action was taken in respect of 412 applications; twelve were opposed and safeguards were taken in respect of a further 30. Those opposed during the year two were amended and one was abandoned. In the case of applications to which opposition was entered prior to 1960, opposition was withdrawn, one was amended and five were abandoned. At the end of the year twelve applications were still under opposition of which three were opposed to 1960.

UNION'S GOLDEN JUBILEE

Awards. On the occasion of the Union's Golden Jubilee in May, 1960, presentations of gold medals and imbumba kiets were made to European and non-European employees respectively, who were in the service of the coal or gold mining industry in 1910 or during 1910 and who were still employed in the mining industry in 1960.

GUESTS OF THE MINING INDUSTRY

During the year your committee had the pleasure of entertaining Dr. the Hon. J. Verwoerd, M.P., Prime Minister of South Africa, the Rt. Hon. Harold Macmillan, P.C., M.P., Prime Minister of the United Kingdom, Dr. Hans U. Granow, German Ambassador to South Africa, Dr. A. Dauliger, Swiss Ambassador to the United Kingdom, Mr. Sanchez Santamaría, Argentine Minister to South Africa, Admiral Sir Dymock Watson, K.C.B., C.B.E., Commander-in-Chief South Atlantic and South America, Dr. H. Seligman, Deputy Director-General of the International Atomic Energy Agency, Dr. D. H. McLaughlin, President of the Westlake Mining Company, California, delegates to the South African Publicity Association's Congress and 42 members of the United States Society of Editors and commentators.

In addition, about 5,200 people visited the gold mines under the scheme of tripartite visits organized by the Chamber. Thirty special visits were also arranged, mainly for parties from schools and universities.

REPORT OF THE GOLD PRODUCERS' COMMITTEE

MARKETING OF GOLD

The producers continued throughout the year to dispose of the major portion of output to the Union Treasury through the South African Reserve Bank at the weekly prices related to the daily official London quotations, less shipping charges amounting to 6½d. per ounce fine.

Sales of gold in the form of 400 ounce bars continued to be made through the African Reserve Bank direct to buyers resident outside the sterling area as well as sales by the Chamber of bars containing one kilogram of gold to approved purchasers outside the sterling area. Direct sales to purchasers outside the sterling area by the South African Reserve Bank amounted to approximately 6,000,000 ounces of gold and sales by the Chamber of kilo gold bars to approximately 350,000 ounces. In addition 7,500 one ounce gold medals, commemorating the Union's centenary, were struck by the South African Mint on behalf of the Chamber. The medals were sold locally.

The average sale price received by the producers for their product was 255s. 8d. per ounce fine, the highest average weekly price being 257s. 3½d. and the lowest price being 253s. 10d. from which must be deducted the Reserve Bank's buying charge at the rate of 1s. 6d. per ounce fine gold.

EXTENDED INDUSTRIAL USES OF GOLD

Towards the end of the year the University of the Witwatersrand, at the request of the Gold Producers' Committee, undertook research work into certain aspects of the properties of gold alloys.

URANIUM

Uranium Production Programme. Discussions between the South African Atomic Energy Board and the Combined Development Agency, which were first commenced in February, 1960, were resumed during the month of March. These discussions resulted in agreement between the Board and the Agency's constituent partners, the United States Atomic Energy Commission and the United Kingdom Atomic Energy Authority on a number of important aspects of the South African uranium programme.

The new agreements, which will operate from the 1st January, 1961, take the form of the former arrangements which provide for the acquisition by the Agency of the six year period 1st January, 1961, to 31st December, 1966, of 28,350 tons of uranium oxide at prices varying as between individual producers and calculated according to a cost-type formula.

At the request of the Underground Officials' Association, your committee re-united, during 1960, the question of payments to holders of the mine oversear's tickets of competency and informed the association that it could not agree to a further adjustment in the allowance for this certificate.

UNDERGROUND OFFICIALS' ASSOCIATION OF SOUTH AFRICA

Minimum Rates of Pay of Surveyors and Samplers. Your committee met representatives of the association to discuss an amendment to the schedule of minimum rates of pay for the occupations of surveyor and sampler. The requests of the association were still under consideration at the close of the year.

General Secretary and Manager. Mr. P. J. Malan was appointed as general secretary and manager of the association in place of the late Mr. J. H. P. Boyer.

Proposed Death Benefit Scheme. The proposal initiated by the association in 59, that a death benefit scheme be established by the industry, was discussed between representatives of your committee and representatives of the Officials' associations and of the Mining Unions' Joint Committee. At the close of the year a matter was still under discussion.

MINE SURFACE OFFICIALS' ASSOCIATION OF SOUTH AFRICA

Holiday Qualification Vouchers: University Students. A request by the association that university students, who were not Chamber bursars, after undertaking education work on mines and on returning to university, be permitted to encash their holiday qualification vouchers, was refused by your committee.

Variation of Annual Leave Regulations. As a result of a request by the association, referred to in the report for the year 1959, your committee agreed to amend, in effect from 1st February, 1960, the leave regulations for mine officials so that an official might take his voluntarily accumulative leave, or, in appropriate instances, a portion of his deferred annual leave, at a time other than when he took his normal annual leave.

Technical Foremen: Time Off for Sunday Work. In 1959, your committee reported that the association had requested a review of the arrangement whereby technical foremen were granted time off as compensation for Sunday work. The review, conducted by your committee, revealed that the present arrangement was equitable.

Your committee suggested to the association that it bring to the notice of mine managements specific cases in which it considered that the existing arrangement had not been implemented; thereafter if the association considered that a case did not been dealt with satisfactorily it should be brought to the attention of your committee.

Mine Ambulance Officers: Conditions of Employment. At the request of the association, your committee reviewed its standing recommendations covering amounts paid to ambulance officers responsible for training European ambulance men. Your committee recommended to mines that the bonus paid to ambulance officers for training first aid teams be increased, with effect from 2nd May, 1960, to amount not exceeding £15.

MECHANICS UNIONS' JOINT COMMITTEE

Training of Artisans Act, 1951: Employment of Trainees. Following an approach by the joint committee in 1959 to support the scheme for the employment and training of persons, other than juniors, who completed the prescribed training under the Training of Artisans Act, at institutions under the direction of the Department of Education, Arts and Science, the joint committee stated that its members had been unable to reach unanimity in agreeing to assist in the scheme. The Government of Labour was advised that, subject to certain reservations made by the unions concerned, mines, members of the Chamber, would accept trainees in trades except those of electrician, welder and boiler-maker.

MINE WORKERS' UNION

Request for Increase in Minimum Basic Wages. In 1959 your committee reported requests by the Mine Workers' Union for an increase in minimum basic wages and members of that Union were under discussion. In settlement of the claims of the Union, your committee agreed to introduce, with effect from 1st August, 1959, a minimum rates of pay for all employees allocated under the "Closed Shop" system to the Mine Workers' Union.

Conciliation Board: President Steyn Gold Mining Company, Limited. A dispute arose between the President Steyn Gold Mining Company, Limited, over the distribution of shares. The Mine Workers' Union applied for the appointment of a Conciliation Board which resolved the dispute shortly after the close of the year.

Strikes. Apart from the dispute referred to above, strike actions of short duration involving members of the Mine Workers' Union were taken on three gold mines during the year.

MINE WORKERS' UNION: SOUTH AFRICAN ENGINE DRIVERS' AND
MINEWORKERS' ASSOCIATION: SOUTH AFRICAN REDUCTION WORKERS'
ASSOCIATION

Shift workers. The Mine Workers' Union, the South African Engine Drivers' and the South African Reduction Workers' Association again held joint representations during the year for additional remuneration for afternoon and night shift work. The three unions were informed that your committee was not prepared to accede to their request.

MINE WORKERS' UNION: SOUTH AFRICAN ENGINE DRIVERS' AND
MINEWORKERS' ASSOCIATION: SOUTH AFRICAN REDUCTION WORKERS'
ASSOCIATION

Call-out System for Winding Engine Drivers. Your committee agreed to a system of call-out for winding engine drivers employed on sinking shafts. It was agreed that winding engine drivers employed on sinking shafts should be employed on regular eight hour shifts, subject to the following provisos:—

APPRENTICES

Course for Apprentice Supervisors. During the year a course of lectures on various aspects of apprentice training and administration was held for apprentice supervisors, resident engineers and mine personnel officers.

First Aid Bonus. Your committee approved a suggestion by the Association of Managers of South Africa that the bonuses laid down for other European employees be paid to apprentices who obtained a higher certificate than the elementary practical first aid certificate and also to those apprentices who renewed their elementary practical certificates either by participation in first aid competitions or attendance at first aid classes in their own time.

Merit Rating Scheme. Your committee agreed to a suggestion by the Association of Managers of South Africa that the merit rating scheme for apprentices be adopted to permit payment of the merit rating bonus to a maximum of 50 per cent. of entices.

RECRUITING

Government Miners' Training Schools. Recruiting of young men overseas for mining in the schools as miners was suspended during 1960.

The number of trainees who entered the schools during 1960 was 1,256 (1,212 and 44 overseas) and in the same period 512 (355 local and 157 overseas) trainees completed their indentures.

At the end of 1960 there were 1,357 (1,229 local and 128 overseas) trainees in the schools.

Learner Official Scheme (Mechanical and Electrical Engineering): Sandwich. Your committee agreed that learner officials undertaking the above course should be treated in all respects in the same way as apprentices when required to attend sandwich courses at the Witwatersrand Technical College on a full-time basis.

Training of Winding Engine Drivers. An increased number of candidates was entered for training as winding engine drivers during 1960; the daily average number of learners in training was 84 compared with 80 in 1959.

During the year, 97 learners trained in the schools obtained winding engine drivers certificates of competency.

SCHOLARSHIPS AND BURSARIES

Research Scholarships. Two research scholarships and gold medals for 1959 were held during the year to graduates from the University of the Witwatersrand.

Bursaries. Twenty-five bursaries, made available by the Chamber during 1960, enable the recipients to study for various degrees at universities in the Transvaal Orange Free State, were awarded as follows:—

INDUSTRIAL CONCILIATION ACT

Industrial Tribunal. During the year your committee submitted to the Industrial Tribunal a memorandum on the subject of deduction of trade union subscriptions and the remuneration of employees and the granting of organizational facilities. In evidence in support of the memorandum the Tribunal was informed of the many services which have been built up in the mining industry over the years and which helped to maintain the harmonious relations that exist between members of the number and mine employees.

COALBROOK DISASTER

Your committee regrets to record the deaths of six Europeans and 429 non-Europeans in the disaster which occurred at the Coalbrook North Colliery on 21st May, 1960.

Relief Fund. In order to provide immediate relief for the dependants of the victims of the Coalbrook Colliery disaster, your committee contributed £15,000 of total of £25,000 made available by the Chamber. The balance of £10,000 was attributed by the Collieries Committee on behalf of coal mining members of the number.

Ad Hoc Committee. As a result of problems arising out of the Coalbrook disaster, hence to which was made in the presidential address in June, 1960, the Government appointed an *ad hoc* committee of three senior inspectors of mines to carry out actions wherever they considered there was need or where the possibility of serious conditions existed. Representations were made by your committee to the Government about the appointment of this special *ad hoc* committee and, later in the year, the so-called "flying-squad" ceased its visits to mines.

Statutory Inquiry. A statutory inquiry and inquest held at Coalbrook, under the direction of a senior magistrate and assisted by an inspector of mines, completed its deliberations towards the end of the year. Your committee was present at the inquiry by an official of the Chamber in the capacity of an observer.

Judicial Commission of Inquiry. The Government appointed on 1st April, 1960, a judicial commission of inquiry into the general subject of safety in mines. The terms of reference of the commission were:—

"In the light of the accident at the Coalbrook North Colliery on 21st January, 1960, to enquire into and report on the following matters:—

- (1) The principal systems of coal mining practised in South Africa, with special reference to safety;
- (2) The adequacy of the provisions of the Mines and Works Act, 1956, and the regulations promulgated thereunder concerning safety in coal mines, *inter alia*, in comparison with the safety requirements applicable in similar circumstances in other mines;

ring 1960 Luiyards Vlei Estate & Gold Mining Company, Limited, accumulated 2,000,000 fatality-free underground shifts. Brakpan Mines Limited, Deep Limited, Vogelstruisbult Gold Mining Areas Limited and West Rand dated Mines Limited each recorded over 1,000,000 fatality-free underground

during the year 21 Natives received the award of a Golden Hat.

31st January, 1960, Edward Moyana of Durban Roodepoort Deep, Limited, the bronze medal of The South African Red Cross Society for exceptional performance on a Native who had been injured in a pressure burst.

26th June, 1960, the millionth certificate to be issued by The South African Loss Society to a mine Native labourer was presented to David Motyaleni of Roodepoort Deep, Limited. Training of Natives in first aid commenced in 1959 and approximately 67,000 mine Natives now qualify in first aid annually.

The European inter-departmental ambulance competitions on gold mines in 1960 the number of competitors was 5,960, an increase of 450 over the previous year.

strict ambulance competitions were held in mine areas and the winning teams competed in the shield competitions held at Milner Park on the 30th October, 1960.

The underground shield was won by Buffelsfontein Gold Mining Company, Limited, and the surface shield by Luiyards Vlei Estate & Gold Mining Company, Limited.

Inter-departmental ambulance competitions for Natives on gold mines were held in the same lines as in previous years. A total of approximately 17,125 Natives participated.

For conspicuous bravery in a blasting accident which occurred at Geduld Harry Mines, Limited, on 31st May, 1960, Mokgosi Muthoso was awarded the miner's bronze medal and an inscribed watch.

SOCIAL SERVICES

Rehabilitation and Re-employment of Individual Workers. The number of man employees referred to the Chamber's Social Services Department during 1960 because of difficulties experienced in their employment within the industry was 407. This compares with 407 in 1959.

A total of 398 of these cases was referred to the department for investigation, rehabilitation and placement. At the end of 1960, 380 of these were in the industry gainfully employed. Of these cases 53 were placed in new occupations.

In addition 2,907 old cases referred to the department before January, 1960, were dealt with during 1960. This compares with a total of 1,635 old cases dealt with in 1959.

amendments to Rules. Provision has been made in the rules for continued honorary membership in respect of an official with at least five years' service who is retired or seconded from the service of an employer to the service of:

- (i) a financial corporation, member of the Chamber, which is the head office of his last employer;
- (ii) a company affiliated to or under the control of the financial corporation referred to in (i);
- (iii) the Chamber of Mines; or
- (iv) any organization affiliated to the Chamber of Mines.

The rules have also been amended to provide that, where an official is receiving less than full salary, due to absence from work on account of a mine accident, member and his employer shall contribute to the fund on the basis of the member's salary.

In addition, certain amendments, mainly of an administrative nature, have been made to the rules in order to comply with the requirements of the Registrar of Pension Funds.

MINE EMPLOYEES PENSION FUND

The following statistics are given of awards made by the fund during 1960:—

<i>Lump Sum Benefits</i>		
Entrenchment	£368	
Reaching pensionable age (commuted pensions)	1,514	
Reaching pensionable age (commuted pensions)	3,508	
Death of members	99,425	
Death of pensioners	31,706	
Termination of membership	222,891	
Total lump sums	£369,402	
<i>Pensions Paid</i>		
Reaching pensionable age	£79,341	
Reaching pensionable age	106,361	
Total pensions paid	£185,702	
Grand total amount paid in benefits	£545,104	
The number of pensioners as at 31st December, 1960, was 3,321.		
During 1960, members contributed £1,029,920, a like amount being paid by the employers.		

the maintenance costs for the financial year amounted to £126,150. The amount contributed £5,000 towards these costs and, after allowing for the fees in behalf of public cases, the balance of £116,521 was paid by the gold mining industry.

REVISION AND CONSOLIDATION OF THE MINING LAWS

Towards the end of the year the Department of Mines informed your committee that the section of the Department had commenced work on the revision and consolidation of the various mining laws, and requested the Chamber's co-operation in this by examining and commenting upon the draft as the revised chapters were prepared. Five chapters had been received by the Chamber by the end of the year and a detailed study thereof had commenced.

TAXATION

Gold Mining Companies. No change was made in the scale of taxation of gold in the Union Budget for 1960.

Undistributed Profits Tax. The tax on "undistributed profits" of companies engaged in or carrying on business in the Union, which was introduced in 1955 has, since then, been confined to private companies.

Removal of Discriminatory Taxation. Your committee reported in 1959 that discussions had been made to the Government for the removal of the discriminatory taxation of the gold and uranium mining industry. These representations were considered during the year but the result is not likely to be revealed until the 1961 Budget.

DECIMALIZATION

European Wage Rates. The Mining Unions' Joint Committee approved a proposal that the committee should, on the introduction of the decimal system in February, 1961, recommend that the rate of pay be calculated on the basis of shift rates rather than on hourly rates. Your committee advised the joint committee that no employee would suffer any loss in pay as a result of the conversion to decimal currency and in accordance with the recommendation is undertaking all shift rates were rounded up to the next cent when conversion took place, and that the result would be a fraction of a cent.

Native Wages. Your committee recommended that no Native labourer should be paid less than the equivalent of the rate which he received when paid in £.s.d. and that the changeover to the decimal system. The wages for Native labourers were recommended accordingly.

Trading Supplies: Stores and Trade Accounts. Discussions were held towards the end of the year with the Commercial Exchange of Southern Africa and other organizations, in respect of purchases made by the mines, on the accounting and other matters necessary to cover the introduction of decimal currency. As a result of these discussions the change over proceeded smoothly.

considerable portion of the agenda was devoted to the consideration of pneumonias, tuberculosis, work physiology, heat stress and strain, workmen's compensation and other matters of concern to the gold mining industry.

OCCUPATIONAL DISEASES

In response to a request to your committee from the Ghana Chamber of Mines, the Legal Adviser visited Ghana for the purpose of assisting that Chamber in connection with proposals of the Ghanaian Government to bring occupational diseases, including tuberculosis and silicosis contracted on mines, within the provisions of the existing Workmen's Compensation legislation.

PNEUMOCOONOTOSIS

Research Unit. Apart from the direct financial contribution from the Chamber, the Research Laboratories, as mentioned elsewhere in this report, continued to support the Pneumocoonotosis Research Unit during the year in its programme of research for the prevention of pneumocoonotosis.

Miners' Chest Clinic. Your committee agreed that from 1st April, 1960, the Chest Clinic which had previously functioned under the administration of the Pneumocoonotosis Research Unit, should be taken over by the Chamber. The future of the Clinic was under consideration at the close of the year.

Compensation and Miners' Pensions Bill. During the year your committee was consulted by the Union Department of Mines to examine and comment on a draft Bill which provided for the payment of compensation for pneumocoonotosis and tuberculosis to employees on mines and the establishment of a statutory pension fund for employees engaged in dusty occupations on controlled mines. The main features of this proposed legislation had been foreshadowed in the proposals presented by the delegation from the Department of Mines which visited the United Kingdom and Europe during 1959, for the purpose of investigating compensation schemes for mine employees. A memorandum embodying your committee's views thereon was submitted to the Minister of Mines. At the close of the year consideration was still being given to the details of the draft Bill.

MISSION OF ENQUIRY INTO METHODS OF TRAINING FOR UNIVERSITY DEGREES IN ENGINEERING

During the year under review your committee submitted to the commission a detailed questionnaire in respect of all members of the Chamber. In November, representatives of your committee were called by the commission to give oral evidence.

COMMISSION OF ENQUIRY INTO IONIZING RADIATION

In December, 1959, the Government appointed a Commission of Enquiry into the possible effects of radiation from X-ray plants and other similar sources on the population at large.

Committee of Employer Organisations. During the period of the State of Emergency, which was declared by the Governor General on 28th March, 1960, a committee comprising representatives of various employers' organizations including the Chamber of Mines was formed. The Chairman of your committee, Dr. W. J. Busschaan, presented to the Prime Minister, Dr. H. F. Verwoerd, on behalf of the Committee of Employer Organizations, a memorandum recording certain views of the executive officers of these organizations.

Conditions of Employment and Rates of Pay. The review of the rates of pay and conditions of employment of certain categories of monthly paid Natives, referred to in the 1959 report, was completed. Your committee recommended the introduction of a graded system of minimum rates of pay for indunas, mababans and certificated tribal orderlies, with effect from 1st March, 1960.

MINING SUPPLIES

Proposed Industry Specification for Imported Pitch Pine. In the previous report your committee it was mentioned that a special sub-committee had under consideration a proposed specification for imported pitch pine. During the year the specification was issued and a recommendation made that all pitch pine for the mining industry be purchased to that specification.

ELECTRIC POWER

Tariffs. The discussions with the Electricity Supply Commission with reference to the tariff for the supply of electric power to the mining industry referred to in the 1959 report, ended inconclusively during the year.

Power Emergency. Following the Coalbrook Colliery disaster, to which reference has been made elsewhere in this report, the "Flying Squad" of three senior mines inspectors appointed by the Government ordered the cessation of operations at the Coalbrook Colliery with effect from midday on Saturday, 12th March. The effect of closure of the colliery was to cut off direct coal supplies to the Taabos and Highveld Power Stations of the Electricity Supply Commission, normally supplied by conveyor systems from the Clydesdale Colliery. The position was aggravated by a reduction in coal output from the Vierfontein Colliery supplying the Vierfontein Power Station in consequence of the temporary closure, by the colliery management, of a roadway at the mine as a precautionary measure.

With the collaboration of the Electricity Supply Commission, the South African Railways Administration and the Transvaal Coal Owners' Association, emergency arrangements were made for the delivery by rail and, with effect from 16th March, for the transport of the maximum quantity of coal that could thus be handled at the various stations. These steps, and the maximum transference of electric power from the northern section of the transmission system of the Electricity Supply Commission, proved successful in limiting the shortfall in power supply to the western areas of the coal fields at the height of the emergency to 20 per cent. of the normal weekly consumption. Mining industry, South African Railways and Electricity Supply Commission personnel were seconded to supervise and carry out the traffic movement.

(iii) *Work Capacity Studies.*

(iv) *Nutrition of Mine Natives.* The Laboratory continued the determination, by direct measurement, of food consumed by mine Natives.

(v) *Collection of Anthropometrical Data on Natives of Different Tribes.*(vi) *Climatic Chamber and Instruments.*

Human Productivity. Data to determine the relative importance of physical, psychological and physical factors in the performance of Natives underground analysed. An experiment has been commenced to study the "will to work" in mines.

The energy expenditure of mine Natives engaged in training is being studied.

Contracts. The National Physical Research Laboratory and the National Institute for Personnel Research continued to assist the Laboratory in its research.

Extra Laboratory Research. Under a Royal Society—Nuffield Foundation Fellowship, the Director of the Laboratory studied the "natural state of acclimatization" of Aborigines and Whites in Australia.

The Laboratory participated in a University of the Witwatersrand expedition to the Kalahari Desert.

Assistance was given to the 1961 South African Antarctic Expedition in planning programme of physiological studies.

LOGICAL AND CHEMICAL RESEARCH LABORATORY

During the year under review the Laboratory continued to conduct research in following spheres:—

- (a) Preservative treatment of mine timbers.
- (b) Fire retardant treatment of mine timbers.
- (c) Fabrics for use in mines.
- (d) The bacterial leaching of uranium and uranium plant effluents.

Establishment of Vegetation on Slimes Dams and Sand Dumps. In September, a mobile unit equipped with agricultural machinery was established. The unit commenced a large-scale experiment to test the possibility of establishing vegetation on the tops of slimes dams.

Analytical Work. The Laboratory is investigating the possibility of using a analytical method for assaying of "superfine" gold.

The Laboratory continued to assist the Pneumoconiosis Research Unit in chemical studies of the effect of silica dust on the amino acids and enzyme systems in lung tissues.



Mr. C. B. ANDERSON
President, 1960-1961

PRESIDENTIAL ADDRESS

ELEMENTS:

During my year of office the relationship between South Africa and the outside world has changed dramatically. The Government, after a referendum, took legislative steps to establish a republican form of government in South Africa, thus ending the 55-year-old link with the British Crown. The desirability or otherwise of this change is a matter which it would not be appropriate to discuss here. It is of interest, however, to set this change in its historical context so far as the gold mining industry is concerned. This is not the first time that this industry or this Chamber has operated under a republican form of government. During the presidency of President Kruger the industry provided the main spring of the economy of the old South African Republic. Then throughout the short colonial period that followed the South African Republic it was gold mining that provided the basis of recovery and laid the economic foundations of Union. Only last year we celebrated the Golden Jubilee of that Union and noted the substantial contribution that the mining industry's economic activity had made to the nation's growth and prosperity over a period of 50 years. It can be certain that gold mining will make a major contribution in the new era on which we are launched, and that it will continue to reward enterprise and endeavour, and this is a South African industry with a leading role to play in the future of our country.

The decision to change from a monarchy to a republic brought abruptly in its wake the loss of Commonwealth membership, an association that has meant much in the past in terms of security, prosperity and growth. This is an event of far-reaching significance for South Africa and one which the gold mining industry must regard with deep concern.

A first result of South Africa's departure from the Commonwealth has been a re-evaluation and intensification in the world at large of hostility to South African political policies which, coupled with political and economic disturbance in less developed areas in Africa south of the Sahara, has served further to undermine confidence abroad in this continent as a sphere of investment. A consequence has been a large-scale selling of investments here and indications that capital for the financing of new ventures may not be forthcoming from its traditional sources. As a result there could now be a tendency for ore reserves to be depleted faster than they can be replaced by the opening up of new mining ground, for our internal capacity for capital creation is limited and what local sources of capital there are, such as in demand by all sectors, not least of all by the State itself.

The industry is already drawing largely from its own resources to finance its operations. Last year R62,000,000 (£31,000,000) an amount equal to nearly 7% of total working profits—was appropriated for capital expenditure. Altogether, in addition to the large sums made available by the mining houses, the sum of £1,000,000 (£139,000,000) has been appropriated since 1955, an amount representing nearly 38% of total capital and loans raised between 1946 and 1959. Clearly, the effort must be made to restore overseas investors' confidence in the industry, the health of investment in gold mining, or the industry will be unable to maintain its rate of expansion and thus to fulfil its traditional role in maintaining a high level of economic activity. It is tragic that our affairs have come to such a pass that the Government has been forced to suspend the repatriation of overseas capital invested

FIELDS (Mines Members of the Chamber)	Tons Milled	PRODUCTION		PROFITS		DIVIDENDS DECLARED
		Gold Ounces fine (Troy) (oz. Mill.)	Uranium Oxide lb. (Avoir dupois) Millions	Working Profit from Gold R Millions	Profit from sale of Uranium Oxide and Acid R Millions	
East Rand	24,850,600	5.08	.76	32.80	4.66	15.16
Central Rand	10,911,000	1.97	—	2.02	—	2.16
West Rand	6,146,500	.56	3.98	1.90	10.08	4.72
Far West Rand	7,167,000	3.65	.94	48.96	5.32	18.34
Klerksdorp	8,279,500	3.33	4.04	33.98	22.80	18.84
O.F.S.	13,904,000	6.33	2.70	76.30	15.76	36.44
TOTALS	71,258,600	20.92	12.42	195.96	58.62	95.66

Percentages

East Rand	34.9	24.3	6.1	16.8	7.9	15.8
Central Rand	15.3	9.4	—	1.0	—	2.3
West Rand	8.6	2.7	32.1	1.0	17.2	4.9
Far West Rand	10.1	17.4	7.6	25.0	9.1	19.2
Klerksdorp	11.6	15.9	32.5	17.3	38.9	19.7
O.F.S.	19.5	30.3	21.7	38.9	26.9	38.1
TOTALS	100.0	100.0	100.0	100.0	100.0	100.0

Coal Sales of Colliery Members

	Year	Tons	Value
1959		30,171,327	R34,218,064
1960		31,652,299	R37,090,782

used in the same terms have risen by no more than about 70 per cent. This rise in liquidity may be shown in other ways such as in the relationship between reserves and international trade, and the facts are unassailable. Failing the very of large new deposits of gold, an increase in gold price is the only logical way to restore and enhance the liquidity of all countries. None of the plans for new reform now being presented in international monetary circles offer anything reaching the same prospects of success in promoting freer trade and a return to stability. Rather do they involve a continuance of existing restrictions.

I do not intend to add today to what I and my predecessors in office have said so fully about the necessity for a revaluation of gold, except to state my conviction while we cannot yet take into account an increase in the gold price in the planning operations, the time will surely come when the release of gold from the bondage of a present fixed dollar price will be demanded in the interests of international and the orderly arrangements of currencies.

Uranium. Important changes in the arrangements for the disposal of uranium that have set the pattern of production for the next decade have been made as a result of agreements completed between the South African Atomic Energy Board, United States Atomic Energy Commission and the United Kingdom Atomic Energy Authority. The original contracts with the Combined Development Agency, serving United States and United Kingdom interests were due to expire over the period 1964/66. The new arrangements which replace them, take the dual form of a stretch-out and a rationalization of production.

For some high cost producers the prospect of dislocating their mining operations and cutting out their output over the next ten years and deferring their income had to be considered. On the other hand for some low cost producers the advantages of increasing production were manifest. Closure of their plants in the middle of this decade might have meant the possible loss of some business and a limitation on their ability to re-enter the market.

There were also relatively high cost producers who could not expect to remain competitive in the long-term market. These were in a position to agree to the transfer of their quota entitlement to low-cost producers on a royalty basis, which would give at least the same rate of income they were expecting.

Some mines stretched their production for only a short period beyond the original contract period, but six have made arrangements for their contracts to run until the end of 1970, by which time it is hoped that the market for uranium will have improved.

I should like to pay a special tribute to Mr. C. S. McLean who, assisted by Mr. Koch and our Chamber officials, helped Dr. T. E. W. Schumann, the able Chairman of the Atomic Energy Board, to conduct these long and complicated negotiations on our behalf and succeeded in reconciling the differing interests involved in carrying the varying requirements of individual producers into a workable plan.

Uranium Research. The Atomic Energy Board is proceeding with its R8,000,000 (1960) research programme, half the cost of which is being met by uranium users with a contribution of R800,000 (£400,000) annually for five years ending the 1963/64 financial year. This programme includes investigations into

After this year the Chamber invited Sir Basil Schonland, retiring Director of the well known Nuclear Research Station in the United Kingdom, who was in South Africa on a private visit, to review the organization of the industry's research and to indicate to us how this could best be improved. Sir Basil accepted the invitation and over a period visited the Chamber's research establishments and discussed with those responsible for directing the research programmes.

Basil's preliminary report was most gratifying. He informed us that his impression was of the remarkable progress our research organizations had made in the application of research and of the benefits that had been derived. But he did say that the industry was guilty of hiding its light under a bushel and not sufficiently publicizing research programmes of which we had every right to be proud. He considered that if more were known of the scope of our research work the ablest scientists would be attracted to join our research teams.

Basil also indicated where he considered improvements might be made and a number of constructive suggestions. He has now prepared a detailed report recommending certain improvements to the research organization. This report will give full consideration and is certain to leave its imprint on our future research programmes.

Pensions and Other Benefits. Serious attention has been given during the year to other matters affecting the welfare of employees, including pension and death benefits. The industry has had provident and pension funds for many years and, in common with most other industries, these were established as a result of negotiations between employers and employees. The industry's provident and pension funds are among the largest of their kind and the benefits for the most part are in advance of other industries in the country offer. The extension of these schemes, both as to the nature and the amount of the benefits which they provide, is also a matter for negotiation between employer and employees, in the light of prevailing conditions. The industry has thus viewed with concern the possibility of interference with State in what has traditionally been a domestic affair of employers and employees, particularly as the mining industry can take pride in the steps—often involving new forms of employee benefits—which have been taken to cater for its needs.

It will be appreciated that at their inauguration the pension funds did not have the financial resources to provide for those employees with prior service, and the result is to which members are entitled depend on the period they have been contributing members. In the early years of the funds pensions payable have naturally been high, but they are improving every year and in due course will become substantial.

In addition to this, negotiations with associations representing our underground staffs officials have resulted in the introduction of a new death benefit scheme. Arrangements with trade unions for a similar scheme for other employees have reached an advanced stage.

Monetization. Another matter of importance both to employees and the industry as a whole has been the introduction of a decimal system of currency in South Africa and the neighbouring High Commission territories. Careful preparation over many months involving many thousands of man-hours of work on mines, offices, and in the Chamber resulted in a smooth switch-over.

There can be no doubt of the value of the gold mines to the tribal territories as a element in a changing world. It is well known that the industry relies on a y flow of Native labourers to maintain the tempo of its operations; but the territories, and perhaps those outside the Republic of South Africa in particular, themselves dependent on the gold mines as a sphere of employment for their people and on the large sums transferred as payment under the deferred pay family remittance schemes, or paid out in administrative expenditure by the engagement centres maintained by the Witwatersrand Native Labour Association, Limited, and the Native Recruiting Corporation, Limited.

About R2,000,000 (£1,000,000) is paid annually throughout Southern Africa to the remittance agencies of the two labour organizations which enable Natives to send money to their homes at no cost to themselves and in the certainty that it will be made quickly and safely. Another R6,500,000 (£3,250,000) is paid in home-lands in deferred wages. These amounts, to which may be added administrative expenditure and cash savings transferred by other means, may not seem in relation to the national income of an industrialized state like South Africa, but they nonetheless constitute a source of income as important to the territories as the supply of labour to the mines.

During the year the Government of Tanganyika decided, apparently for political reasons, to cancel with effect from 30th June its agreement with the Witwatersrand Native Labour Association which permits the engagement in Tanganyika of some 100,000 Native workers for the mines yearly. The full effect of this will not be felt until the beginning of 1931, but it is probable that the main result will be to deprive Tanganyikans of employment opportunities important to them, for which there is likely to be no ready alternative; and to deprive the territory of income estimated at about R1,000,000 (£500,000) a year.

Personal Relations. Relations with all our employees during the year were good, and I wish to express my appreciation for the loyalty and co-operation shown by all sections of the industry, and at all levels.

Should like at this point to pay tribute, too, to the able assistance I personally received during my term of office from my Vice-Presidents, Mr. H. C. Koch and Mr. W. S. Findlay and from my colleagues on the Executive and Gold Producers' Committees. My sincere thanks are due to them, and to members of the Technical Advisory Committee and other Chamber committees. I wish also to give special thanks to the officials of the Chamber and their staffs.

Commonwealth Congress. In April and May this year we had the honour of receiving delegates to the Seventh Commonwealth Mining and Metallurgical Congress and in the Central African Federation under the aegis of the Commonwealth Institute of Mining and Metallurgical Institutions, London, and convened by the Southern branch and Southern Rhodesian associates of the Institution of Mining and Metallurgy, London. Mr. McLean was President of the Congress and Mr. Findlay was its Vice-President for South Africa.

We were pleased to have this opportunity to show delegates from abroad the developments that have taken place since the Commonwealth Congress was held here in 1930, and something of the technical skill that has placed us in the

However, I am hopeful of the days that lie ahead. I believe that it is possible to clearly the full dimensions of the South African dilemma, without losing faith in ability of our peoples to resolve it in our own way. In the transitional period that may well be sustained by the possession of an economy more advanced and of apparently greater capacity than any other in Africa. South Africa is the only industrialized bulwark of Western civilization on the dark African continent whose inherent strength will, I believe, prove of fundamental importance in the making of changes that are evolutionary rather than revolutionary in character. I should not underestimate the advantage for the future that rests in the location of Witwatersrand and extensions of perhaps the world's greatest concentration of mining activity, and certainly of its greatest goldfield, together with the vast mineral complex that has sprung up around it. The universal never-diminishing and for gold imparts remarkable equilibrium to the South African economy and, even the future may bring, this demand will remain a stabilizing factor of prime importance. In the spectacular development of this country over the past century a pastoral way of life to a modern industrial state many crises have been faced and overcome by suitable compromise with surprisingly little disturbance of the course of progress. With wise government and further compromise this should mean, for the capacities of South Africans are greater than their failings, and they the incentive of the great opportunities that lie beyond the settlement of their ills. (Applause.)

Gentlemen, I now move the adoption of the reports and confirmation of the minutes, and I would ask the doyen and elder statesman of the coal mining industry, Tom Coulter, kindly to second the motion.

ECHE BY MR. T. COULTER IN SECONDING THE PRESIDENT'S MOTION
OR THE ADOPTION OF THE ANNUAL REPORTS AND ACCOUNTS

PRESIDENT, GENTLEMEN:

I am indeed grateful for the privilege of being invited to second this motion.

This is the first time, as far as I am aware, that a representative of the coal mining industry, a member of the Collieries Committee of the Chamber, has been accorded this honour and on behalf of the coal mining industry I would like to record appreciation of this gesture.

May I, first of all, Mr. President, congratulate you on your clear and vigorous view of the mining industry's activities during the past year.

Mining itself always has its own problems—problems of working costs, increasing complexities of operation and other technical and human challenges. But in these times of stress through which we are now living, the mining industry must concern itself with problems that go far beyond its immediate technical field.

The problems for example, associated with the availability of capital, any deviation of which *must* take account of various factors affecting and involving the status of South Africa in the eyes of the world.

The coal mining industry from time to time attracts to itself a great deal of attention, especially in the winter months.

If the gold mining industry fell short in its production by say five bars of gold, people would be any the wiser. But let the coal industry fall back and it immediately becomes the target of a great deal of criticism from a wide range of people on the industrialist to the housewife.

Such criticism, however, should not be read as an inability on the part of the coal mining industry to meet its considerable national responsibilities. On the contrary, have said, the industry is geared to meet all its demands and to continue playing its part, if unspectacular part in South Africa's development.

It might interest you to know that available records of production show that in South Africa a total of just on 1,000,000,000 tons of coal has been mined in the past years to build the present industrial structure of the country. Since Union in 1910 coal production has increased by over 35 million tons a year.

There is no doubt in my mind, Gentlemen, that the coal mining industry will be able to meet any future demands that might be made upon it, and one can only trust that South African policies will be adapted to gain for this country once again the full confidence that enabled it to build so big and so fast in recent years.

There is also little doubt that as the years go on, the demand on the industry continue to grow, particularly for electric power generation purposes and for the needs of our expanding Iron and Steel Industry.

We are also not unmindful of the requirements of coke, and although we are well-endowed with reserves of coking coal, we manage to get by and are not worried about the future.

It is usual, I believe Mr. President, for your secondor to touch upon some aspect of the subjects you have dealt with in your address, and I would like to refer in particular to research.

The coal mining industry, like the gold mining industry, does not rest in its efforts to increase safety and efficiency of operation. The Collieries Committee of the Chamber of Mines has recently set up its own research committee to investigate problems of strata control and various other associated matters. This study could have a vital bearing on coal mining operations in this country.

I mention it as an indication of the South African coal mining industry's determination to take second place to no other country in its efficiency and in its safety mining.

And now, Mr. President, I would like, with your permission to close on a somewhat personal note.

In 1912 I arrived on the Rand in search of a job. I borrowed a bicycle and, armed with a straw hat, I made my way to the E.R.P.M. where I was interviewed on a tough "rough neck" from Butte, Montana. I tried to tell him something about myself and produced some papers including a Mining Diploma and a First Aid Certificate which stated that I was a Gold Medalist. Well, the things he said about these papers and the places he told me to put them (especially my Gold Medal) are quite unmentionable! (Laughter.)

He has a wide variety of interests, as you all know—the Church of the Province, smead and Hilton Schools, the Council of Education, the Council of the University of the Witwatersrand, the Order of St. John of Jerusalem, the Johannesburg *ren's Home*, the Polionylitis Research Foundation, the Atomic Energy Board of course, last, but not least, the Anglo American Corporation, of which he is a tor and a Manager. I have no doubt that all these will have claims on his time the prior claims of the Chamber. However, I have always found that time is to be used, and if you don't use it it cannot be reclaimed.

Mr. Kooch's previous experience as a Vice-President in the years 1956-57, 1958-59 his last year, 1960-61, and as President in 1957-58, have given him the necessary ground, and I thus have no hesitancy in putting his name before you to-day in action with his election as President. (Applause.)

DR. W. J. BUSSEMAN: Mr. Chairman, I would like to second your nomination.

THE CHAIRMAN: Are there any other nominations? I put the motion to the ing. Those in favour? Against? Carried unanimously. I have pleasure in declaring H. C. Kooch duly elected as President of the Chamber for the ensuing year, and did congratulate him. (Applause.)

ELECTION OF VICE-PRESIDENTS

THE CHAIRMAN: Now we come to the election of Vice-Presidents, and in terms of le 29 of the Chamber's Constitution I would ask for nominations.

MR. C. S. McLEARN: Mr. Chairman, Gentlemen—I would submit the name of Peter Anderson. Although Mr. Anderson is well-known to all of you, it seems able to give a little of his history.

Mr. Peter Anderson was born on the Princess Estate in Roodepoort, in the year and was educated first in South Africa and then overseas, finally coming back uth Africa to the Witwatersrand University. In 1935 he joined the Central g/Rand Mines Group. During the last quarter of a century he has established a reputation not only for himself but for the organization by which he has been oyed and for the industry as a whole.

Between 1940 and 1944 he was on military service, and after he came back this he became, in 1947, an Assistant Manager of the Central Mining/Rand s Group and in 1953, a Manager. Then, he became Joint Managing Director e Rand Mines Group, and in 1959 he was not only Managing Director but he also the Deputy Chairman of the Group. In between, he was Chairman of the i Mutual Assurance Company in 1951-52, and among other activities, was ated in an executive capacity with the Transvaal Coal Owners' Association its various subsidiaries.

In 1954 he became a member of the Gold Producers' Committee, in 1955 a ber of the Executive Committee of the Chamber, in 1956-57, 1957-58 and 1959-60 as a Vice-President and in 1958-59 he was President of this Chamber, in which capacity I am sure you will agree he looked after the Industry's interests in an anding fashion.

THE CHAIRMAN: I declare that in terms of Article 33 of the Chamber's Constitution the President and the two Vice-Presidents of the Chamber for the time being be members of the Gold Producers' Committee, and that accordingly Mr. H. C. h, Mr. P. H. Anderson and Mr. A. A. von Maltitz are members of that Committee the ensuing year.

Also, in terms of Article 34 of the Chamber's Constitution, the remaining four gentlemen, Mr. C. S. McLean, Mr. W. S. Findlay, Mr. J. M. M. Ewing and myself are elected as members of the Gold Producers' Committee for the ensuing year.

ACTION OF COLLIERIES COMMITTEE FOR THE YEAR 1961-1962

THE CHAIRMAN: I would ask the General Manager to read the names of the retiring members of the Collieries Committee.

THE GENERAL MANAGER: Mr. Chairman,—The retiring members of the Collieries Committee are:—

Mr. G. Arnolds, Mr. E. M. Brothers, Mr. T. Coulter, Mr. R. W. Groult, Mr. T. Kie and Mr. F. J. L. Wells.

These six gentlemen are eligible and submit themselves for re-election, and no nominations have been received.

THE CHAIRMAN: Gentlemen,—I declare that in terms of Article 39 of the Chamber's Constitution these six gentlemen are duly elected as the members of the Collieries Committee for the ensuing year.

AUDITORS AND AUDIT FEES

THE CHAIRMAN: I move that the retiring Auditors (Messrs. Douglas, Low and and Messrs. Whiteley Brothers) be re-appointed as Auditors for the ensuing year, that the fee for the past audit be fixed by the Executive Committee.

Mr. A. A. VON MALTITZ: I have pleasure in seconding the motion.

THE CHAIRMAN: I put the motion to the meeting. Those in favour? Against? Tied unanimously.

OTHER BUSINESS

THE CHAIRMAN: Is there any other business that any member would like to e?

Mr. H. C. KOCH: Mr. Chairman and Gentlemen,—First of all, I would thank for the honour you have done me in electing me your President for the coming c. I sincerely hope I shall justify the confidence placed in me. I am sure that Peter Anderson and Mr. von Maltitz would wish me to express on their behalf reclamation of their election as Vice-Presidents. Of their abilities I have no doubt. Peter Anderson, as you have heard, has a store of experience and wisdom which is always ready to place at the disposal of the gold mining industry, and it is a at comfort to me, Mr. Chairman, to know that he will be at hand. Mr. von Maltitz, you have also heard, has already won his spurs in the technical and administrative k of mines and head offices, and his service on the Gold Producers' Committee has closed a thorough grasp of matters dealt with by the Chamber.