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Kinkend? resigned Pandora Plant, Colorado > SA (M4E Journal (Checago)
7 guly 1900 p. 16.

Kleyn haus April 1898 Miniq Com. for Bollsburg Succeds Toubent 5AMJ, 16 April 1898, p. 614

On the first of next month Mr Kleynhans, the Mining Comm ssioner at Boksburg, will, as has been foretold in these columns for some time, take up the duties THE MINISTRY vacated by Mr Christian Joubert. A better appointment could not have been made, con-OF MINES. sidering the men available. Mr Kleynhans is an official of very considerable ability, always courteous and always just. He has a reputation for incorruptibility which is well founded-indeed, it has been remarked in the writer's hearing that during his tenure of the Boksburg office not a single job was perpetrated there. Some time ago when he acted for Mr Joubert, he had a hard struggle to get the Ministry of Mines into ship-shape, but he did it in time, and we believe he will do ā it again. By the way, what was the cause of the delay in Mr Kleynhans's appointment? The Government must have known Nov. 1848 some time before Mr Joubert did actually resign that he was on the point of resigning; and there ought to have been someone ready to step into his shoes.

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Kleyahaus installed as Mir of Mines Dec. 1898 (SAMJ, 3 Dec. 1898, p.161)

KOCK/ (ME.C) / PRESS, 16 May 1893)
in austre Clebrate

KLIMKE

(SAMI, 19 Sept 1891, p. 4)

THE STATE MINING ENGINEER.

Mr. Klimke, who has just been appointed Mining Englisher is a German, and a qualified Mining Engineer. After passing the Gymnasium examination in Germany, he was engaged for two years in practical mining work. Subsequently he passed the Government examination in underground engineering as well as in geology, mineralogy, and mathematics. He obtained a government appointment as underground surveyor, as well as being for one year on the German geological survey. Afterwards he was engaged as the manager of a gold-mining company in South America, and was for several years with the famos El Callao gold mine, and other gold mines in Venezuela. While thus occupied he received a diploma from the Caraccas University as a "public engineer." After being some years in Venezeula, he left on account of his health, the climate being very trying. He came to South Africa subsequently on behalf of a syndicate, and in that capacity has become well acquainted with the gold-mining capabilities of the country. Diggers News.

Klimike J - appointed Sept 1891 STATE MINING ENGINEER Notole Tweede Volksraad, 1893 (Rapport, 1892. 130)

REPRESENTATIVES OF SOUTH AFRICAN MINING AND FINANCE.

No. X.

MR. J. KLIMKE, STATE MINING ENGINEER TO THE S.A.R.

Amongst those who have furthered the interests of the mining industry, Mr. Klimke occupies a prominent position. Though his term of office has not yet been sufficiently lengthy for the full benefits of his administration to have made themselves felt, his energy of temperament, and his determination to assist the infant industry to the utmost of his ability, have already borne considerable fruit. As an engineer, his reputation for the strictest integrity stands high, and his appointment to the post he now holds has been one of the most popular acts, in connection with the gold industry

Mr. Klimke is now 42 years of age, and is by birth a German, though he speaks English fairly fluently. He passed the early years of his life in the province of Silesia on a farm owned by his father. He was sent to a gymnasium at the age of eleven years, and went through the usual eight years course of study. When twenty years old he adopted mining as a profession, and from that time has been actually engaged, in or closely connected with practical mining. At the outset of his career he commenced with the usual manual labour in the mine, and for two and a half years worked as ordinary miner, carpenter, and mason, both in collieries, and in metalliferous mines. While acting in these capacities, he was occasionally employed in bricking up large working shafts and walling in the underground fires, which sometimes break out in coal mines, and which, in some cases, have already continued for more than 150 years. Having thus become acquainted with the practical branches of mining he proceeded to study geology, chemistry, mechanics, mine surveying, and the theory of mining, and was subsequently employed as an assistant in various engineering offices. For one year he was also engaged in railway construction work, and in the artificial drainage of agricultural lands. In 1877 he passed the German Staats Examen in mine surveying, combined with geology and general mining at the Oberbergamt (the special court for mining matters). After this he was employed for several years in the service of the German Government, under whom he held the responsible post of markscheider for about one year, also superintending the works of an extensive zincblende and galena mine, attached to which were large ore dressing works. At the end of the year 1880, a commercial firm in Hamburg offered him the management of a mine in Venezuela, S. America, which he accepted, but resigned after one year of office with the view of improving his position. Shortly afterwards a well-known gold mining company in the Shortly atterwards a well-known gold mining company in the same country entered into an arrangement with him to draw up the working plans of their mine. A residence of three years in the Guana (Venezuela) goldfields having made him conversant with the peculiarities of the country, and acquainted with its people, he applied for and obtained from the University of Caracas (the capital of the United States of Venezuela) the diploma of ingeniero publico. In this capacity, he capital of the Cupital of the country for a further period of three and venezuela) the diploma of ingenero puotico. In this capacity, he remained in the country for a further period of three and a-half years, during which time he was engaged in mine surveying, and when required, furnished reports on mining matters to the Government. The trying nature of the climate compelled him to return to Europe in 1888 in order to recruit his health. After a rest of nine months, he was sent out to South Africa by a Hamburg syndicate to inspect the Knysha endoffeds also hearing a commission from an English syndigoldfields, also bearing a commission from an English syndi-tate to report on Rand properties. As a result of his visit of the Rand he decided to remain here, and has in the course of his professional and private journeys become conversant with the mineral features of the Rand, and other districts of with the mineral returns of the Manu, and other districts of the State. In September 1891 Mr. Klimke was selected by the Government, from the small number of candidates approved by the Chamber of Mines, to fill the important office which he now holds.

We availed ourselves of the opportunity of a recent visit to Pretoria to ask for a statement of his views upon the questions most nearly affecting his department, and at once met with a courteous and ready response.

On the subject of the Transvaal Dynamite Concession,

Mr. Klimke informed us that he maintained an attitude that was strictly neutral as far as any personal interests were concerned, but felt that it was a question which merited the very closest attention in view of its important relation to the working costs of the mines and safety of the

employees. A commission, of which he was a member, had been appointed by the Government to investigate the matter, been appointed by the covernment to investigate the matter, but naturally he was not at liberty to disclose the result of their labours, which would, however, come before the public in the usual manner at no distant date. He, however, stated that his private opinion as regards the whole question is that, if possible, all explosives should have a free market, their price being ruled by open competition. Purchasers should be able to select for themselves the positive would naturally be the particular kinds they require which would naturally be the cheapest and best. A most important question in the near cheapest and cess. It will be the working of low grade ores which will only become possible under the most economical conditions of working. There can be no doubt that increase in the number of mines at work will directly benefit the whole community, and that policy should be adopted which will result in the attainment of this most desirable object, the means to be em-

ployed being summed up in reduction of costs of working.

Mr. Klimke is of opinion that some official protection to professional men connected with mining and allied occupations is absolutely necessary, and has drafted a law providing for their receiving licences from the Government, after submission of their qualifications to a commission duly appointed for that purpose, possibly in conjunction with the Chamber of Mines. This law will probably be submitted to the Govern-

ment at an early date.

The Mines Regulation Act, he considers, merits the serious consideration of the Government. Accidents are an evil inseparable from the occupation of mining, but there is no doubt that their occurrence can be minimised by the operation of proper rules and regulations. A mistaken idea operators of the Johannesburg mining community that the proposed regulations will only result in the giving of unnecessary trouble. So far from this being the case, Mr. Klimke believes that they will exercise a most helpful influence in many ways. Managers and employees alike should be subjected to proper rules and regulations, framed with the object of safeguarding as far as possible all connected with the mines from unnecessary accidents resulting in injury to life or limb. They will provide for the fencing of abandoned shafts and hoisting gears, the prevention of overwinding of cages, the ensuring of sufficient ventilation, the employment of none but qualified engine-drivers, and other such subjects dealt with in the mining laws of all other countries, and quite as necessary in the South African Republic as elsewhere. Mr. Klimke expressed his surprise that more accidents had not already occurred, and his determination to leave no stone unturned until the necessary reforms shall have been carried out. It is also proposed that mine managers shall in future be compelled to hold some form of Government diploma or certificate of competency. Such an innovation would be welcomed by all really qualified men, and, as regards the others, their removal from managerial positions, as soon as others, their removal from managerial positions, as soon as possible, would be a benefit to the whole community. The State Mining Engineer considers that the responsibility of granting such diplomas should not be vested in himself; but, as in the case of engineers, entrusted to a properly constituted committee. Provisions of this nature form part of the new Mines Regulation Act. The qualifications insisted upon will be adapted to suit the class of managers now in the country, and great care will be taken to prevent their being made unduly stringent. With regard to inspection of the mines, Mr. Klimke said that before the proposed regulations, if sanctioned by the Government, can be carried out, competent inspectors must be appointed at salaries sufficiently high to secure the candidature of really good men. Inspectors at insufficient salaries would be worse than useless. Possession of a first-class technical education he considers an absolute necessity. The revenue derived from the mining industry by the Government yields a very large surplus; the expenditure required to establish a thorough system of mine inspection would be comparatively s nall, and would most probably prove an actual economy. The spection of boilers is a subject of most pressing importance. At present they are not tested regularly, gauges often either do not work at all or unsatisfactorily, and it is surprising that no serious accidents have yet occurred. Of course most boilers are still new; but every day increases the chances of accident, and explosious must sooner or later occur. There are now five hundred in use on the fields. Their inspection will require the appointment of at least two inspectors whose salaries can be provided by fees payable by the companies. No expense will be entailed upon the Government, and hence the passing of the laws dealing with the matter will probably present no difficulty.

Questioned as to the desirability of deep borings being undertaken at the Government expense, Mr. Klimke stated his firm conviction that work of this nature should be at once undertaken as part of a far-sighted general policy, saying that absolute proof of the existence of the Main Reef series in depth, both on its lateral extension and on its dip, would be of incalculable value to the State. The work could be performed by contract, on public tender, and the expense entailed would be entirely incommensurate with the value of the results anticipated.

Turning to the Waterberg district, to which Mr. Klimke has recently paid an official visit, he stated that the farm Welgevonden will shortly be proclaimed a public goldfield, and that others will probably follow. The reefs are promising, consisting of quartz veins running both N. and S. and E. and W. They would seem to be true fissure veins, showing no visible gold, in a slate formation, traceable on the strike for upwards of 1,000 yards. Their value increases from one or two pennyweights at the surface, to one or two ounces at a depth of some seventy feet. Three years ago auriferous reefs were discovered some 30 miles N.E. of Nylstroom, but the depression then existing in the money market prevented any active steps being taken with regard to them.

In the Klein Letaba district, the gold zone is from four to six miles wide a d has been traced for some 30 miles. Mr. Klimke is of opinion, from the general aspects of the formation that it extends still further to the N. E. and is very probably traceable into the Portuguese territory. The country rock consists of archaean schists, viz.: hornblende, talcose and chloritic schists, and phyllites, or crystalline argillaceous schists. The reefs consist of quartz veins embedded in these schists running S.W. to N.E. and dipping conformably with the formation. Judging from the formation of the rocks and the nature of the reefs, he considers that they are not true fissure veins; but, notwithstanding, that they offer strong indications of being as permanent as the general formation, interstratified with its cleavage planes. Very rich ore has been found in the Birthday on the east, and the Ellerton on the west, although both properties are at present very insufficiently developed. There is every probability of rich strikes being made between these two properties. The general indications are good, and highly promising, but surface indications are few owing to the auriferous strata being covered by thick deposits of soil which materially interfere with the efforts of prospectors. Probably good reefs exist on the Government farms in the neighbourhood of the Ellerton Claims, but the private farms on the Klein Letaba and Middle Letaba rivers offer no indications of the presence of payable auriferous deposits. The country rock consists of gneiss-formation. Other metallic ores usually occurring in this formation elsewhere may also exist here.

As previously stated Mr. Klimke's confidence in the Rand is best proved by his having decided three years ago to remain in the district, with all parts of which he is now personally conversant. He regards the deep level properties as equally valuable with the outcrop, looks forward to continued increase in activity and prosperity throughout the fields, and has no hesitation in describing it as the greatest goldfields in the world.

Having never personally visited either the De Kaap or Lydenburg districts, Mr. Klimke refrained from expressing any personal opinion as to their prospects. With regard to the publication of the Government statistics relating to them, he admitted the inaccuracy of the returns published, due in great measure to the failure of companies to supply regular and reliable returns, and the hesitation of the Government to take active steps in the matter by the enforcement of severe penalties. Steps are now being taken to ensure proper returns being made, and the results will be published in the Journal.

Mr. Klimke stated that, in conjunction with the Surveyor-General's Department, he is engaged in the compilation of a complete and reliable map of the Zoutpansberg Gold Fields, dealing not only with the geographical features of the country, but also with the occurrence of metalliferous deposits and other natural conditions affecting the economic conditions of working.

The influential official position of the State Mining Engineer as the direct adviser of the Government on matters affecting the mining industry, gives the expression of his personal views a very special interest. The active steps he has already taken in its behalf, his well-known energy and integrity, and the liberal nature of all his views, justify our firm conviction that he is the right man in the right place, and that with his help and co-operation the mining industry may look forward to shortly receiving as full a measure of Governmental recognition and encouragement as is accorded to it inany country in the world.

p.686

(SAMJ, 27 May 1893, p.544

With all his efforts crippled and happened in this manner, it is surprising, not that so little has een accomprished, but so much; and we consider that the greatest credit is due to the State Mining Engineer, for the wisdom of his recommendations, and for the energy he has displayed in occupying the always thankless rôle of a reformer. In addition to visiting and reporting upon the Zoutspansburg, Waterberg and Pretoria Goldfields, Mr. Klinke has paid frequent visits to the Witwatersrand, and has endeavoured to acquaint minself in every possible way with the wants and wishes of the mining Community.

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Klinke VS. Wage reductions (secretly) & cantien ares whenaity to Afs by employees

SAMJ 14 April 1894 p. 419

The whole

Reverting fo. a moment to Mr Klimke's remarks, a strong opinion is entertained in many quarters that it is not so much the white employee who wants protection against unscrupulous or iahumane managers and directors, but the native labourer who is urgently in need of better treatment from his immediate bosses. The carelessness and cruelty which are said to be manifested towards the native in the mines require to be put down with a strong hand. Even in the native labour question generally, the attitude of the white employee, it is said, will bear investigation. He is secretly against the organised endeavour died which is now being made to reduce native wages, and he orismis ably seconded by the canteen-keep rs and the storakeepers scattered along the the Main Reef, who have no desire to see the spending capacity of 1 bour reduced at one stroke by half-a-million per annum

KLIMKE CONSCIENTIOUSNESS OF

(Press, 17 June 1896)

KLIMKE, J Gout Mining Engineer

Gordon, p. 104

p. 48 called State Mining Engineer.

KLIMKE - AMM & REGINS - 1896

Star, 25 April 1896

NEW MINING REGULATIONS MANAGERS' OBJECTIONS

[Meeting of Commission with Association of Mine Managers and Chamber of Mines to hear their objections and suggestions to the Draft Mining regulations of 1896.]

Took place 23 April 1896 and was specifically with AMM

On Thursday [23 April 1896] Mr. Klimke (State Mining engineer) and Mr. A. R. Sawyer, member of the Commission which drafted the New Mining regulations, sat at the Chamber of Mines board-room for the purpose of hearing the objections of the Association of Mine Managers and the Chamber of Mines to the proposed regulations - Mr. Klimke presiding. There were also present: Messrs. Johns (President of the Association of Mine Managers), Macfarlane, Syd. Jennings, H. Jennings, Skinner, Goodwin, Clement, Britton, Leggett, Boucher, Jas. Hay, H. Millar, and [E. J.] Bok (Secretary to the Commission).

GENERAL NOTES.

THE Second Raad, it is generally supposed, looks after the aterests of the mining industry. In this country the foregoing assertion may be taken to mean that it does THE SECOND nothing of the sort. For all round ignorance nothing can beat the debate on the State Mining Engineer's report. Obviously, the members of the Second Raad, with the honourable exception of Mr Geldenhuis, take only an academic interest in mining, else they would not have come to the conclusion that the depression was due to the mine managers themselves, who lavished the money of the shareholders and accused the Government of oppressing the industry. This, of course, is sheer nonsense. A great deal was said about managers' houses and salaries and so forth, but the members ought to have known that these form a very slight item in the mine's expenditure. The average salary of a mine manager in this Republic is £99 9s 6d per month; that is Mr Klimke's own figure. There are 158 managers of gold and coal mines, so that the cost per ton crushed can easily be calculated, and that alone will show that the Second Volksraad was talking according to a preconceived idea and not by the fact. We can't pretend to regard the figure as excessive.

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On the other hand, three gentlemen took part in the debate who know something of the true state of affairs. Mr Klimke by a word could have corrected the erroneous impressions under which the members laboured. But he seemed only too anxious to assist Mr Van der Hoff and Mr De Witt Hamer to go astray in their judgments.

in their judgments. For instance, Mr De Witt Hamer, after having been told by Mr Klimke that if coal were carried free and if dynamite were reduced by 30s a case, the reduction would enly amount to 2s. 2d. per ton—which understates the case—marked with unusual eloquence:—"Now I stand dumbfunded. The mines always declared that if the price of dynamite were reduced and railway tariffs also they would be able to work at a profit. The replies by the State Mining Engineer

to my questions have proved that even assuming an almost impossible reduction in price of dynamite and railway tariff only those mines producing \(\frac{1}{2} \) dwt per ton less than paying mines would be able to work. \(\tilde{I} \) thus leave you, gentlemen, to judge the value of all the cries from the mines for cheaper dynamite and r duced railway tariffs." Mr Van der Hoff also spoke to the same effect. Mr Klimke encouraged the idea—deliberately, if the published reports of the session go for anything. Only Mr Geldenhuis spoke up for the truth.

The fact is that dynamite and the carriage of coal are points where reduction is insisted upon by the industry because the need of reduction is so obvious. These are

THE TRUE CASE. not the only grievances: they are representative grievances. The industry's case has been admirably stated by Mr Percy Fitzpatrick, who said, before the Industrial Commission: "We lay so much stress upon the questions of dynamite and coal because they are such clear cases that it is impossible to pass them over, and because we have to look into every detail that can bring down our costs. If we neglected them we should be doing what we are sometimes accused of doing: not attending to our own business. But the real pinch is in the great items of the railways and the general Could anything be more explicit than that? could the State Mining Engineer have forgotten it? Take for instance the increase of the taxation on jam to which Mr Geldenhuis referred. The recently granted reforms have added 30s per case to the cost of jam, and thus to the cost of living in general, which cost is reflected on the pay sheets of the mining companies. One might go through a long list of similar items with the same result. Besides, even if dynamite and coal had been reduced to the amount of 2s 8d per ton-that is sixpence more than Mr Klimke's figure—additional dividends would have been paid by all the producing mines ranging from 21.98 per cent. in the case of the Crown Reef, to 45 per cent. in the case of the Simmer and Jack, with its issued capital of £4,700,000. The statistics which prove this may be found in The Mining Industry, p.p. 52, 53.

From the condemnation expressed above Messrs Engelbrecht and Konig must be excepted, as they manfully expressed the hope

that the President would fulfil his promises -- and, MR. KLIMKE. indeed, the statement has been specifically made in Pretoria that he is now contemplating further reforms. But Mr Klimke ought to have spoken up on behalf of the industry. He allowed several false impressions to go abroad: as that the mines buy more machinery than they re-We put this statement before one of the leading machinery merchants, and he states distinctly that the present difficulty is to get the mines which are not prospering to buy even the machinery they need. Moreover, our personal experience is that the relation between the machinery and the work it is called upon to do is very close upon all the mines. Very few tre so lucky as the Langlaagte Estate, which has had a breakdown with the mill engine, but which, fortunately, happens to have another mill engine on the water. Again, Mr Klimke stated that it had frequently happened that batteries and mills were put up before a mine was opened out. Such cases have been known but they are very rare; and Mr Klimke is behind the times, for he knows that nowadays no battery is put up until the management has had an opportunity of judging from the development what stamping power will be required. Seeing how honestly and honourably the industry is worked, it is nothing less than a shame that old errors which were mostly the result of inexperience should be raked up in this reckless fashion, for the impression they convey is incorrect-in some cases deliberately incorrect.

John 1248

WE have had a call from Mr De Witt Hamer, the Second Volksraad member for Barberton, and he strenuously resents the idea that any of his recent actions in the Ra d can Mt. DE WITT fairly be taken as hostile to the industry. After hearing his explanation we have come to the same conclusion, and are sorry to have misrepresented him. On the tailings question the prime offender was the Standard and Diggers' News, whose issue of the 20th July reports him as having said, "Let the tailings be put into the worked out mines." As a matter of fact, the words were used almost sotto voce, and as a pleasantry. Mr De Witt Hamer's position is that nothing in this year's debate was sufficient to induce him to change the policy he advocated a year ago, when he spoke and voted in favour of the abolition of Arti le 10 of the regulations. As to connecting tunnels between bewaarplaatsen, Mr De Witt Hamer is also in favour of them.

At first he expressed some doubt as to the Second Raad's right to deal with the matter in view of the First Raad's besluit. What we were not aware of was the fact that hearing from the State Attorney that the proposal did not conflict with the First Raad's besluit, Mr De Witt Hamer supported the motion. With reference to his recent attitude on the price of dynamite and of railway tariffs, the member for Barberton explains that what he actually and chiefly desires to drive home is the point that the industry can only be saved by such economic reforms as will effect a radical reduction in the cost of living. Finally, as to the Ministry of Mines, Mr De Witt Hamer has no designs on the post, for the very sufficient reason that he is not a full burgher, and by the Grondwet only a full burgher can hold the post. He has attacked the present holder of the office because he is a mere nonentity and does not do his duty.

offerds industry loses Jone 1897 esteem. Pronouncevents overseas while an holiday Klinde SAMJ 12 June 1897, p. 759 Klimbe prodynamie defends vley trenifs etc

Klinke hot coming brack - Bureau in Paris Dec. 1896 Monnik prob. succeed hum

SAM J, 3 Dec. 1898, p. 161

WE are informed that there is considerable possibility that Mr Klimke will not return to the Transvaal; in which event Mr Munnik will probably be appointed permanent MR KLIMKE. State Mining Engineer. Mr Klimke's idea is to establish a bureau, probably in Paris, for the spread of information regarding Transvaal gold mining companies. It is to be hoped that he will make a handsome thing out of it and so retire altogether from business the more speedily. Anyhow, the quality of his information will require very careful watching, for we are all aware with what extraordinary statements Mr Klimke and Dr Leyds have been in the habit of stuffing the all too gullible European investor. By the way, we understand that Mr Munnik will make it his business to remove several slight but irritating causes of friction between the mines and the department, which friction Mr Klimke apparently did his best to intensify.

tract, informed the Government of the fact, and obtained permission to retain his rights until such. time as their sale should become practicable.

The original contract with the claim-holders expired in December, 1891. Before that date Mr. Klimke succeeded in securing its extension for another year, with a further option of extension should such be required. His regotiations having proved successful, the claims were taken up; active work was commenced, and a total sum of about £10,000 was spent in the development of the property. The reef originally proved was opened up, and a new exceedingly rich auriferous antimonial deposit was discovered. In consequence, notice was given to the claim-holders under the contract that more time would be required, with the result that, contrary to expectat.on, the request was refused.

Application was then made to the High Court by Mr. Klimke on behalf of himself, and of those who, through him, had acquired their rights, to compel specific performa ce of the contract. The defendants took exception to the proceedings on the ground that under Art. 29 of the Gold Law it was illegal for any Government official to hold interests in mining properties. The exception was sustained, and the case was thrown out before it had been heard upon its merits.

. Whilst upon the facts as submitted to the Court it is clear that the judgment was technically correct. it is at the same time apparent that great hardship would result were it to be eventually sustained, and it is to be hoped that the question will be again raised in another form, In the recent case of White v. English, a similar point arose, but the exception was overruled in the face of the evidence brought forward. The State Mining Engineer should be able of to rely in the present case upon the warm support of the Government. On equitable grounds his rights cannot be questioned, and, therefore, seeing that no question of public policy is in any way involved, common justice demands that his special contract with the Government should not be allowed without compensation to be set aside.

Several important points are raised by the case of J. Klimke v. Pogge, Sboril and Seelig, which has recently come before the High Court. In the first place, it is evident that the rights of officials of the Mining Department, considered in their private capacity, require somewhat clearer definition. In the second, the power of the Government to modify, by special contract, obligations imposed by official status would appear under the existing law, to be insufficiently established. More will probably be heard of the case, and in view of the many misconceptions of the true facts which have apparently arisen, a recapitulation of the circumstances by which it has been preceded would seem desirable.

Mr. J. Klimke, two years before he received the appointment of State Mining Engineer, whilst privately practising his profession in Johannesbu g, paid £1,000 for the refusal of the Gravelotte property in the Zoutspanburg district for flotation. Licenses which at first amounted to £66, and subsequently to £15 per month were also paid. In December 1891, prior to his accepting the position of State Mining Engineer, Mr. Klimke entered into neg tiations with European capitalists, and being unable at that time to immediately realise his interests under the con-

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while could not not have to prefer to

menher of Exec. Courcil. 1894 too. Jan Kock-(consider with habount is) Star 16 May 1894, p.3.

Kotze R.N. Consulting engineir Winsot. 1899 SAMJ, 20 May 1899, p. 613.

Kotze Robert Nelson - Chambelain Com^e. 1902 Engineer for I Windsor TCMAR, 1902, Amexune

KRAUSE, DR F.E.T. STATE PROSECUTOR (certainly 1892)

Kuhnmuch, Eugene, Fr. Mine Inspector April 1898
SAMJ, 2 April 1898, p. 576

in place of Mr. Schmutz- Dumont

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George Labram was born in Detroit, Mich., about 1860. His father was a mechanical engineer employed in the copperand iron-mines in the Lake Superior district, and the son naturally followed the same profession. He became connected with mines in Mexico, had charge of some of the works of the Silver King mine in Arizona, and was employed for some time by Fraser & Chalmers of Chicago in designing and erecting machinery built by them, notably the Harney Peak tin-ore reduction-works. In 1893 he was sent by this firm to erect and run a crushing-plant for the De Beers Consolidated Mines, Ltd., at Kimberley, South Africa. Three years latter he became chief engineer and electrician of that company. During the historic siege of Kimberley, which lasted 124 days (from Oct. 14, 1899, to Feb. 15, 1900) he rendered more assistance than any other man in the defence of the town against the Boers. From a 10-ft. billet of hammered mild steel, about 10.5 in. in diameter (originally intended for shafting) and several bars of 6- by 2.5-in. Low Moor iron, which happened to be in the possession of the De Beers Co., he constructed in 24 days a 4.1-in. siegegun, under the disadvantages of entire personal ignorance of such work, and the lack of technical authorities, experienced assistants and suitable mechanical facilities—to say nothing of the discouragement and opposition offered by military experts. His scientific guides were the "Encyclopedia Britannica" and a corple of more or less pertinent text-books found in the town.

brown George extraser

His workmen were members of the "town-guard," withdrawn from service in the outworks, a few of whom had previously been employed in English arsenals. The work was carried on under continuous heavy fire from the enemy.

The order authorizing the experiment was signed by Mr. Cecil Rhodes on the evening of Dec. 24, 1899; and on Jan. 19, 1900, the gun was in position for a preliminary trial. After a few necessary alterations, rapidly made, "Long Cecil" went finally into action Jan. 23, and, with a few minor accidents, promptly repaired, remained a most effective aid in the defence of the town (firing more than 250 29-lb. shells at ranges of from 5000 to more than 8000 yards) until the arrival of the relief-column, Feb. 15, 1900.

Unfortunately, the skillful and ingenious creator of "Long Cecil" did not witness that joyful event, having been killed in his room at the hotel, by the explosion of a 100-lb. Boer shell, on the evening of Feb. 9, 1900. In recognition of his distinguished service, the De Beers Co. has undertaken to provide for the education of his only son.

Mr. Labram became a member of the Institute in 1896, and has contributed to its Transactions only the story of American self-reliance, courage and resource which is outlined above with mingled pride and sorrow.

* LABRAM, George Traser & Chalmers 1893 100 S.A. (Manning, p.14) Fraser & Chalmers in 1893 sent habrons to Kenkenley to evect + sun a counting plant for De Beers. 1896 chieb meshaveal & electrical enqueer for De Beers - . with F. B. Kusten - derkid a greene table for In the senter. catching diamands Palenled in 1897. De Beens took over the

Lang, J.J. Manager of Oricin GOLCO. (Goldmann, 1895, p. 432) 1895 reports on Uselessness of Vestra G.H.Co. CAf Estate Ce.

thaschinger, E. F. One of Jennings Conadian Jacob Eng. engineers, etc. later. (Rickard, interviews, H. Jennings, P. 244) One of Jennings' list of Throughy represented Eng. engineers later SA. who's who 1908 1 p. 230)
b 1871 Ontario
Unio. & Toronto
-> 5.A. 1895

An Appreciation
By Fred Hellmann

THOMAS HAIGHT LEGGET1 died on Tuesday, Oct. 1. at his home in Plainfield, N. J. His passing was sudden and unexpected and without pain. Born in Flushing in 1859, he was thus in his 76th year.

He graduated from Columbia University with the degree of Mining Engineer in 1879 and his first experience in mining came with his appointment to the staff of the Batopilas Company in the State of Chihuahua, Mexico. where he remained until 1884. After Batopilas he served as chemist for a few months at a silver-lead smelter at Lake Valley, N. M., and then returned to New York. His next engagement was with the New York & Honduras Rosario Mining Co. from 1884 to 1887. He increased the capacity of the mine and plant from twelve tons to 100 tons daily in two years. Here it was that he contracted the malaria which remained to plague him for many subsequent years.

Then, 'seeking a wider field and a more varied experience, he took the management of the Darien Gold Mining Co., on the Darien Peninsula, about 100 miles southeast of Panama, where he built a sawmill and felled the trees wherewith to construct a ten-stamp mill. He built a power plant and developed the mine.

In 1891 he became manager, and later on president, of the Bodie Standard Consolidated mine at Bodie. Calif., where he did two outstanding pieces of work which established the reputation he so bravely sustained in after years for engineering imagination, daring, and initiative. He built one of the first long-distance power transmission lines and the first cyanide plant in the West, thereby greatly reducing power costs and increasing the yield.

From Bodie he went to Johannesburg in 1895 as consulting engineer to Messrs. S. Neumann & Co., of London and Johannesburg. Until then the firm had restricted itself to investment with directorships in the mines of the Rand. With Leggett's advent the firm immedi-

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ately expanded the scope of its activities and initiative—those qualities that are by taking over the direct management of such well-known and important companies as the Wollhuter, the Consolidated Main Reef, the Witwatersrand Deep, the Knights Central, the Vogelstruis Deep, the Treasury, and the Cloverfield Deep. This expansion, made possible by Leggett's technical and managerial experience, greatly enhanced the prestige and standing and influence of the firm in the mining world of Johannesburg. Leggett's professional work on the Rand was eminently successful. He brought all the mines under his control to a better condition of output, development, and profit. He also became the friend and in some instances the intimate associate of such men as Hennen and Sidney Jennings, Pope Yeatman, W. L. Honnold, Charles Butters, Jack Hammond, and Sam Thomson. On the shoulders of Leggett and these men fell the early technical development of the Rand. They were backed by the pioneer mining financiers of those days-Alfred Beit, Julius Wehrner, Sigismund Neumann, Sidney Goldmann, the Farrar Brothers, and Cecil Rhodes. The ore was there, the engineers were there, and the money was forthcoming, so that the Rand, in the light of its history and the hope of the future, stands as the foremost undertaking in gold mining that the world has ever seen.

Leggett left the Rand in 1903 and established himself in London as a consultant. He remained the trusted counselor of the Neumann firm, and in cooperation with them and others undertook many important mine examinations. among them that of the Victoria mines of Ludwig Mond in the Sudbury nickelcopper district of Ontario, and that of the famous Spassky mine in Siberia. He returned to the United States in 1906 and settled with his family in Plainfield, N. J., where he lived until his death. He opened offices in New York. became associated as consulting engineer with the Mines Finance Co., and was thereafter appointed consulting engineer to the American Smelting & Refining Co., with which company he served over a period of three years. He retired from active practice in 1932.

His death has removed from the list of living pioneers another illustrious name. He belonged to that group of men who early in the '80s faced the dangers and perils of the wilds of Mexico and of Central and South America to open up and develop the hitherto, in large measure, unknown mineral resources of those countries and to apply to such work American methods of mining and ore treatment. In those undertakings Leggett proved himself possessed of character, honesty, courage, ability,

common to the truly great and successful in all walks of life. He belonged to the class that does things. His friends will long remember him for his many qualities and his many acts of kindness and helpfulness, particularly those that worked for him and that are bound to him by indissoluble ties of friendship and affection. May he rest in peace!

BRA, HE, vol. 59, Thomas Leggett to Mr McDermott, 21 May 1894, p. 481 (from Bodie, California).

Thomas Leggett:

Reply to letter from him.
Would be open to job offer
No salary like Perkins or Hammond (couldn't expect such)
All the same, 'I'm not a cheap man'. COL high in Jhb
Would consider an offer seriously

LEGGETT, T.H. CONSULTING MINING ENGINEER FOR S. NEWMANN & CO. Thomass H MIC p. 240 strated in April 1897 NOT AMM 20 montes in Toly before that in America expensence of uning in California Star, 25 April 1896 NEW MINING REGULATIONS MANAGERS' OBJECTIONS [Meeting of Commission with Association of Mine Managers and Chamber of Mines to hear their objections and suggestions to the Draft Mining regulations of 1896.] Took place 23 April 1896 and was specifically with AMM On Thursday [23 April 1896] Mr. Klimke (State Mining engineer) and Mr. A. R. Sawyer, member of the Commission

On Thursday [23 April 1896] Mr. Klimke (State Mining engineer) and Mr. A. R. Sawyer, member of the Commission which drafted the New Mining regulations, sat at the Chamber of Mines board-room for the purpose of hearing the which drafted the New Mining regulations, sat at the Chamber of Mines to the proposed regulations - Mr. Klimke objections of the Association of Mine Managers and the Chamber of the Association of Mine Managers), Macfarlane, presiding. There were also present: Messrs. Johns (President of the Association of Mine Managers), Macfarlane, Syd. Jennings, H. Jennings, Skinner, Goodwin, Clement, Britton, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, H. Jennings, Skinner, Goodwin, Clement, Britton, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Clement, Britton, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, and Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Syd. Jennings, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Jennings, Macfarlane, Leggett, Macfarlane, Leggett, Boucher, Jas. Hay, H. Millar, And Jennings, Macfarlane, Leggett, Macf

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Leggett - Adaptations to Cyanide Process See Exhactin (cyande)

* hegett T. H. Consulting Engueer Tourney 1897 SAMJ 10 April 1897, p. 582. SAMC1 16 May 1903, P. 232

hegett Consulting Engineer Witwat. Deep (SAMJ 17 Dec. 1897, p. 214) 1897 LEGGETT, T. H, consulting engineer Toeasury 1899 SAMJ 20 May 1899, p.612 Spencer, C. H. manager.

Consulting engineer 1903 LEGGETT THOMAS HAIGHT - NEUMANNIX Co Resigned

SAM, CI, 18 July 1903, p. 423

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SAMCI 2 Jan. 1904, p. 966

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Caravmann, Sir Harry I

Rand, Riches and South Africa:

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Annual and Quarterly Reports.—The mining companies on the Witwatersrand publish such full and complete reports of their operations, that they can well serve as a model in this respect to the rest of the world. They comprise reports of the board of directors, the consulting engineer and the manager, and give PRESENT MINING CONDITIONS ON THE RAND. very fall and complete tables, showing the technical details, costs, and results of the operations, together with full financial particulars, comprising usually a balance-sheet, revenue and expenditure, or profit and loss account, and an appropriation account; but above all they show the tonnage in sight at the end of the year and its value, and describe the mine-development and the appearance of the bottom levels of the mine. The quarterly reports issued regularly to the shareholders give in the same way the results of the preceding three months' work, yield, costs and profit, together with a short description of the appearance of the mine, latest developments, tonnage of ore in sight, and oftentimes its value. Many mining companies in London now send monthly postal cards to each stockholder giving the amount of ore treated, the yield, cost and profit for the preceding month, and any important feature of the month's development on the mine. In this day of reform in corporate management it is to be hoped that many of the American mines, well managed in all other respects, will copy the methods and practice of the English companies.

£30,000,000. The yield is now within 12 per cent. of that estimate, which it bids fair soon to reach.

The output for the entire Transvaal for 1907 was £27,403 738, an increase of £2,823,741 as compared with 1906; practically

all this increase was due to the Rand proper.

Labor.—The paper by Mr. T. Lane Carter presented to the Institute at this meeting gives a full description of the Chineselabor conditions on the Rand. There is one important point, however, that does not seem to be generally understoodnamely, that the introduction of the Chinese into the Transvaal is not on a par with their introduction into Canada, Australia, the United States, or any of the countries that object to their presence. In these latter countries the Chinaman comes immediately into competition with white labor, while in the Transvaal he does not, because there already exist there two planes of labor, the white and the black, and the Chinaman has been rigorously confined to the latter.

In any country where white and black labor work side by side, there are always certain things the white laborer considers intra dig., and he will always relegate these to the black. The white man is always scrupulously careful to keep the black on the lower level, and to not allow him to rise, since that would mean competition. In the Transvaal the white miner has the overseer's position and the black man does most of the hard Engine-drivers and mechanics are white men; in fact, skilled work of all kinds has always been done by the white man, and always will be done by him.

The Chinese have simply supplemented the supply of Kaffirs, and have never been in competition with the white labor any more than are the 100,000 or more Kaffirs now at work in the mines in such competition. Nobody has ever objected to these Kaffirs working with, and under the direction of, the white miners, and as there are 6,000,000 of them south of the Zambesi alone, the country can never be made a "white man's country" in the full sense of that term.

It is evident that the feeling against the Chinese, founded as it is upon a valid and practical cause in other countries, has no such basis in the Transvaal, and is there but an empty sentiment; one, however, that was worked to such an extent in England, where the average man knew nothing of the real con-

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Browner Ross E

ditions and supposed the Chinese would eventually oust the Britons, that the Chinese have to be sent home on the expiration of their contracts. This has been going on for some time, so that cut of the 53,000 Chinese in the country at the end of 1906, it is estimated that but comparatively few will remain by the end of this year.

The repatriation of the Chinese is a loss to the mining industry of the Rand, since they are more intelligent than the Kaffirs and have become very adept at mining-work. Moreover, they are on a three-year contract, while the Kaffirs seldom stay for more than six months at a time, though they often return.

The question now is, can all the Chinese be promptly replaced by Kaffirs, to whose scarcity after the war the introduction of the coolie is due. On this point divers opinions have been expressed, but thus far the Chinese have been so replaced, in November, 1907, no less than 4,610 Chinese having been sent away and their places filled by Kaffirs. The Transvaal government, acknowledging its responsibility for sending away the Chinese, has put itself on record as desirous of aiding the mining industry in every way in its power to secure Kaffirs, and as they have perhaps more ways of doing this, it seems highly probable that they will succeed. Moreover the depressed condition of business generally throughout South Africa, combined with the shutting-down of the Kimberley mines, has forced large numbers of Kaffirs to seek employment on the Rand.

As to white labor, the miners' wages, heretofore excessive, have been reduced, partly due to the necessity of giving work to the hundreds of unemployed in and around Johannesburg, with a resultant benefit to all concerned, since the efficiency of this class of labor has been much improved.

Before the strike the white miners' pay was about £1 10s. per fathom, stoped, based on the work of the poorest miner, with the result that capable contractors made enormous profits; to-day contract-prices are reduced, and, what is still more essential, are based upon the capacity of the best miners.

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C. D. LESLIE.

The news that Mr. C. D. Leslie, until recently Consulting Engineer to the Consolidated Gold Fields of South Africa, had lost his life in the railway accident to the Natal train at Sugar Bush Bridge on February 12th, came as a great blow to practically the whole mining community of the Rand. It was a tribute to a vivid personality that no one seemed able to accept the sad fact: it was as incredible as cruel. It was only a few months since he had relinquished the arduous post that he had filled so capably for many years, and had turned with characteristic keenness to the development of his farm. Already private professional business was drawing him into new mining interests and his friends had never seen him in better health and spirits.

Charles Duff Leslie, born 1871, was the son of a Scottish landowner of Suddie, Ross-shire. He came out to this country, and after a few years in the Civil Service of Natal came to the Transvaal and at once associated himself with mining. He soon made himself a master of his profession, and his sound education, fresh acquisitive mind and the varied nature of his practical and the varied nature of his practical and the front rank of mining men.

In 1906 when he took over the management of the Simmer and Jack it was realised that a new force was making itself felt on the Rand. It is owing to his work on this mine that he is entitled to be called a pioneer in the matter of greatly reduced working costs. He intro-duced such an extraordinary increase in efficiency and so organised all branches of the work of the mine as later on gave the low grade mines a new lease of life. Within a year of his coming to the Simmer and Jack he had literally worked a revolution on the property. To mention the outstanding features, a single shift replaced the old double shift without loss of tonnage.

A new native time-keeping system, itself a masterpiece in the art of mine management, was introduced, and with a reduction of working costs to a half there

was opened out for the mine a greatly extended lease of life.

It is not long ago that the writer heard Mr. Leslie say that he had always greatly admired efficiency. Efficiency is a word that has been maltreated of late and in connecting it with his work it is well to consider it a little closely. The efficiency that is so often praised and aimed at, the efficiency whose ideal is the machine is not the efficiency Mr. Leslie preached and practised. He was a man of fine capacity and great energy, but these qualities do not entirely account for the wonderful results he achieved. What then was the secret of his success? More than anything else it was due to his love for ideals and the immense value he placed upon human personality. Where ideas and appreciation of ideas in others are absent, one gets the " official" type, and a concern so ruled is doomed to be without initiative and enterprise among its subordinates. C. D. Leslie was full of ideas and seemed to induce them in others. As the world knows, many can use ideas once they are presented, but few can originate them.

His appreciation of personality was an even rarer gift. No man who worked for him ever felt that he was merely a cog in the wheel. He was made to feel that there were required of him character and responsibility, and above all power to give and receive ideas. Most men capable of engaging in such a profession as mining are also capable of responding to such a demand. Their self-respect increases and their value to themselves and to the world increases accordingly.

There is a limit, especially in this profession, to what a man can accomplish without the goodwill of his subordinates. Everyone who worked for Leslie loved him, as a miner remarked the other day. He was able to make all his men feel that it was their own special qualities that were used and valued. This is the gift of the born master of men and was the secret of his power of attaching to himself the affectionate loyalty of his workers. It was, in fact, the secret of his officiency.

In addition to his virtues he had an exceptional endowment of the graces which rendered his personality as engaging and gracious as it was virile and commanding. By virtue of such abounding vitality combined with a ready imaginative

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sympathy he diffused his own good qualities of heart and mind among those who worked for him: he diffusel his streigth, his good spirits, his optimism, his pleasure in ideas and his sense of one's work being a fight and a game—a hard fight against ignorance and waste and a great game with the interplay of ideas and human forces. Professional contact with the man cheered and invigorated and memories of past meetings give one some faint conception of the overwhelming loss his death means to those who shared his private life.

In the ordinary sense of the word C. D. Leslie could not be called a public man, but his life was by no means private. He spent his strength generously, and his mind was always pre-occupied with the public value that was bound up with all his activities. Latterly this fine quality had developed considerably, and in all the projects and plans for his farm the idea of contributing something to the agricultural future of the country was ever to the fore.

He was still young, for so fresh and open a mind could never decline into old togeyism, and there was still a great career before him in mining, industry and agriculture. The very large attendance of representatives of every section of the community at the funeral showed that the Rand was conscious of having lost one of the finest of its sons.

In 1916, when Vice-President of the S.A. Institution of Engineers, he took the initiative in convening a meeting of representatives of the several local technical societies, which resulted in a Scientific and Technical Committee being formed to assist the Government during the war. This Committee was ultimately amalgamated with the Government Advisory Board, and is now the Government Advisory Board of Industries and Science, a body which has done much useful work for the community. In 1918-19 he was the President of the S.A. Institution of Engineers.

Hε joined this Society as a member in February, 1903.

W. E. T.

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Por mining enqueer JCI. Lewis 1902-1908 SA who's who, 1908, p. 236. Camborne School of Mines - Canada 1898-1901 Gen. M'arager new Vurfied (Barnatos JC1.).

ENRY LOUIS, world-famous mining engineer and professor of mining for 27 years at the University of Ducham, died on Feb. 22 at the age of 83. For the following notes upon his career, we are indebted to The Engineer: Louis was a man who held strong views and liked to express them strongly. He was impatient with anything that he considered unwarranted by the evidence, unfair, or foolish.

He was born on Dec. 7, 1855. father was a lace merchant in London, but he received his elementary education largely in Germany, returning to England at the age of ten to enter the City of London school. A scholarship to the Royal School of Mines in London led to still further honors, for he emerged three years later with the highest award then given-the de la Beche Medal-and an associateship in mining and metallurgy. After a few months as chemist for John Percy, wellknown chemist. Louis was offered a position as chemist to the Steel Co. of Canada in Nova Scotia, which position he held for three years. Before returning to England, he made a tour of the iron and steel districts of the United States. He was soon off to Ecuador as assayer and assistant manager of a gold mine, where he spent an adventurous few years; he is reported, among other things, to have quelled a riot with his umbrella. After a brief period at Genoa. he went to the Transvaal where he did a great deal of consulting work during the busy period from 1885 to 1890. the latter year he founded. with H. M. Becher, the firm of Becher. Louis and Co., in Singapore, and he was engaged in consulting work at many properties throughout India and Siam. After Mr. Becher's death. Louis returned to London. He was just forty when he came home in 1895 to settle down as a professor of mining in the Armstrong College of the University of Durham. which position he was to hold until his retirement in 1923. It was actually in the remainder of his life that he attained the distinction for which he was honered in the mining and metallurgical industries. Among the many positions of honor that he held was that of president of the Iron and Steel Institute and the secretaryship of the

taculty of graduate studies from 1893 to 1918, when he became emeritus. Dr. Monroe was also the inversor of porous cones for filtration and of metallic felt filters, notably the Monroe crucible. He proposed and was coinventor of the pendulum friction device and developed catalytic coatings. He was the author of many publications on expressives.

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