U. D. C. WILL OPPOSE LEASE FOR BAUXITE

Committee Will Meet Today to Take Action Against State Contract.

1-21-32 Gazette

A committee, representing a score of chapters of the United Daughters of the Confederacy, will meet today at the home of Mrs. R. J. Lea, state chairman of the U. D. C. Committee on Relief and Entertainment of residents at the Confederate Home, to plan the organization's campaign to obtain cancellation of a contract whereby bauxite mining rights on the Confederate Home property has been leased to the Pulaski Mining Company for a period of 10 years.

Mrs. Lea said the committee will discuss employment of an attorney to institute injunction proceedings against David A. Gates, state revenue commissioner, who executed the lease under authority of an act of 1929, with the approval of Governor Parnell, Attorney General Hal L. Norwood and G. C. Branner, state geologist.

The U. D. C. will attempt to restrain the state officials and the mining company from performing any act to carry out terms of the lease contract until after the next legislature decides whether it shall be the state's policy to lease mineral rights to property occupied by state institutions, Mrs. Lea said.

Warren U.D.C. Protests Leasing Of Confederate Home Property.

Special to the Gazette.

Warren, Jan. 20.—The Benjamin F. Sweeney chapter of the United Daughters of the Confederacy of Warren, at a special meeting last night, adopted a resolution opposing lease of mineral rights to the Confederate Home property about three miles southeast of Little Rock.

Members of the chapter declared that the property had been donated to the state for the sole purpose of furnishing a home for Confederate veterans and their widows, and that it should not be used for any other purpose as long as it is needed for the original one. A letter of protest is being mailed Governor Parnell today.

PARNELL'S REMARK BREAKS UP MEETING

Gazette 1-24-32

But Governor Insists U. D. C. Representatives Misunderstood Him.

LEASE PROTEST IN VAIN

Plans for Contesting Validity for Mining Operations at Confederate Home to Continue.

A conference between a group of members of the United Daughters of the Confederacy and Governor Parnell regarding the leasing of mineral rights to property occupied by the Confederate Home near Little Rock broke up in confusion yesterday when an unfinished remark by the governor was understood by some of the women as the expression of an opinion that the South was in the wrong in the war between the states.

Governor Parnell later said emphatically that he had not said what Mrs. R. J. Lea, leader of the delegation, and several other members, said they understood him to say.

The governor said his statement, "whether it was right or wrong," referred to the lease, but that apparently it was misconstrued as applying to the justness of the Southern cause in the war. He said a general discussion of the historical and sentimental setting of the Confederate Home property had preceded the incident.

Most of the delegation left the governor's private office precipitately, but several members remained or returned to talk with him and some members of the delegation assembled in the governor's reception room nearby to discuss the situation.

Chairman Returns.

Mrs. Lea, state chairman of the U. D. C. Committee on Relief and Entertainment of Confederate Home Residents, returned to the governor's office yesterday afternoon and conferred with him at length regarding the incident and the controversy over leasing bauxite mining rights to the Confederate Home property.

Mrs. Lea said the governor expressed regret that any statement he made had offended members of the delegation. She said she was sure she had not misunderstood the governor's statement up to the "point of interruption by exclamations" from the other members of the committee, but added that she accepted in "good faith" his explanation that his completed statement would not have been what an apparent majority of the delegation understood it to be.

Several other members of the delegation declined to discuss the matter beyond saying they believed it was "an unfortunate and unforseen" incident which, they said, is closed as far as they are concerned.

The delegation, composed of 30 or 40 members of the four U. D. C. chapters in Little Rock and North Little Rock, went to the governor's office to present a resolution adopted Tuesday protesting against the contract executed last Saturday whereby the state revenue commissioner leased bauxite mining rights to the property to the Pulaski Mining Company for 10 years, with a minimum of 10,000 tons of ore to be removed annually and with a minimum royalty of $10,000 to be paid to the state.

Arguments Presented.

Mrs. Lea explained the U. D. C.'s contention that the property was donated to the state for use as a Confederate Home under conditions which would preclude its use for any other purpose, as long as it is needed as a home for Confederate veterans.

Other members of the delegation who presented the organization's viewpoint in brief statements were: Mrs. S. P. Davis, president of Memorial chapter; Mrs. R. C. Rudisill, a member of the organization's State Committee; Mrs J. D. Simpson and Mrs. Lela Gatewood.

The U. D. C. representatives protested against the lease on the ground that mining operations near the home would disturb the aged men and women and would be a menace to their health and comfort. They also contended that underground mining, called for by the lease, could not be carried on without eventual caving and scarification of the grounds. They asked the governor to cancel the lease.

He said it was too late to withdraw from the contract, since it had been executed and filed, but offered to try to obtain an agreement with the company that mining operations would be delayed two years.

The governor said he explained provisions of the lease which were designed to prevent disturbance of the residents or disfiguration of the topography of the grounds. He said if it should be found that mining operations disturbed the veterans and other residents of the home he would be the first to protest.

Mrs. Lea said last night the organization will proceed immediately with plans to attack validity of the lease in the courts.

Confederate Home Lease Called "Shame and Disgrace."

Gazette 1-27-32

To the Editor of the Gazette:

Has the state become so poor financially that it is necessary to rob the Confederate soldiers, their wives or widows of their peace of mind? You can't make them believe that blasting within 50 feet of their rooms won't cause the plastering to fall on them.

It is a shame and a disgrace on the state. They are like children looking to their parents for comfort and protection, those old battle-scarred soldiers, some of them past 90 years of age, are looking to the state of Arkansas for comfort and protection during the remaining few months or years of their lives and the state is being weighed in the balance and found wanting. It is not only unwise, but it is unfair, for a few state officials to subject those old people to the harrowing experiences they will have to go through. Some of the members of this U. D. C. chapter have visited the home and know how these old people feel about mining for bauxite on the grounds. One has only to look across the highway opposite the home to see what mining has done for the grounds over there. For a few paltry dollars the state is willing to sacrifice the peace of mind and quietude of the inmates of the home. If it could be done and over with in a few weeks it would be different, but it has to last for 10 long years. They will all have answered the last roll call in that time.

Mrs. W. E. Kittrell, President.
Mrs. George Easter, Secretary,
Hamburg Chapter, U. D. C.
Hamburg, Ark.

To Hold Hearing in Bauxite Lease Suit

Dem 1-31-32

Hearing is expected to be held before Chancellor Frank H. Dodge in Pulaski chancery court during the latter part of this week on the petition of M. D. Vance, past commander of the United Confederate Veterans, and representatives of the Daughters of the Confederacy to prevent the Pulaski Mining Company from carrying out its contract with the state to mine Bauxite at the Confederate Home.

The suit against the mining company was filed in chancery court yesterday and seeking to void the contract and restrain the defendants from entering upon the land which is a part of the Confederate Home property.

The litigation was instituted after an unsuccessful effort had been made by the four local chapters of the Daughters of the Confederacy and the Confederate veterans to have state officials rescind their action on the lease.

BAUXITE CONTRACT ATTACKED IN COURT

Confederate Veterans Plaintiffs in Move to Cancel Lease.

Gazette 1-31-32

Cancellation of the 10-year lease of Arkansas Confederate home property to the Pulaski Mining Company for bauxite mining rights is asked in the suit filed in Chancery Court yesterday by M. D. Vance, past commander-in-chief of the United Confederate Veterans, and B. F. Red, brigadier general, against the mining company.

The complaint, filed by the law firm of Carmichael & Hendricks, as attorneys for the veterans, alleges that the 54-acre site for the Confederate home was bought and the home established by the Ex-Confederate Association of Arkansas which was formed before 1891, and that the association, without consideration and for charity conveyed the property to the state with the understanding that the state would foster and continue the charity by annual appropirations. It is alleged that the state holds the property under this grant as trustee for the benefit of the veterans.

Specific allegations as to the invalidity of the contract executed January 16 by David A. Gates, commissioner of revenues, and the mining company, are: First, that the contract is a violation of the trust agreement; second, that Mr. Gates has no authority to execute a contract on behalf of the state, and that the approval of the other state officials adds nothing to the force of effect; third, that the company obtained the contract as the result of favoritism and not by open competitive bidding contemplated by law.

Other charges are that the names of those principally interested in the mining corporation do not appear among the holders of the $1,000 capital stock of the lessee corporation.

Chancellor Dodge said last night that not date for the hearing on the suit had been set.

Bauxite Lease To Aid Vets, Firm Declares

Ark. Dem. Feb. 8, 1932

Would Provide Approximately Million for Pensions, Claim.

A general denial was made in Pulaski chancery court Monday to the charges made by M. D. Vance and others in a suit against the Pulaski Mining Company in an effort to void a mining lease between the company and the state government for mining bauxite on the grounds of the Confederate Home southeast of Little Rock.

The action was taken by Confederate Veterans and representatives of the Daughters of the Confederacy, who contend that the mining operations would destroy the usefulness of the Confederate Home as a place of abode for the veterans and their widows.

It is expected that Chancellor Frank H. Dodge this week will hear the case and decide the validity of the lease. The complaint also seeks the issuance of an order restraining the mining concern from entering upon the Confederate Home property.

The mining company's answer charged that the litigation was fostered by a disgruntled bidder for the lease, which was executed by state officials.

Leassee Plans Plant.

Plans of the company, the answer disclosed, include the erection of a $100,000 plant for mining the bauxite and it was contended that revenues to the state from the lease would make a large sum of money available for the payment of pensions to veterans and their widows. The lease would yield between $500,000 and $1,500,000 for the benefit of the veterans, it was suggested.

Answering the charge that the mining operations would destroy the usefulness of the Confederate home, the defendants in their answer said that the mining operations would be carried on in a plant to be located far enough away from the home so as not to interfere with the welfare of the veterans.

The answer recited that the contract or lease between the state and the mining company was advantageous to the state and added that the lease is not in violation of any trust with reference to the use of the Confederate Home site.

Says Bauxite Mining Will Ruin Confederate Home.

Gazette 2-14-32

To the Editor of the Gazette:

After reading the answer in the courts in regard to the bauxite lease on the Confederate home in the paper of January 10 I visited some of the people that had the bauxite taken from their lands. The bauxite is in pockets wherever it has been worked so far around here, and netted the owner from $40 to $32,000. Each time the bauxite company promised not to mar the looks of the ground but each time the same old ditches and holes are left. The promise is $1.05 a long ton of green ore; that means as it is taken out of the ground, but instead they have a drying house and dry it out before they measure it, taking off quite a shrinkage. Now the wonderful amount of bauxite under the Confederate home to the state officers is like a pimple on the back of a man's head. He can feel it and can't see it, so the pimple seems like a mountain. No one can see the bauxite but imagination makes it appear a mountain of wealth. But when worked, the home ruined, the old people killed from the blasting, the buildings caved in and the beautiful and sacred gift to the state to guard and care for which cost more than a million to build and years of work to beautify, will be gone and those old folks thrown out of a home in their old and decrepid condition. What is worse, some of the men on both sides of the controversy are sons of Confederates. This is the hard part. That the promise of money will kill all love and sympathy for the fathers and mothers of the Confederacy. Some say the money received from the sale of bauxite will be applied to pay the pensions of Confederate veterans and their widows. Mr. Gates said in his statement in the Gazette that $500 was paid to the Geological Department and the rest would be put in the treasury to be used as the state saw fit. Now the Confederates in the home pray God to save the home and spare these old afflicted people from their suspense and worry during the few years they have left. As for the great plant the bauxite company promises to erect in Pulaski county, this will depend on the small stipend made from the pocket of bauxite at the Confederate home. We invite the people to take a view of the plans along the Sweet Home pike and be convinced that the bauxite is in pockets in slick red clay that will not hold a prop long enough to stand a blast. May the Daughters of the Confederacy and the Sons stand by the Confederate home and leave this pimple of bauxite alone.

Mrs. George W. Hill.
Confederate Home, Ark.

Bauxite Lease Is Opposed by Legion

Dem. 2-16-32

The American Legion and the American Legion Auxiliary units of Little Rock will join with the United Daughters of the Confederacy and the Sons of Confederate Veterans in opposing the state's recent leasing of Confederate Home property, for bauxite mining, it was announced Tuesday afternoon by Mrs. Douglas Wells, president of the Auxiliary unit.

Members of the U. D. C. and others recently filed suit to annul the contract made by the state with a mining company, giving the company a 10-year lease on Confederate Home grounds.

Mrs. Wells said that a resolution opposing the lease would be presented at a joint meeting of the Little Rock Legion and Auxiliary units at the War Memorial building Tuesday night.

Legion and Auxiliary Oppose Bauxite Lease

2-17-32

A resolution opposing the action of the state in leasing Confederate Home property for bauxite mining was read at a joint meeting of the Little Rock units of the American Legion and the Legion Auxiliary at the War Memorial building Tuesday night, but action was deferred until a meeting which will be held in two weeks.

The resolution was written by John G. Pipkin, business manager of the Little Rock public schools and a member of the M. M. Eberts post of the American Legion.

Entertainment at the meeting last night included dancing by students of the Dorothy Donelson School, songs by the Blue Bird Chorus and novelty numbers by J. B. Wirges, H. G. Fausett and J. T. Malone. Mrs. Bernie Babcock discussed her new book on George Washington.

Hearing Set for Next Monday in Bauxite Suit.

Gaz 2-23-32

Hearing on the petition of M. D. Vance, former commander of the United Confederate Veterans, and others in Chancery Court for an order to restrain the Pulaski Mining Company from mining bauxite on the Arkansas Confederate home property, will be held Monday, J. H. Carmichael, attorney, said yesterday. He said the time for the hearing was set for Monday, February 29, several weeks ago and that there has been no change.

$302,000 ALLEGED DUE IN BAUXITE TAX

Gaz 2-27-32

Suit, for Benefit of Schools, Filed Against Republic Mining Company.

Recovery of $302,261 from the Republic Mining and Manufacturing Company, alleged due the state as delinquent severance tax assessments for bauxite, is sought in a suit filed against the company yesterday in Chancery Court by Mrs. Sara A. Evans of Pulaski county, as a taxpayer, in behalf of the schools of the state.

The complaint alleges that the commissioner of revenues, David A. Gates, fixed a flat valuation of $2 per ton instead of collecting two and one-half per cent of the market price.

J. F. Loughborough, attorney for the mining company, said last night that he did not understand what merit could be found in such an action and that he believed it would again give Arkansas unfavorable publicity relative to the attitude within the state toward development of natural resources.

Mr. Loughborough said that shortly after passage of the severance tax act at a special session of the legislature, during the administration of the late Gov. T. C. McRae, hearings were held on the question of the levy on bauxite and that the flat rate was fixed at that time.

The petition recites that between 1923 and 1926, the Republic company mined 103,819 tons of bauxite and in 1930, the company took over the properties of the American Bauxite Company. It says further that during 1927 to 1931 the company produced from its mines in Saline and Pulaski counties 567,780 tons of bauxite. It is alleged that the value of this ore was not less than $6.50 per ton.

Totals for Two Periods.

From 1923 to 1927, 1,250,077 tons of bauxite were mined, it was said, and through the commissioner's "arbitrary ruling," $136,696 was said to have been lost to the school fund. The amount alleged lost to the school fund during the second period between 1927 to 1932 was placed at $165,565.

State Senator G. W. Hendricks, member of the law firm of Carmichael & Hendricks, which instituted the suit, denied that it was anything but a sincere effort to reimburse the school and road funds of the county of tax monies to which they are entitled. He said that he had studied the allegations in the complaint for several weeks and that the law plainly provided that the severance tax should be collected on the basis of the market price.

Under the severance tax law, one-third of the revenue is returned to the county within which the ore is severed from the ground to be divided equally between the school and road funds, and the other two-thirds of the tax goes to the common school fund.

Senator Hendricks said that the suit had no connection with the recent action taken by his firm for M. D. Vance, former commander of the United Confederate Veterans, and others in an effort to invalidate the contract given the Pulaski Mining Company to mine bauxite on the Confederate Home property.

Suit to Break Bauxite Lease Will Be Filed

Democrat 2-28-32

U. D. C., Backed by S. C. V. Camp, Retains Local Legal Counsel.

The law firm of Carmichael & Hendricks has been retained by the Arkansas division, United Daughters of the Confederacy, to institute suit in an effort to cancel the state's recent 10-year lease of the Confederate Home property to the Pulaski Mining Company for bauxite mining rights.

The action will be filed within the next few days.

Announcement that legal action had finally been determined upon was made Wednesday night by Mrs. R. J. Lea, chairman of the Confederate Home residents relief committee of the U. D. C., at a meeting of Robert C. Newton Camp, Sons of Confederate Veterans, at the Albert Pike hotel. Members of the U. D. C. and United Confederate Veterans had been invited to attend the Sons' meeting, called for annual election of officers.

Mr. Hendricks said Thursday morning that the suit would be filed as soon as possible.

Members of the S. C. V. voted unanimous support to the sister society and adopted a resolution to resist by court action the leasing of the Confederate Home property "to the end that residents of the Confederate Home may not be disturbed in the remaining days of their lives among us."

"In the event that the contract is sustained by the courts," the resolution continued, "it is the sense of this body that all funds derived therefrom should be devoted exclusively to the aid and relief of surviving Confederate veterans and their widows."

At a joint meeting early last week the three Little Rock chapters and the North Little Rock chapter of the U. D. C. adopted a resolution asking Governor Parnell to cancel the lease, which was executed by Revenue Commissioner David A. Gates on January 16. When their delegation called on the governor and he said that he would not comply with their request, they announced that they would resort to court proceedings to test the validity of the contract.

Sons Elect Officers.

Annual election of S. C. V. camp officers was held at the meeting Wednesday night. Camp officers were elected as follows: C. P. Newton, commander; Dr. James O. Hall, R. C. Rudisill and J. R. Riley Jr., lieutenant commanders; Porter Grace Jr., quartermaster; Dallas T. Herndon, historian; Dr. E. M. Pipkin, chaplain R. V. Inman, color sergent; Roy D. Campbell, judge advocate, and H. B. Chrisp, adjutant.

J. S. Utley, division commander, who presided at the business meeting of the camp, announced his appointment of brigade commanders for 1932 as follows: J. E. Lye, Jonesboro, First Brigade; Dr. J. K. Smith, Texarkana, Second Brigade, and Charles W. Bell, Little Rock, Third Brigade. Brigade commanders, it was announced, will proceed to organize active camps in their respective brigades.

Dr. Charles H. Brough, the principal speaker at the buffet supper which followed the business session, gave an address on the subject of Generals Robert E. Lee and "Stonewall' Jackson. C. P. Newton acted as toastmaster. Guests of honor were Edmond R. Wiles, past commander in chief of the S. C. V.; General M. D. Vance, past commander in chief of the U. C. V., and Mrs. Brown Rogers of Russellville, president of the Arkansas division of the U. D. C.

SAYS COMMISSION FIXED BAUXITE TAX

Commissioner Gates Denies Allegation in Chancery Court Suit.

Feb 29 1932

David A. Gates, state revenue commissioner, said yesterday that allegations in a suit filed in Pulaski Chancery Court Friday against the Republic Mining and Manufacturing Company, to the effect that he had fixed the taxable value of bauxite at $2 a ton were without foundation.

Mr. Gates said the valuation of $2 a ton at the point of severance (mouth of the mine) was fixed by the Arkansas Railroad Commission when it also functioned as a Tax Commission, which was several years before he became revenue commissioner.

He said he was responsible for the provision of the original severance tax law which levied a flat tax of 25 cents a ton on bauxite. This provision was held to be discriminatory and the two and a half per cent tax on valuation was substituted.

Extensive hearings were held on the question, Mr. Gates said he had been informed, and the Railroad Commission found that $2 a ton was a fair value of the ore at the mouth of the mine when the price for treated ore f. o. b. railroad cars was $6 a ton. The operators proved to the satisfaction of the state at that time that treating, milling, transporting and loading the product added $4 a ton to its value.

He said he investigated the method of arriving at the tax when he assumed the duties of commissioner and became convinced that the valuation was justified. He said he acquiesced in the matter by refraining from attempting to set up a new valuation, but that he had nothing to do with fixing the method of determining the value.

2-29-32

Bauxite Lease Is Set Aside By Chancellor

Dodge Upholds Contention of United Confederate Veterans.

Will Appeal Case

Mining Concern Plans to Carry Fight to Supreme Court.

Chancellor Frank H. Dodge in Pulaski chancery court Monday sustained Confederate veterans and their effort to nullify the lease recently executed by state officials with the Pulaski Mining Company for mineral rights to the Confederate Home property southeast of Little Rock.

The action was filed by M. D. Vance, former commander of the Confederate veterans organization, and representatives of the four local units of the Daughters of the Confederacy who objected to the use of the home for the veterans and their widows as a mining site.

In deciding the case, Chancellor Dodge held that the lease executed by state officials with the mining company violated the deed of trust by which the state came into possession of the property about 40 years ago from the ex-Confederate Veterans' Association of Arkansas.

In the suit againt the bauxite lease executed to the Pulaski Mining Company, the plaintiffs contended that the state officials did not have authority to use the Confederate Home property for any purpose other than as a home for veterans and their widows.

It was explained that the home was erected by the ex-Confederate Association of Arkansas in 1890 and that the state legislature the following year levied a tax of one-fourth mill to provide pensions for Confederate veterans and appropriated $10,000 annually for the maintenance of the home.

The home was deeded to the state by the association for the specific use for the benefit of the veterans and their wives. It was further contended in the complaint that the state was without authority to execute the lease under an act of the 1929 legislature which provided for leasing certain lands owned by the state. It was argued that the Confederate Home property did not come under the classification of lands mentioned in the act.

The defense contention was based on the benefits which, it was stated, would go to the veterans in the form of revenues from the bauxite lease and it was further contended that the mining operations would not interfere with the welfare of the veterans and their widows living at the Confederate Home.

LEASE FOR MINING BAUXITE HELD VOID

Gazette

Chancellor Holds Act Not Applicable to Confederate Home Property.

March 1 1932

The contract between State Revenue Commissioner David A. Gates and the Pulaski Mining Company whereby the company was authorized to mine bauxite at the Arkansas Confederate Home property at Sweet Home, was held invalid by Chancellor Dodge yesterday.

His ruling followed a hearing on the petition filed by M. D. Vance, former commander of the United Confederate Veterans, and others who contended that mining operations would interfere with residents of the home and also would divert funds which should be used for the benefit of the veterans.

Chancellor Dodge said that the act, under which the lease was executed with the approval of Governor Parnell and Attorney General Hal L. Norwood, would not permit the mining of bauxite at the Confederate Home. The act provides that proceeds from such a lease should go to the state Geological Department.

The Confederate Home property was deeded to the state by the Ex-Confederate Association of Arkansas on condition that it was to be used solely for the benefit of the veterans. The association, formed in 1890, bought the the property and established the institution.

The chancellor said that the lease probably would have been valid if the proceeds were to be used for the Confederate Home.

Senator G. W. Hendricks, attorney for the veterans, was permitted to withdraw the portions of the complaint which attacked the execution of the contract by the state officials.

During the hearing, Chancellor Dodge criticized legislative action, remarking that it was true, as one of the lawyers had said, that "no one can tell what a legislature will do." He added that in 1931 funds obtained through a bond issue for the construction of the new State Hospital for Nervous Diseases had been diverted to another purpose.

BAUXITE CONTRACT DECLARED INVALID

Supreme Court Affirms Decree Against Mining at Confederate Home.

Gazette

B. AND L. ACT CONSTRUED

1931 Measure to Grant Credit on Loan for All Dues Paid Not Retroactive.

April 26 1932

The lease executed several months ago by State Revenue Commissioner David A. Gates, with the approval of the governor and attorney general, under which the Pulaski Mining Company of Little Rock was to mine bauxite ore on the Confederate Home property near Little Rock on a royalty basis, with a guaranteed payment of $10,000 a year for 10 years, is invalid because the statute governing mineral leases did not specifically include state-owned lands occupied by state institutions, the Arkansas Supreme Court held yesterday in affirming a decree of Pulaski Chancery Court.

The Supreme Court sustained practically all the contentions of the plaintiffs, M. D. Vance, former commander-in-chief of the United Confederate Veterans, and B. F. Red, adjutant of the Arkansas Division, U. C. V., except that relating to the right of the state to use the Confederate Home property for purposes other than a home for veterans of the Confederate army.

On this point the court held that no enforceable trust was imposed by the donors of the land to prevent the state from disposing of the property.

Opinion in Bauxite Lease.

The opinion, written by Associat Justice W. F. Kirby, follows in part

"The parties to the lease evidentl doubted that authority was granted b the statute for the disposition of th minerals made in the execution of th lease in question, since the governc and the attorney general were re quired to approve the lease and did d so although the statute does not re quire it.

"Such approval could give the lease no greater validity than it had already as executed by the commissioner of revenues under the authority of the statute, which did not require the execution and approval of the lease by them. Neither could the commissioner execute a valid lease of the minerals, as was attempted to be done in this case, since the statute neither by express words nor necessary implication granted him the authority to make such disposition of minerals a part of the grounds and foundations of the buildings of one of the state's charitable institutions.

"The legislature could have done so, of course, the state having the title to the property, but it did not, and if there was any such intention it is not fairly deducible from the language of the statute, which should use such language as shows an unmistakable intention to authorize it to be done—too plain to admit of any other construction.

"Neither did the court err in refusing to dismiss the suit as one that could not be prosecuted by the appellees as taxpayers and inmates of the charitable institution and beneficiaries of the use of it. It was not necessary for the appellees to first request the attorney general to bring the suit and then allege his refusal to do so in order to proceed, since the law does not require a vain thing to be done, and the attorney general was a party to the lease, having given his approval thereto as shown by the lease exhibited with the complaint.

"It makes no difference that the lease does not appear to have been improvidently made, nor without due regard for the protection of the improvements in the mining of the minerals, or whether the purpose was good in attempting to dispose of the minerals for the better maintenance of the Home and in providing increased comforts for the inmates thereof, since the statute did not authorize its execution.

"The lease having been executed without authority, it was necessarily void and the court did not err in so holding. The decree is accordingly affirmed."

Attorney General Hal L. Norwood said yesterday that he was not a party to the lease and was not interested in or connected with its execution, except that he approved the form of the lease when it was presented to him by the revenue commissioner, without attempting to pass on the right of the state to execute such a lease.

WILL REVIEW TAX RATES ON BAUXITE

April 29 1932

Revenue Commissioner's Agreement Results in Dismissal of Suit.

Gazette

After David A. Gates, state commissioner of revenues, agreed to hold a hearing on the present severance tax rates on bauxite, the suit brought by Mrs. Sara A. Evans against the Republic Mining and Manufacturing Company was dismissed by Chancellor Dodge in Pulaski Chancery Court yesterday.

Chancellor Dodge said with that understanding, he would sustain a demurrer and grant a plea in abatement to the suit brought in an attempt to recover $302,261 from the mining company, alleged due as delinquent severance tax.

It was alleged that Mr. Gates had fixed a flat valuation of $2 per ton instead of collecting two and a half per cent of the market price. Lawyers for the mining company contended that the amount charged as severance tax represents two and a half per cent of the market price, and that the price quoted by attorneys for Mrs. Evans does not represent the market price at the time the ore is mined but represents the price of refined ore.

The mining company's lawyer based his demurrer and motion to dismiss on the contention that the suit had not been brought by the attorney general, and also sought to have the intervention of the attorney general dismissed as it was filed after the suit was brought.

Chancellor Dodge first took the position that the attorney general could be made a party plaintiff and said he would not dismiss the suit unless Mr Gates would agree to hold a hearing on the rates, and Mr. Gates said he would be glad to review the question.

Attorney General Hal L. Norwood was reported to have been willing to bring the suit to collect the taxes should the case warrant litigation after the hearing by the Revenue Department. It was the contention of attorneys for the mining company that the present rates are the result of such a hearing held several years ago during the administration of the late Gov. T. C. McRae.

APPEAL FILED IN BAUXITE TAX SUIT

May 24 1932

Advanced by Supreme Court and Set for Submission May 20.

The suit of Sara A. Evans, as a taxpayer, against the Republic Mining and Manufacturing Company, bauxite mining firm, for $302,261 in severance tax on bauxite mined in Saline and Pulaski counties since 1923, was appealed to the Supreme Court yesterday and was advanced and set for submission June 20.

Attorney General Hal L. Norwood intervened on behalf of the state soon after the suit was filed in Pulaski Chancery Court, but Chancellor Frank H. Dodge dismissed the complaint and the intervention on the defendant company's demurrer, after David A. Gates, state revenue commissioner, had agreed in writing that he would hold a hearing to determine the value of bauxite mined during the period covered by the suit, if proper petition for such hearings should be filed with him.

The plaintiff and the intervenor chose to stand on their complaint and appealed from the ruling of the Chancery Court.

It was alleged in the complaint that the severance tax law passed in 1923 provided that bauxite should be taxed at 2.5 per cent of its market value, and that an arbitrary value of $2 a ton was fixed by state agencies for taxing purposes, when the actual market value, it was alleged, for the period covered was approximately $6.50 a ton.

The tax rate was increased to 2.6 per cent in 1927, and the plaintiffs alleged that 2,662,000 tons of ore were removed from 1923 to 1932, and that the company owes the state $302.261 in taxes, representing the difference between the valuation of $2 a ton and the alleged actual value of $6.50 a ton.

Other appeals filed yesterday were: R. H. Hanson and others, appellant, vs. Louisiana Oil Refining Corporation, appellee, from Lafayette Circuit Court, where the appellee was given judgment against the appellant for $750 claimed to be due on an account for gasoline and oil.

David A. Gates, appellant, vs. Mrs. Janet Hughson, appellee, from Sebastian Circuit Court, where the appellants' suit for $1,570 as liquidated damages for alleged violation of the cigar and cigarette tax law was dismissed.

New Bauxite Plant Being Built Near Benton.

Special to the Gazette. 9-25-32

Benton, Sept. 24.—A new plant to be operated by the Standard Bauxite and Chemical Company is being built four miles east of Benton. The amount expended will be $40,000, and the plant will be in operation in 90 days. It is reported as being backed by Fletcher & Hudspeth. W. J. Lester of Indianapolis is mining engineer and the superintendent is W. E. Thompson. Frank Finsthwit of New York is president.

Bits of Arkansas Go All Over the World

4-12-37 Gazette

At left in the above picture is a chunk of bauxite ore, and at the right is an aluminum cooking vessel.

By TOM SHIRAS.

Figuring that Arkansas produces 90 percent of the bauxite ore in the United States, nine women out of 10 who pick up an aluminum cooking utensil or vessel pick up a little bit of Arkansas. If the world were as familiar with the state as a whole as it is with the aluminum products which are made from bauxite ore produced in Arkansas, it would be the best advertised commonwealth in the world.

The story of bauxite mining is old to the people of Arkansas and the South, but they know but little about the development of the industry as a whole.

During the last quarter of a century the Bauxite section was witnessed the most remarkable development of a base metal ore that has ever taken place in the history of metals. Even as late as 1890 the high price of aluminum prohibited its use in industry. Its chief use up until that date was in the manufacture of souvenirs, cups, novelties, etc. Today it is almost indispensable in every industry in which metal plays a part The largest domestic deposits of bauxite from which aluminum is derived are located around Bauxite in Saline county, and the production has steadily mounted from less than 200 tons in 1902 to several hundred thousand tons a year in latter years.

Four different commercial bauxite ores are produced there. They are known as aluminum ore, from which the metal is smelted; water purification ore, which is used in purifying water supplies of municipalities; abrasive ore, which is used n the manufacture of emery wheels, etc., and chemical ore which is used in the manufacture of chemicals. Each ore carries an analysis suitable for the purpose for which it is used.

To many, aluminum is a mystery metal. It is almost as light as wood, nearly as strong as steel, easily molded, drawn or stamped, non-rusting, valuable in alloys and is now used in the industries for thousands of different purposes. Many imagine that it is an alloy conceived in the cunning brain of some chemist. Others vaguely think it is derived from a certain kind of a clay. The fact is, bauxite ore is not so hard as limestone and not so soft as shale. It originates from the decayed upper crust of the granite which has undergone the necessary chemical changes to transform it into bauxite.

The ore takes its name, bauxite, from the village of Les Baux, France, where the first deposits of the ore of any consequence were found. Because there is no connection between the name of the ore and the metal which is derived from it, as there is between other metal ores and their metals, few connect bauxite with aluminum. While the ore took its name from a French village, the metal took its name from the Latin (alumen). This from the fact, no doubt, that bauxite for the most part is composed of silicia, alumnia and iron.

In 1827, over a century ago, F. Wohler, a German chemist produced the metal from the ore in a distinct state for the first time. It has passed through various stages of development since, but not until 1890, when the electrolytic process of reduction was made applicable, was the price reduced so it could be used in the industries generally. From that date to this the growth of its use has been phenomenal.

The shallower ore deposits in this field are mined by stripping away the over burden from the ore bodies with steam shovels and scrapers. The final operation of cleaning is done with wire brooms, which removes all of the clay from the top of the ore bed. It is then shot up, loaded in cars and taken to the mill where it is ground and dried preparatory to shipment. In later years the deeper deposits have been worked with tunnels and drifts.

Other domestic deposits of bauxite are are found in Alabama, Georgia, Mississippi and Tennessee. Abroad it is found in Australia, France, Hungary, British and Dutch Guinea, Brazil, Ireland, Germany, Austria, Roumania, Spain, Jugo-Slavia, Africa, Venezuela, India, Russia and China.

For many years the electrical smelting process was a secret covered by patents, but these expired some years ago. Among the baser metals aluminum is still a high priced metal selling for around $400 a ton, while the ore sells for around $5 and $6 a ton. The big spread between the price of the metal and the price of the ore is made in the reduction process, which is very expensive. It takes five tons of ore to produce one ton of metal, and 27 tons of other material such as coal, limestone, soda ash, carbon, etc., to reduce it, besides a vast amount of electricity.

The average weight of aluminum per cubic foot as compared with other metals is as follows: Aluminum 162 pounds, gold 1,204, pig iron 450, lead 709, platinum 1,342, silver 655, zinc 437, tin 459, copper 542.

The uses of aluminum at this time are almost too numerous to mention and are being increased every day. Suffice to say that it is used in every industry that uses a variety of metals. Manufacturers of cooking utensils are using it almost universally; the automobile industry is using vast quantities of it, as are the chemical and electrical industries. Being a conductor of electricity, it is in demand for transmission lines, lessening the upkeep and installation on account of its lightness. In some lines of work it is taking the place of lithograph stone in printing. In warship construction it is used for those parts where lightness is synonymous with economy, and in making boats for portage.

Aluminum, compared with other base metals is only a new born babe in swaddling clothes, but it has already found a place in industry which makes it indispensable.

State Geologist Believes Series of Dynamite "Shootings" Might Disclose Vast Amounts of Bauxite Ore in Pulaski

April 22 1934 Democrat

By HARRY WESTON.

Recent discoveries in connection with the bauxite deposits in Pulaski and Saline counties lead George C. Branner, state geologist, to believe that a series of dynamite "shootings" might disclose vast amounts of hitherto unknown ore that could be mined profitably under existing commercial conditions.

A geomagnetic survey of the central Arkansas bauxite region was finished in 1930 by Dr. Noel H. Stearn, who issued a report to the state geologist at that time. The report established definitely several new points in relating to these deposits.

From this report and other information, Dr. Branner came to the conclusion that the several separated outcrops of bauxite in the Granite mountain and in the Bryant mining districts, and at points between them, are parts of a single formation that lies buried in the intervening distances.

"Shooting" Described.

Dr. Branner described the system of shooting which he advocates as an inexpensive method of determining the depth at which probable veins of ore lie buried beneath the earth's surface in the 165-square mile area that is known to be its location. The depth at which the ore is to be found largely determines the commercial feasibility of extracting it.

"It has been known for a long time," Dr. Branner said, "that central Arkansas bauxite deposits are closely associated with beds of syenite, generally known as granite. By a series of geomagnetic soundings, the survey conducted in 1930 by Dr. Stearn demonstrated quite clearly that throughout the area surrounding and between the numerous separated bauxite outcrops, a single underlying base of syenite exists. Where there is syenite, it follows logically that there is a strong likelihood of there being bauxite also.

"The varying depths at which this syenite base has its location are yet to be discovered. The present method of discovery, that of drilling, is quite expensive. A tripod is set up, with a pulley at its apex. A cable is threaded through the pulley and a drill is attached to one end of the cable. The drill is raised and dropped by winding the other end of the cable on a revolving drum. The specimens that are brought up from beneath the surface in the hollow core of the drill are examined to determine their identity. In this way is roughly determined the depth at which the deposit is located and to some extent, its thickness. The expense of this method precludes any possibility that it can be used soon to determine the extent of ore deposits in the entire 165 square-mile area.

"In the shooting method of exploration, charges of dynamite are set off at varying intervals along the surface of the ground above the place where the syenite base is known to be located. Sound waves that travel downward from the point of explosion, move along the underlying syenite and are later refracted back to the earth's surface, are measured by delicate instruments. The time it takes these waves to make their trip is learned, and by the use of these figures it is possible to calculate the distance at which the syenite lies beneath the ground at that point. This process is repeated over much of the area. From such information that this subsurface exploration discloses, it is possible to make an accurate subsurface topographical map.

"Such a map should certainly be of much assistance in any mining operation contemplated in this area, and besides, should give a valuable estimate as to the extent of the bauxite deposits and their commercial usefulness. There is reason to believe that there are as yet large deposits that have been undiscovered."

In Decomposed Granite.

Bauxite, according to the theory of Dr. J. W. Mead, which is most widely credited, is the product of the weathering for natural chemical decomposition of granite rock, or nephelite syenite. As this theory expresses it, the syenite was at one time, thousands of years ago, exposed to the weather on the surface of the ground. The ravages of the weather caused the syenite to crumble, just as such stones crumble on the surface today. Further decomposition made the products of bauxite and kaolinized syenite.

The surface of the syenite that was exposed for weathering was very irregular. As the bauxite formed, it was in many cases washed away from the granite base of its origin and deposited in areas adjacent to and in depression within the syenite area Thus pockets of bauxite were formed in small valleys in the granite. As the formation of bauxite progressed sediments of clay, sand and gravel of the Tertiary age were deposited in alternate layers with the ore. This accounts for stratas of the ore at varying levels. It was also in this age that the "clay horses," large beds of clay within a strata or pocket of bauxite, were deposited. These clay horses have at time caused much delay and unproductive expense on the part of mine operators.

The ore is now being mined by several companies at locations near Sweet Home, Bryant, Bauxite and on Arch road, eight miles south of Little Rock. Almost all mining now being carried on is by the underground method. During the World war, much of the ore to produce necessary armaments and equipments of aluminum was mined in the Sweet Home, Rauch place area from open pit mines. In the rush to make large outputs, laborers were imported from Mexico, and sent here from the Eastern states. Many of them were Italians.

Pits Abandoned.

The open pits have been abandoned and have mostly become full of water, forming artificial lakes. The water in these lakes has an intense blue color that is the result of chemical action of the bauxite.

Straight shafts are now sunk into the ground and lateral veins of ore are mined out, using the shaft as a means of access and of withdrawing ore that has been dug. The shaft is boxed on all sides by wooden planking that keeps it from caving in. A pipe is lowered into the mine in order that water might be removed by a pump that is kept going at all times. An electric cable carries power and lights down into the shaft and lateral veins of the mine itself for the use of the miners. Down one side of the shaft is a long ladder for use in climbing up or down in case of emergencies. Usually the miners enter their day's work by riding down on the machine-driven bucket, suspended from the end of a strong steel cable, that brings up the mined ore.

As a result of the long-continued operations of bauxite mines in this district, a distinct class of laborers has come into being. The men who abandond axes when the forests of Pulaski county were gone to take up farming and left farming when the interstate traffic in foodstuffs made it no longer profitable, have turned to mining and have formed a picturesque group. Several Little Rock merchants were quick to sense this change, and stocked their shelves with equipment for the miner, such as headlamps and denim trousers and jackets instead of overalls.

The psychology of these men has changed with their occupations. Those who left farming to mine no longer feel that they are a beaten class, such as the truck farmer who must work from daylight to dark in order to produce enough to keep himself and his family alive. They now talk and think in terms of shifts, and hours, and work schedules, and use their leisure time for recreation, instead of for more work, as they would have done, had they been still on the farm.

Discovered in 1891.

The world first knew of bauxite deposits in Arkansas on January 8, 1891, when the Arkansas Democrat ran a feature story on the subject, in which it made public a report of the state geologist, Dr. W. C. Branner, the father of the present geologist, to Gov. J. P. Eagle.

The editor of the Democrat went into ecstacy in describing the discovery of the late Dr. Branner. It was an age of discovery by such men as the state geologist and an age of superlatives for such men as the writer who described his exploits, for both of them were adventuring into virgin country and neither of them knew what lay around the corner.

Dr. Branner's report, dated January 7, 1891, announced to Governor Eagle the wonderful news that, with the exception of a small bed in Georgia, the great deposits of bauxite in Pulaski and Saline counties were the only American sources of this aluminum ore. The report stated that an area of approximately 640 acres lay in the bauxite districts of Arkansas. Since that first report, the area in which are known deposits of the ore has been greatly enlarged by subsequent discoveries.

In explaining the uses of aluminum, the late Dr. Branner must have been a prophet. His words certainly foretold the use to which Arkansas bauxite would be put:

"Its great strength and exceeding lightness," he said, "make it invaluable in the construction of articles for the use of troops in active service, for surveying and exploring parties, for optical instruments and a multitude of other purposes." Could the man who recognized bauxite in this state possibly have envisioned the thousands of "yanks" who carried with them, in France and Germany, mess-kits that were made of aluminum that came from Arkansas mines?

Used For Roadbuilding.

"At the time when it was found that this rock was bauxite," wrote the late Dr. Branner, it was being used extensively for roadbuilding, especially for making the roadbed of the Little Rock-Sweet Home turnpike. It has also been recommended by a former state geologist, W. F. Roberts, as a pistolitic iron ore, and attempts had been made to mine some of the highly colored Saline county beds for iron ore."

The first Dr. Branner suspected the identity of the bauxite ore as early as 1887, but he withheld information on the subject until he was able to make a complete and detaild report.

Another Source of Bauxite Ore In Pulaski County Utilized

—Gazette Staff Photo.

The new Rauch bauxite mine on the Arch Street pike, operated by the American Cyanimid and Chemical Corporation, is pictured above as it appeared shortly after mining was begun. The men on the high platform are pictured dumping huge buckets of ore by hand. Mechancial equipment will be installed soon. April 9 1934

NEW BAUXITE MINE BEGINS OPERATIONS

American Cyanimid Corporation to Use Output in Making Alum.

A new bauxite mine has been in operation in Pulaski county for a week, and its developers are contemplating construction of a mill for drying and refining the ore.

It is known as the Rauch mine and is a half mile past the Granite mountain road, on the west side of the Arch Street pike. It is owned and operated by the American Cyanimid and Chemical Corporation of New York.

The Bauxite taken from the mine is to be used by the corporation and its subsidiaries in the manufacture of its own products, chiefly alum.

The Rauch mine is a shaft mine. A quarter of a mile farther north the company owns an open bauxite mine which is not yet being worked. It is there that the mill will be built, if arrangements are completed with the Rock Island Lines to build a spur track to the mine, W. L. Powers, engineer in charge, said yesterday.

Temporarily, the ore taken from the Rauch mine will be hauled to the Crouch mine, which has been operating in the same vicinity since 1931, to be dried before shipment.

Are Reached at 90 Feet.

Sinking of the shaft at the Rauch mine began last November. Bauxite ore was reached at 90 feet, and the deposit averages 20 feet of workable ore and covers an area of 25 to 30 acres.

Mining at present is done by hand and hoisted to the surface in big buckets holding 400 pounds. Six men, working an eight-hour shift, produce about 20 tons daily.

Expansion plans include the installation of a "skip," a mechanical device that will increase the output considerably. The entire deposit will be worked from the one shaft, by means of radial "drifts."

The ore is of fairly good quality, Mr. Powers, said, averaging 58 per cent aluminum and about two per cent iron.

Seeking Bauxite Scientifically

Through the Use of a Magnetmeter, Which Virtually Looks Through the Earths' Crust, the Bauxite-Bearing Area of Pulaski and Saline Counties Has Been Increased. Here Is How It Operates.

Gazette January 15, 1934

By TOM SHIRAS

One of the oldest axioms in the mining industry is: "One man can see as far under the ground as another." But science has made this obsolete. Provided with the right instrument and knowledge to operate it, man now can see many feet beneath the crust of the earth and be reasonably sure that he will find what he sees when he begins to use pick and shovel or more modern mining machinery.

A recent geomagnetic survey in Pulaski and Saline counties by the Arkansas Geological Survey has extended the potential bauxite bearing area from 3.2 square miles to 165 square miles, and has assured a domestic supply of this valuable mineral from which aluminum is abstracted for generations to come.

The instrument used in making the survey was a Hotchkiss superdip magnetmeter, which follows the course of the different formations like a penetrating eye, recording the different variations of magnetic intensity on the dial from which the computations were made.

There are two districts in central Arkansas that now produce bauxite, the Bauxite district, adjacent to the town of Bauxite, and the Fourche Mountain district, immediately south of Little Rock. These two districts are separated by 12 miles of heretofore unproductive territory, but the geomagnetic survey indicates ore bodies in this area.

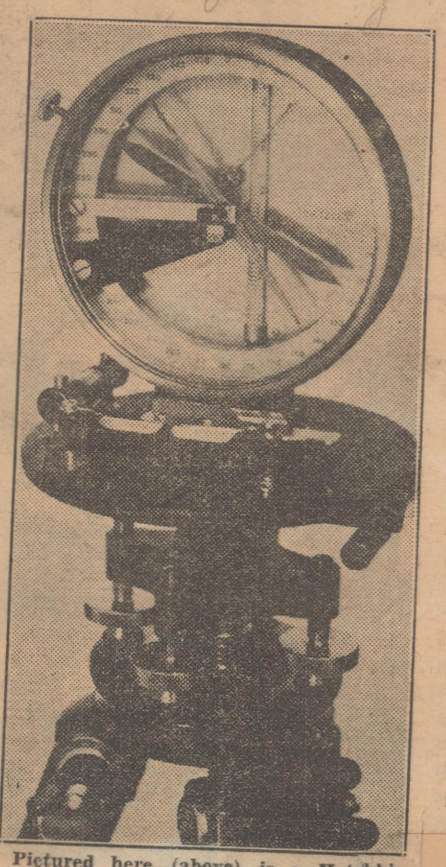
Hunting For Bauxite.

Bauxite is the decayed upper crust of granite, which has undergone the necessary natural chemical changes to transform it into mineral. In these two districts it is found in depression on top of the granite, from close to the surface to a depth of 200 feet.

The magnetic exploration for minerals, such as was used in this survey, is based on the fact that the earth acts as if it contained at its center, a spherical magnet surrounded by a magnetic field of force. If this magnetic field were contained in a single homogeneous substance it would be perfectly symetrical. But the outer shell of the earth lies within this magnetic field, and the earth's crust is composed of rock formations which differ in mineral content and therefore differ in magnetic permeability—that is, some rocks permit the passage of magnetic force much easier than others.

These lines of magnetic force crowd through rocks of high magnetic permeability and avoid rocks of low magnetic permeability. To make it plainer, consider this magnetic force water. Water passes through a coarse screen much faster than it passes through a fine one.

The clays and other formations which lie over the granite, on which the bauxite lies, and the bauxite itself are of low magnetic permeability. On the other hand, the granite on which the bauxite occurs, contains magnetite, which is magnetic, and the magnetic lines of force crowd through it readily, and are easily recorded on the magnetmeter. The logical conclusion then was that the bauxite would be found over more or less of the area in which the granite was located.



Pictured here (above) is a Hotchkiss superdip magnetmeter. At the left are some types of divining rods, showing how they are held.

Old Methods of Hunting.

There has been an urge in the human breast from the beginning of time to see beneath the crust of the earth and locate valuable bodies of mineral before spending any money or physical effort in actual digging.

Taking advantage of this urge, fakirs have invented many different kinds of mineral rods, to sell to the most credulous in and out of the mining profession. Millions of dollars have been invested in them to no successful end. They were made to sell, not to work.

Despite modern science and radio detecting machines, core-drills and other means of locating hidden gold, the immeasurably ancient divining rod still holds its own and is relied upon implicitly by many people. And, strange and incredible as it may seem, even hard-headed scientists who have carefully studied the divining rod have been forced to admit that there are certain mysteries and inexplicable features of the device or of its users.

Divining Rods Discussed.

Not that such eminent men as Prof. W. F. Barrett of the Royal College of Science of Ireland, believe that a forked hazel twig possesses occult power to indicate the presence of hidden gold or underground water. On the contrary, even the "dowsers," as they call themselves, freely admit that almost any twig, or even a piece of bent wire, will serve as well as hazel or anything else. But Professor Barrett, and other scientists, do believe that the dowsers possess some instinct or subconscious knowledge which affects their nerves when passing over water or other matter for which they are searching, and that this subconscious suggestion reacts through their muscles to bend the divining rod downwards. In his long and voluminous report on his investigations of the subject, Professor Barrett says:

"About 10 or 15 per cent of their (the dowsers') successes cannot be explained, nor can they be accounted for by chance or lucky hits, the proportion being larger than the doctrines of probability would account for. This residue no known scientific explanation can account for. Personally I believe the explanation will be found in some faculty akin to clairvoyance; but as the sciences of today do not recognize such a faculty I prefer to leave the explanation to future investigators and to throw on the skeptic the task of disproving my assertions and giving his own explanations."

Until science stepped in during recent years the surest methods of locating minerals were by drilling, after a competent geologist had located the site, by finding outcropping ledges of the mineral sought, or by finding float and tracing it to its source.

But new scientific instruments that record magnetic lines of force and sound waves are much more certain. It is not far fetched to say that in all probability, within another decade most of the major prospecting operations will be done with such instruments, and the depth and area of the ore bodies determined before a hole is ever drilled or dug in the earth.

Aluminum Co. Held 100 Pct. Monopoly

Washington, Jan. 25.—(AP)—Calling the Aluminum Company of America a "100 per cent monopoly," Attorney General Cummings said today that he had ordered a recheck of an investigator's report submitted to him concerning affairs of the company. Cummings said that the company, controled by the Mellon family, exercised a monopoly in production of aluminum. Gazette. 1-26-34

He added that the company's subsidiaries were engaged in the fabrication end of the business and that it was this phase of the company's activities which he wanted rechecked.

Cummings said a decision concerning action to be taken by Department of Justice with reference to Andrew Mellon's income tax returns which have been under investigation would be forthcoming within a week.

PWA to Investigate Bauxite Mining in Mississippi.

Gazette June 17, 1934

Eupora, Miss., June 16.—(AP)—Ned Lee of Eupora, said today he had received a letter from Congressman Jeff Busby saying that the PWA would investigate possibilities of mining bauxite in Webster, Winston, Choctaw, Chickasaw, Calhoun, Union, Benton and Tippah counties.

Ore Plant Near Bauxite Resumes Operations

Benton, June 14.—(Special.)—One of the most important industrial improvements made in this county since the depression began to show signs of passing, was the resumption of operations by the American Cyanide Corporation, successor to the Superior Bauxite Company, which had been closed down since August, 1931.

This company's plant and mines are located in the Mt. Olive community, about six miles east of Bauxite, and are next in size to the Republic Mining and Manufacturing Company's plant at Bauxite.

The Cyanide Corporation plant turns out an aluminum ore product suitable for chemical purposes and it is understood that it has sufficient orders to justify operation at full capacity. A crew of about 60 men has been put to work, which means a weekly payroll of about $500.

Practically all of the laborers are men living in the community where the plant is located and their being given work spells almost the end of the depression so far as that section is concerned, and especially to the large group of men who have been out of work since the plant was shut down nearly three years ago.

From One Car of Ore Mined 35 Years Ago by Farmer, Bauxite Industry in Arkansas Grew to Be One of Greatest in World

Democrat Sept. 16, 1934

By STEELE KENNEDY.

The name of Dr. John C. Branner will be identified with Arkansas' geological history forever. He discovered and made known many of the state's valuable mineral deposits. He discovered bauxite in Saline county in 1891, resulting in an Arkansas product, aluminum, finding its way into the markets of the world. It is one of the state's greatest resources.

These deposits, found only in Saline and Pulaski counties, furnish 60 per cent of the world's supply and 90 per cent of all the aluminum mined in the United States. The largest deposits are found within a 12 square mile area in the vicinity of Bauxite, Saline county. The deposits in Pulaski county are a few miles south from Little Rock, near Sweet Home.

Columbus Brazil, a farmer living five miles south from Bauxite, 'squared" himself on a small goods box in his crib and quit shucking corn one day last week to sketch the beginning of the industry, 35 years ago.

Mr. Brazil was the first local employe. He has the distinction of having mined the first car of ore shipped from Arkansas. After serving as general mine foreman 20 years, and as head of the labor department 10 years, he retired two years ago to go home and manage his 500-acre farm. He helped build that two-million-dollar bauxite plant on the hill where he attended school in his boyhood days, at the old Antioch schoolhouse. He helped clear the forest and saw the town spring up where he once hunted turkey and deer. He has taken millions of dollars worth of rich aluminum ore from hills he and his forefathers considered worthless for aything except growing timber.

"Half a dozen families were living in the neighborhood when Dr. Branner came through and discovered bauxite in '91. We were engaged in farming, never dreamed the land we tilled was rich in a valuable mineral, Our nearest postoffice was Bryant, three miles north, or Benton, the county seat, five miles west. There were dim wagon roads to each place, where wide graveled highways are.

"Things didn't begin happening around there until about 1895. R. S. Perry began buying up our land. L. Stortbz of Little Rock got ahead of him by purchasng a 160-acre tract, the present location of the plant and town of Bauxite. He paid $6,000 for it and sold it to the Pittsburgh Reduction Company, now the Aluminum Company of America, for $40,000 after a carload sample of ore was shipped to the company's plant in Pittsburgh. The ore tested 57 per cent aluminum. Immediately Arkansas appeared in the spotlights among financial circles in the East. Speculation ran pretty high.

Mining the First Car.

"The vein was near the surface. We dug the ore with picks and shovels and piled it in two rows, 40 feet wide and three feet high. I kept a log heap fire burning all around it for 72 hours. That dried and bleached it. Then I hauled it in my wagon to Bryant, the nearest railroad point. I received a dollar a ton for my work and was glad to get the job. It required me and two helpers a week to do the work."

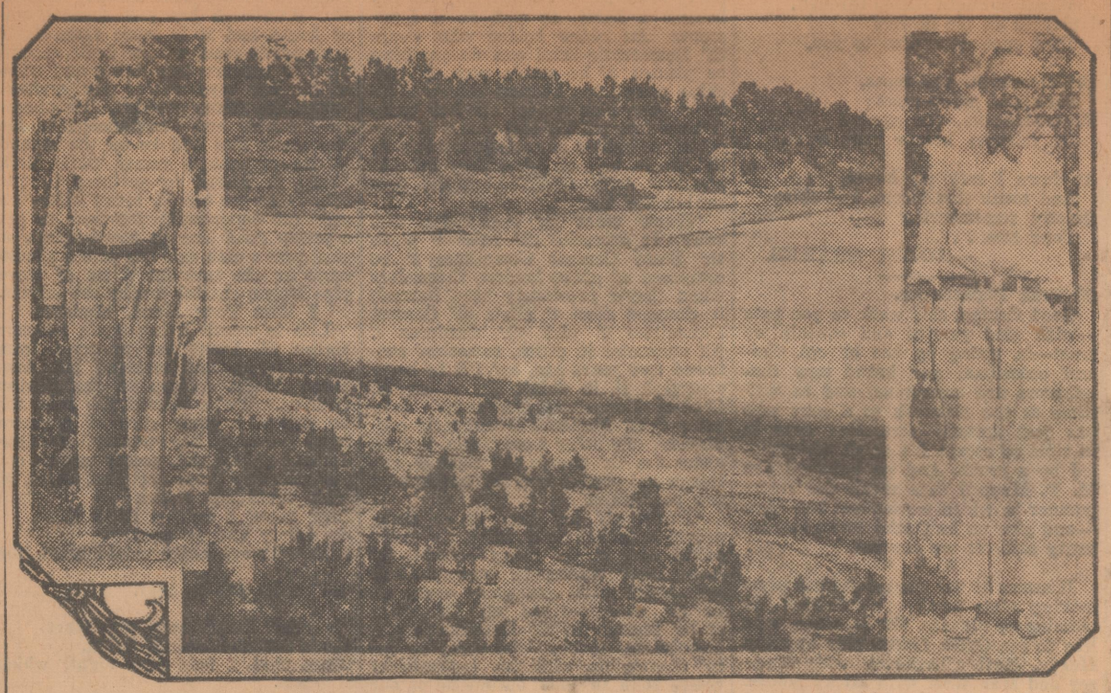
A quarter of a mile west from where Mr. Brazil "pioneered" in the mining of bauxite, six gigantic iron kilns, averaging seven feet in diameter and 70 feet in length, equipped with metal conveyors and elevated bins, now dry and load 50 cars daily. The ore is not lifted by the hand of man between the mines and the car. Some development, indeed, in the bauxite mining industry within 30 years.

Little Rock First Headquarters.

In 1899 Colonel John R. Gibbons, superintendent of the Pittsburgh Reduction Company's mines in Georgia, was sent to Arkansas to buy ore properties for his company. He brought with him his son, Felton, who had just graduated from Georgia Tech and had taken a special course in bauxite chemistry at the company's plant in Pittsburgh. The Gibbons made headquarters in Little Rock. The first prospecting was done from here. Young Felton established a laboratory on the second floor of a store building across the street from the old Capital hotel, where samples of bauxite were analyzed and tested for aluminum content.

Colonel Gibbons made his way into Saline county by buggy and team over almost impassable roads. Columbus Brazil, living near the point of Dr. Branner's discovery, was one of the first men he met. "We could scarcely believe our eyes," declares Felton, "when we saw Mr. Brazil's house resting on pillars of bauxite and large bauxite boulders scattered over his field. The outcroppings were so much more abundant than in Georgia."

Headquarters was then moved to Bryant and Felton established the first laboratory in Saline county, in the rear of a store near the railroad track.



Left—Columbus C. Brazill, 70-year-old farmer who mined the first car of bauxite. Top center—One of the "lakes" where ore is mined. Below—Area where bau xite was first mined 30 years ago. Right—Felton Gibbons who tested the first bauxite in a crude labora tory in an old store on West Markham street in Little Rock in 1899. His father, Col. J. R. Gibbons, is know n as the "Father of Bauxite."

Operations Begun.

Surveying and purchasing of land was begun and Mr. Brazil was engaged as general mine foreman. The ore was hauled to Bryant in wagons, weighed on wagon scales, loaded into box cars, shipped to Memphis, transferred to barges and floated up the Mississippi and Allegheny rivers to the company's plant at New Kensington. Young Felton took samples from each wagon and analyzed it in his crude laboratory.

Within nine months purchases were made that guaranteed the company sufficient ore reserves to warrant the location of a plant in Arkansas. Colonel Gibbons left Felton in charge of operations here while he went back to Georgia to superintend operations there until someone could be found to take over that work. He came back to Arkansas October 1, 1901, began laying out the town and building a plant. He continued as general superintendent of the Arkansas works until his death, in 1919. His name is venerated by all who knew him.

Felton Gibbons is superintendent of the Norton Bauxite Company at Bauxite. Their products are shipped to New England where they are used mainly in the manufacture of abrasives.

The $40,000 the reduction company paid Mr. Stortz for his 160 acres would have purchased half of Saline county 10 years before. This, however, was the most valuable spot within the deposit area. The company now owns 6,000 acres surrounding Bauxite. The richest deposits of ore are found on 200 acres near the plant.

Plant Established 1902.

The first dry kiln was installed in 1902. It was cylindrical, seven feet in diameter, 30 feet long and made of sheet iron. A steam engine furnished the power and a wood-burning furnace the heat.

The modern kilns are operated by powerful electric motors and heated with natural gas, to a temperature of 200 degrees, a heat impossible to obtain with wood. These kilns are placed at a 10 per cent incline, resting on rollers and made to revolve slowly. The ore is poured in at the upper end and passes through the kilns by this revolving process, while the intense heat and draft carry the moisture out, in the form of steam, through large smokestacks. The dry hot ore empties on metal conveyors and is deposited in elevated bins, ready to be loaded, through "chutes," into box cars.

Approximately 170 tons of ore were shipped the first year, with the equipment then at hand. Now it is possible to ship 600,000 tons annually, with improved machinery.

Twenty-three miles of portable track, 11 "dinky" coal burning locomotives and 900 two-ton tilt-body cars have replaced the endless lines of mule-drawn wagons, carrying the ore from mines to mill.

The company employs between 800 and 2,000 people, in the mines, at the plant and in the offices, during normal operations and the annual payroll often exceeds a million dollars.

Induced by prospective tonnage of ore, the Little Rock and Hot Springs Western railroad (now the Rock Island) nosed its way into Bauxite in 1902. In 1906 the Pittsburgh Reduction Company built a short line, the Bauxite Northern, from its plant to the main line of the Missouri Pacific, three miles north. These carriers provide most excellent shipping facilities and the competition has been much in the mining company's favor.

Locating and Refining Ore.

The depth and extent of ore deposits are determined by drilling test holes in the earth. The average vein is about 12 feet thick. About 60 per cent of the ore is obtained by surface mining, after the top soil is stripped by steam shovels and road slips.

Fifteen miles of underground tunnels are laid wih portable track where "dinky" train loads of ore are pulled to the surface by motors equipped with large storage batteries.

The top layer of ore is usually harder than lower strata and has to be crushed before going through the kilns. Green ore varies from five to 20 per cent moisture content. Dry ore has less than one per cent moisture when it leaves the kiln.

The color varies from yellow to red, blue or grayish. Variation in color is due to foreign matter and does not indicate the value of the ore or its aluminum content. Dry ore leaves the kilns a creamy colored powder. It is sent to East St. Louis where the iron, silica and other foreign elements are extracted, reducing it to a silvery white dust.

An immense amount of electricity is used in extracting pure aluminum. For that reason it is sent from East St. Louis to Niagara Falls, Massena, Ohio, Bodin, North Carolina, or Alcoa, Tennessee, where cheap electricity is available.

About 400 pounds of aluminum is obtained from an average ton of ore, requiring the use of 27 tons of coal and other materials and 700,000 tons of water in the process of refining.

A ton of green ore at the mines is worth about $2. Dry ore at the plant about $5.50. Pure aluminum prices vary according to prevailing market quotations.

Bauxite Deposits Various.

Geologists say about eight per cent of the earth's crust, to a depth of 10 miles, and one per cent of the entire earth is aluminum.

This valuable mineral was first discovered by a French chemist, P. Berthier, in 1821, at Les Beaux, France. The word "bauxite" (pronounced box-ite) originated there many years later. The richst bauxite deposits known are in France. French ore averages 62 per cent aluminum. Arkansas ore, the best in America, averages 57 per cent.

Bauxite is found in paying quantities in Australia, Hungary, Italy, the Guianas, Brazil, Ireland, Germany, Roumania, Spain, Yugoslavia, Africa, India, Venezuela, Russia and China.

In the United tSates, it is found only in Alabama, Georgia, Mississippi, Tennessee and Arkansas.

Bauxite is used in the manufacture of artificial abrasives, refractories, alum, refining oil and in various chemical compouds. Its greatest value is in the metallic aluminum.

We think of aluminum in terms of shiny pans, kettles and other kitchen utensils. Such articles are to the aluminum industry what nails are to the iron industry—only a small part.

Half the American output is consumed in automobiles. Airplanes are using increasing amounts of aluminum because it is lighter than other metals, being one-third the weight of copper, three-eighths of iron and one-fourth of lead, rust-proof and a good conductor of heat and electricity. It is used in tables, wiring and paints. Some of the latest uses are in the manufacture of cement, plumbing fixtures, furniture and lacquered aluminum ornamentation.

Bauxite a Model Town.

One usually thinks of a "company-owned" mining town as an accumulation of shacks or hovels, in which the families of the miners stay while the men dig out a pitiful existence in dangerous, ill-ventilated underground mines; no social life or religious environment, little school, if any, no system of sanitation or modern conveniences, commissaries where employes are forced to buy their supplies at exhorbitant prices—places where the big bosses drive out from fine city homes in luxurious automobiles to tell the laborers what to do.

Such is not the case at Bauxite. Since its beginning there have been but three general superintendents, Colonel Gibbons, John T. Fuller and the present one, R. L. Branting. Each has exhibited more than a mere interest in their company's individual welfare. They have worked diligently for the comfort, peace and happiness of the community, in which they live and are a vital part.

The streets are graded and oiled. Homes provided for the employes, though not so elaborate, are well arranged, neat, convenient and comfortable. Malaria, typhoid and similar diseases are unknown because of strictly enforced sanitary measures.

A modern hospital and a nine months' free school, including a four-year high school, are maintained, even through the depression. A city park, athletic field, golf course and community house facilitate athletic sports, recreation and get-together meetings. Its churches are well attended and exert a religious influence over the community. These benefits are extended gratis to the surrounding districts.

She people, from garbage haulers and ditch diggers to the general superintendent, except a few negro laborers, are white American citizens whose honor, integrity and self respect are reflected in their well kept premises, flower gardens and mowed lawns. Modern conveniences are supplied at minimum costs and no sovereign right otherwise accorded a free people is denied any employe.

Ninety per cent of the homes have a piano or other musical instrument and the town has a well organized brass band.

The company spends between $30,000 and $40,000 each years to maintain these standards for its people, in addition to paying a similar amount in county and state taxes and a $16,000 state severance tax.

Laziness, defaming gossip, drunkenness or trouble making are not tolerated. The result is a free intelligent and contented people.

A system of forest protection and reclamation is practiced on the thousands of wooded acres surrounding the town. Forest fires are suppressed and the timber crop is harvested systematically. Picturesque miniature lakes have formed in low places where millions of tons of precious ore have been mined. Mother nature is returning to these barren places, slowly reclaiming her own. She redecorates them with fringes of pine and cedar. It is a long tedious process but aided by the watchful care and protection of the company, wide ugly gashes in the yellowish-red earth are beginning to heal and become beautiful again.

A century after all the bauxite ore and mills are gone future farmers may grow crops where Mr. Brazil dug the first car of ore.

Believes Proposed Bauxite Tax Would Harm the State.

To the Editor of the Gazette:

One of Arkansas's most noted industries is the mining of bauxite ore—but she does not have a monopoly on it as the legislature seems to think. The proposed tax on bauxite will not bring in any revenue but it will throw hundreds of Arkansas men out of work, simply because the Aluminum Company of America can get their ore from their plants in South America, Georgia, Alabama and Tennessee. True there are a few small plants in Arkansas that do not mine in other states, but they would have to close down for how can they compete with plants in other states that are not taxed? Surely no other company has considered the welfare of its employes as have the bauxite companies.

W. A. Hinser.

Sweet Home, Ark.

Inside Story Of Aluminum Trust

Pub at Meridien, Miss and New Orleans La

American Progress

Mellon's Gang Have Things Their Own Way In This Huge Monopoly

May 1935

WASHINGTON.—Proof that Andrew Mellon and his family have been shattering the lives and businesses of little men through their one-family control of one of the most heartlessly vicious industrial monopolies in the world, came last month in a report on the aluminum industry, submitted to the National Industrial Relations Board by Lon Henderson, director of the NRA Research and Planning Division.

Since this proof was a matter of presentation from one branch of NRA to another, the charges were in language appropriately mild in cognizance of the fact that nothing will be done about it. Contained in this mild-mannered report, however, is a picture of capitalistic chattel slavery as it is created and maintained by such men as Mellon and his ilk.

The report shows that through control of the entire aluminum industry both here and in Canada, and hence through control of the International Aluminum Cartel of the world and domination of raw material prices, Mellon has monopolized production and controlled prices to the extermination of nearly all small competition.

The report pointed out that prior to 1928 the aluminum-making facilities of Canada were owned by the Aluminum Company of America, a Mellon-controlled corporation, but in the latter year a separate corporation, Aluminum, Ltd., was set up, while the control remained in the same hands as previously.

Mellon & Family

A chart in the appendix showed that the family and associates of Andrew W. Mellon, former Secretary of the Treasury, controlled 1,023,100 shares of the stock of the American concern, or 69.2 per cent of the total issued, and 433,078 shares, or 73.3 per cent, of the stock of Aluminum, Ltd.

"Accordingly, it is not surprising that, although Canada is the world's largest aluminum exporter, this country has never competed in the United States market with domestic aluminum," the report adds. "Practically all of the Canadian aluminum that has come to the United States has been handled by the Aluminum Company of America.

"Approximately equal amounts of aluminum are produced on the North American continent and in Europe. The European aluminum producing companies can be divided into two groups, viz: members of the international cartel and non-member countries.

Cartel Controls All

"The aluminum making facilities of the latter group are, however with one small and insignificant exception, financially controlled by the members of the cartel. The actual result is that the international cartel, which is identical with the Alliance Aluminum Compagnie in Switzerland, is a dominant factor in the formation of business policies for all European aluminum makers.

"This situation gains increased significance for the United States on the basis of the fact that Canada, which is so closely tied to the American aluminum company, became a member of the international cartel late in 1931.

"As the cartel contract has not been made public there is some doubt as to how far the cartel regulation of the industry goes. It is certain that the cartel fixed the raw aluminum price for European markets and prescribes a mandatory rate curtailment of production if markets are in a depressed state.

"Compliance of members to cartel edicts is made most effective by a provision which authorizes the above-mentioned Alliance Aluminum Compagnie to finance distressed stocks of aluminum, but makes such financing contingent on the adherence to the curtailment of production program."

The report considers the various charges made by independents against the Aluminum Company of America, especially those relating to alleged monopoly price, and points out, as previous reports have, that the Aluminum Company has predominant control of raw materials and 100 per cent control of the production of domestic virgin ingot.

In the fabricating field, the report states that the company "no doubt enjoys the advantages which are naturally inherent in the integration of all the stages of production."

Regarding the accusation of unfair price-cutting in fabricated product markets, it was said that "no definite conclusion can be reached because of the incompleteness of such cost data as have been disclosed and the fact that no general price lists are published for company products."

Price Domination

The "domination" of raw or unfinished aluminum prices in this country by the Aluminum Company of America was also reported by NRA. As a result of the study the NRA governing board renewed the controverted aluminum code until June 16 without the fair trade practice provisions.

Several independent aluminum fabricators have charged the aluminum company with attempting to squeeze them out of business by fixing the prices of their raw material and then turning out fabricated metal in competition at prices less than those of the raw material plus fabrication costs.

In regard to these complaints the report said in part:

"In some lines of fabrication the aluminum company's costs appear to be below those of the others, and there is nothing to indicate that the company indulged in unfair methods of price competition. In other instances there is evidence that the company sold below cost of fabrication or at least without allowing a profit

CONSTRUCTION OF PLANT UNDER WAY

New Bauxite Operation Located South of City on Arch Street Pike.

Mar 31 1935

Construction of a bauxite plant has been begun by the American Cyanamid Company of New York about five miles south of Little Rock on the Arch Street pike, it was reported yesterday.

It was said that the plant when completed will represent an investment of more than $6,000 and will employ 15 to 20 men in addition to workers in the bauxite mines.

The new plant is near the plant of the General Abrasives Company. The American Cyanamid Company also operates a bauxite plant at Goodmansburg, near Bauxite.

Mar 7 1935

INCORPORATION MATTERS.

The Arkansas Bauxite Corporation and the West Bauxite Mining Company, both incorporated under the laws of Delaware, but with headquarters at West Bauxite, Saline county, filed copies of their articles of incorporation in the secretary of state's office yesterday and designated resident agents. The Arkansas Bauxite Corporation is capitalized at $30,000, with A. B. Prickett of Little Rock, president, and L. B. Burrow and F. J. Venner, other incorporators. The other company is capitalized at $10,000, with C. H. McGregor of Little Rock, president, and L. B. Burrow and L. J. Harrington, incorporators.

Jacks Thomas Paint Company of Clarendon, articles of incorporation; capital stock, $300; incorporators, J. P. Jacks, E. J. Thomas and E. Thomas.

Field Work in Survey of Bauxite Area Completed.

June 18 1935

The field work on a PWA project for a survey of the bauxite areas of Saline and Pulaski counties has been completed by the United States Geological Survey, Dr. G. C. Branner, state geologist, said yesterday. The survey was started last July and cost approximately $12,000. Fifty-five test holes were drilled to an average depth of 150 feet, with the deepest being 464 feet. The object of the survey was to determine as nearly as possible the boundaries of the area within which bauxite deposits may be expected to be found. The Arkansas Geological Department probably will publish a report on the survey when the field notes are edited.

PROTEST DIRECTED TO ALUMINUM FIRM

Arkansas Suggested as Plant Location by C. of C. President.

Aug 1 1935

A letter protesting proposed location of a $20,000,000 aluminum plant at Decatur, Ala., without giving Arkansas even passing consideration was written yesterday by Henry H. Tucker, president of the Little Rock Chamber of Commerce, to the Aluminum Company of America, Pittsburgh, Pa.

Bauxite is the principal ore from which aluminum is manufactured and Arkansas is a large producer of the ore.

Mr. Tucker's letter follows:

"On August 3 an Associated Press article carried information that the Alabama Industrial Authority announced that the Standard Aluminum Alloy Corporation of Chicago, Ill., had requested the Authority to open negotiations with the National Emergency Council in Washington for financing a $20,000,000 aluminum plant at Decatur, Ala. The article continues to recite that the corporation owns extensive bauxite properties in Saline county, Arkansas.

"Knowing as we do that your subsidiary, the Republic Mining and Manufacturing Corporation, holds title to the most extensive body of bauxite in Saline county, we are quite concerned as to the article in question. It is the belief of the Little Rock Chamber of Commerce, from communications that have been directed to it and remarks that have been made to its officials, that the people of the state of Arkansas will regard it as an unforgivable affront to their prestige and to their economic destinies if such action were taken by your corporation or any affiliates, particularly if such action were taken without an investigation as to the possibilities of obtaining equally satisfactory operating overhead within this state. It is our feeling that Arkansas possesses the background for the development of a real aluminum industry and that the establishment of such an enterprise or enterprises within Arkansas would meet with high favor and the consideration of its citizenship. Certainly, the citizenship of this state will not view with equanimity an operation in which the final result is that it has been denuded of a valuable asset without reasonable attending return to its people.

"It may be that the corporation listed is not a subsidiary of your corporation and that you do not contemplate at this time any increase in your present operations. If such is the case we would appreciate such information as you can give us regarding the company under question."

ALABAMA MAY GET ALUMINUM PLANT

Arkansas Bauxite Holdings Cited by Concern Seeking Federal Aid.

August 13 1935

Montgomery, Ala., Aug. 2 (AP).—The Alabama Industrial Authority announced tonight that the Standard Aluminum Alloy Corporation of Chicago, Ill., had requested the authority to open negotiations with the National Emergency Council in Washington for financing a $20,000,000 aluminum plant at Decatour, Ala.

The authority was created under a "New Deal" act of the Alabama legislature to encourage new industries to locate in Alabama, and assist these industries in obtaining loans from the government to finance their establishment and operation.

Attorney General A. A. Carmichael, authority commissioner, said the request would be acted upon next Wednesday.

The request stated that the corporation owns extensive bauxite ore properties in Saline county, Arkansas, and plans to produce pig aluminum from this ore at a huge reduction plant at Decatur, using electricity from the Tennessee Valley Authority and coal from the Birmingham district.

The attorney general said that he understood the plant would employ thousands of people, and that the ultimate investment, if the plan carries through, would be substantially larger than the original $20,000,000.

A NATURAL QUESTION IN THE BAUXITE STATE.

A Pine Bluff reader asks why Alabama and not Arkansas should be selected for a proposed $20,000,000 plant to produce pig aluminum from Arkansas bauxite.

This project is in the promotional stage at present, but it should be informative and useful to find out why the state that produces practically all the domestic aluminum ore, bauxite, was passed by for another state as a location for processing the ore into metal. 8-19-35

Several things that might have a bearing on the matter suggest themselves tentatively. Gazette

A plant for reducing bauxite and refining aluminum must have abundant, cheap supplies of a special type of coal, and of electric power. Decatur, Ala., lies convenient to the coking coal deposits of the Birmingham area. It lies in the zone where TVA proposes to sell electric power at minimum rates.

The question of freight rates and access to markets may come in. Alabama lies east of the "Mississippi crossing" points which increase the cost of freight shipments into and out of Arkansas.

The Alabama legislature created a state Industrial Authority to encourage new industries to come into the state and assist them in obtaining government loans. In fact it was an application by an aluminum products corporation for the authority's assistance in negotiating with the National Emergency Council at Washington that brought this Decatur project into the news.

The better we know our situation with respect to various forms of industry the surer the steps we can take toward industrial growth and toward removing conditions that may stand in the way of our obtaining certain industries.

Manufacture of Aluminum In Arkansas Declared Impossible.

Gazette 8-22-35

To the Editor of the Gazette:

At a legislative committee hearing last winter the principal of an Arkansas high school challenged me to a duel because I took issue with his assertion that Arkansas produces 90 per cent of the bauxite consumed within the United States. After some argument he suggested that current textbooks and Arkansas promotional material must be all wrong—which they are.

His lack of knowledge was on a parity with that of thousands of Arkansans who are eternally suggesting that the state, through taxation or other means, should force the production of metallic aluminum within its borders. Constant agitation ultimately can only result in direct action by zealous statesmen in the assembly and when that time arrives Arkansas's bauxite deposits will become as idle as the once active and profitable fuller's earth deposits. The bauxite industry of Arkansas already is hanging by a thread and little would be required to put it out of business.

Arkansans should ignore aluminum and center their attention upon chemical products derived from bauxite, for approximately half of all the bauxite processed in this country is converted into chemical products rather than metal. Production of aluminum in Arkansas is as impossible as the abolition of all forms of taxation. It can be done but it is economically unsound.

Production of one ton of aluminum requires five tons of bauxite and twenty-seven tons of other materials, few, if any, of which are available in Arkansas. It is preposterous to assume that a producer would move 27 tons of material from distant portions of the country to Saline or Pulaski county to combine it with five tons of bauxite when it is possible to move the bauxite to a central point near the other necessary constituents.

If this isn't sufficient to demonstrate that aluminum as an Arkansas product is out of the question there is still another obstacle which would make it impossible. Shortly before completion of Carpenter Dam the writer had occasion to make an exhaustive study of the possibility of aluminum production to discover that if an aluminum plant had access to every kilowatt of power available in Arkansas, leaving none for lights or the multiplicity of other uses, this power would be sufficient only for the operation of a plant employing 54 workers. Production of aluminum requires power in quantities available at only a few points in the country and it must be power in excess of all other needs and, consequently, available at a cost of only a few mills per kilowatt. How much would a 54-man aluminum plant mean to Arkansas if it left homes without lights, without power to run ice machines, dark streets, no telephones or telegraph lines, and so on?

Dudley V. Haddock.

Tampa, Fla.

Says Arkansas Should Realize It Has No Bauxite Monopoly.

8-25-35

To the Editor of the Gazette:

Much has been said and written recently concerning the proposed aluminum plant in Alabama. It is a logical location not only from the power viewpoint—for the excess output of the power plants at Muscle Shoals and Norris Dam will be available—but for the assembly of the necessary 27 tons of cryolite, limestone, soda ash, flourspar, the by-products of the coal tar and oil industries and the five tons of bauxite, the materials from which comes one ton of aluminum. Inasmuch as the 27 tons of other material originate within the area or are produced east of the Mississippi river, the freight rate for their movement to Alabama is favorable.

Arkansas should, and some day will, produce a multitude of chemical products and abrasives from its bauxite. That field today offers the state its greatest industrial opportunity but agitation for the production of aluminum will postpone its attainment. The Industrial Committee of the State Planning Board should conduct a special study of the possible use for bauxite, ignoring aluminum entirely and centering its attention upon chemical derivaties.

Someone recently referred to Arkansas as the "Blunder" rather than the "Wonder" state. Certainly the term is appropos when one remembers the many errors of commission and omission of the past but no one familiar with the ardent love of the average Arkansan for his state and his interest in its advancement would assert that the blunders were deliberate. Rather the mistakes have been due to a lack of knowledge of what Arkansas possesses and what use may be made of it. So far as bauxite, or alumina, is concerned, it is the most plentiful of all the earth's minerals—it is found in every cubic foot of earth on the globe—and the quicker Arkansans realize they have anything but a monopoly the better will it be for the state.

Dudley V. Haddock.

Tampa, Fla.

Believe That Aluminum Can B Refined in Arkansas.

Aug 29 1935

To the Editor of the Gazette:

In this column last Sunday there ap peared an article by a Dr. Haddock Tampa, Florida in which he stated thi it was absurd to think of refinir aluminum in Arkansas, and proceede to tell why.

It is in the cause of our own sta that we are challenging his statement Although we are not certain as to th source of his information, the followin is from a reliable source, unbiased personal opinion. (Industrial chemist by Riegel). In the Hall process (th only commercial one) the only ra material used in appreciable amount bauxite. Although aluminum is o of the most plentful elements in th earth, it is common knowledge th bauxite is the only abundant miner from which the metal can be won, and Arkansas contains one of the few deposits of bauxite profitable to work. Other than bauxite, an initial supply of cryolite and custic soda is necessary. Cryolite comes from Greenland, tariff-free, and caustic soda is made at Niagara Falls; these materials are not consumed but are used over and over again. Although fluorspar is used to adjust the density of the electrolytic bath, the consumption is small enough to be negligible.

Power is an important factor, but in this respect, Arkansas is as well situated as Alabama. In the coal deposits of Arkansas there lies a potential supply of power which could be produced at the mines at a rate comparable to that in Alabama.

In closing let us say that it is a well known fact among engineering circles that the technical problems connected with aluminum refining in Arkansas has been solved.

W. S. McAllister.
James Allen.

Little Rock.

Says Bauxite Offers Arkansas A Wonderful Opportunity.

Sept 1 1935

To the Editor of the Gazette:

Renewed discussion of the industrial possibilities in Arkansas's bauxite deposits is gratifying because for the first time, at least during the last six years, communications to the Gazette upon this subject are constructive rather than destructive. It was with this objective that the writer was prompted to address to you recently the communications which seem finally to have aroused Arkansas who realize what the state is neglecting.

It is to be hoped that this interest will increase, to the end that Arkansas will forget aluminum and direct its attention to the marvelous opportunity to convert its bauxite into abrasives and the many chemicals derived from it. The demand in the Southwest for alum alone is sufficient to warrant the establishment of an alum plant in Pulaski or Saline county. The bauxite is there and the necessary sulphuric acid is easily obtainable from Louisiana. Raw bauxite, caustic soda and water, mixed and brought to the boiling point produces probably the world's most effective water softener. Cement manufactured of bauxite, such as is generally used throughout Europe, hardens in 24 hours to the point which ordinary portland cement attains only after 28 days. The drill the dentist employs to prepare a cavity and the common "emery" wheel in the garage and machine shop are nothing more than bauxite treated in a certain manner. In brief the field is so enormous in this direction Arkansans should hang their heads in shame for having wasted their time thinking about aluminum.

Please understand that the writer is not seeking to be critical. He regards Arkansas as one of the most wonderful and one of the most attractive areas on the globe but believes its good people are deserving of far more than they are deriving from it. It is for this reason that he seeks to interest them in getting down to earth and making use of one of its greatest natural assets.

Dudley V. Haddock.

Tampa, Fla.

Lieutenant Governor Advocates High Tax on Bauxite.

Sept 7 1935

Clarksville, Ark., Sept. 7 (AP).—Lieut. Gov. Lee Cazort, addressing a Democratic rally here tonight, demanded that Arkansas levy a high tax on bauxite, furnish free text books for school children and sponsor government ownership of utility companies.

"I am not running for office and this is not demagoguery," Cazort said.

He said the state should "double, triple or even quadruple the present rates" on bauxite as the first movement in a system of higher taxes on the rich. Free text books should be supplied to the eighth grade, he said. He declared that the way out of unemployment is not through relief but by a return of the unemployed to the farms.

The rally was sponsored by the Clarksville Young Democrats Club.

ARKANSAS AND ITS BAUXITE AND INDUSTRY.

A national concern owning large bauxite properties in Saline county is seeking a $20,000,000 federal loan to erect a plant at Decatur, Ala., to convert this Arkansas ore into pig aluminum. A Pine Bluff reader of the Gazette asked the natural question, Why not build the plant in Arkansas, where the ore is mined?

Dudley V. Haddock, former secretary of the Arkansas State Chamber of Commerce, answered from Tampa, Fla. He said that to make one ton of pig aluminum it is necessary to assemble only five tons of bauxite, but 27 tons of cryolite, limestone, soda ash, fluor-spar and other substances that can be transported to Alabama at freight rates more favorable than those prevailing west of the Mississippi river. Therefore the practical thing is to move five tons of Arkansas bauxite to Alabama rather than bring 27 tons of other chemical material to Arkansas. Gazette

But Mr. Haddock then pointed out that only half the bauxite processed in the United States is converted into metal, the remainder going into abrasives and a wide range of other products of chemical industry. He urged Arkansans to center their attention on the chemical industries using bauxite as their chief raw material. Sept 9, 1935

Publication of Mr. Haddock's communication brought letters from several Gazette readers who differed with him in some particulars. But that was all to the good. It is an excellent thing to have free discussion of such matters as these.

Arkansas has certain advantages and certain disadvantages as respects different lines and branches of industry. The practical and constructive course is to find for what industries the conditions here are most favorable, and whether disadvantages that exist for other industries can not be removed. If, for instance, Arkansas is a disadvantageous location for an aluminum plant but can produce a multitude of chemical products and abrasives from the bauxite, we should be making every effort to make the most of these opportunities.

PLANS NO BAUXITE REFINERY IN SOUTH

Aluminum Company of America Replies to C. of C. President's Inquiry.

Sept. 15, 1935

The Aluminum Company of America, which has extensive bauxite operations in Arkansas, has no intention of establishing a Southern refinery and is not connected with the Standard Aluminum and Alloy Company of Chicago, which is planning to build a plant at Decatur, Ala., Henry H. Tucker, president of the Little Rock Chamber of Commerce, was informed yesterday.

Mr. Tucker wrote the Aluminum Company of America to ask whether it was interested in the proposed Decatur plant and, if so, why Arkansas had received no consideration from the company.

Roy A. Hunt of Pittsburgh, Pa., president of the company, said he had received similar letters from other Southern states but that his firm was not interested in a Southern refinery. Its ore is now refined at East St. Louis, Ill.

ays Arkansas Should Realize It Has No Bauxite Monopoly.

8-25-35

To the Editor of the Gazette:

Much has been said and written recently concerning the proposed aluminum plant in Alabama. It is a logical location not only from the power viewpoint—for the excess output of the power plants at Muscle Shoals and Norris Dam will be available—but for the assembly of the necessary 27 tons of cryolite, limestone, soda ash, flourspar, the by-products of the coal tar and oil industries and the five tons of bauxite, the materials from which comes one ton of aluminum. Inasmuch as the 27 tons of other material originate within the area or are produced east of the Mississippi river, the freight rate for their movement to Alabama is favorable.

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Someone recently referred to Arkansas as the "Blunder" rather than the "Wonder" state. Certainly the term is appropos when one remembers the many errors of commission and omission of the past but no one familiar with the ardent love of the average Arkansan for his state and his interest in its advancement would assert that the blunders were deliberate. Rather the mistakes have been due to a lack of knowledge of what Arkansas possesses and what use may be made of it. So far as bauxite, or alumina, is concerned, it is the most plentiful of all the earth's minerals—it is found in every cubic foot of earth on the globe—and the quicker Arkansans realize they have anything but a monopoly the better will it be for the state.

Dudley V. Haddock.

Tampa, Fla.

Takes Exception to Some of Mr. Haddock's Statements.

Aug 31-1935

To the Editor of the Gazette:

As the letter from Dudley V. Haddock under the heading "Says Arkansas should realize it has no bauxite monopoly" has caused comment I am prompted to compliment Mr. Haddock on the expressions of encouragement but must file exception to certain of his statements.

Wonderful opportunities are here for the production of chemicals and abrasives from Arkansas bauxite and the time and market conditions are ripe for their development awaiting only the disposition of capital to invest. Reduction of bauxite to aluminum however is a large and complex business requiring many millions of capital and an experienced and skilled organization of chemists and engineers.

The information given by Mr. Haddock about the raw materials used in reduction of bauxite to aluminum "originate within the area or are produced east of the Mississippi river" is inexact. All cryolite comes from Iceland. Limestone is plentiful in Arkansas. Large and modern plants now product caustic soda and soda ash at Baton Rouge, Lake Charles and Corpus Christi. By-products of the coal tar and oil industries are found nearer to Little Rock than to the reduction plant of the Aluminum Company at East St. Louis.

Mr. Haddock says "so far as bauxite or alumina is concerned, it is the most plentiful of all the earth's minerals—it is found in every cubic foot of earth on the globe—and the quicker Arkansas realize they have anything but a monopoly the better it will be for the state."

This statement is of the same character as one announcing that iron exists throughout the world or that gold may be extracted from ocean water. The aluminum which is "so abundant" is no nearer being in commercial form or quantity than is the iron oxide or the gold.

Chemists have worked for many years in efforts to extract alumina from clays running 40 per cent, or higher, in aluminum oxide and they have met with no commercial success.

The ore of aluminum available for commercial use is found only in bauxite (hydrated aluminum oxide) and the fact remains that Pulaski and Saline counties, in Arkansas, have a practical monopoly of this ore in North America. The production of Georgia and Alabama is negligible, being only some 10,000 to 15,000 tons a year, as against a normal production in Arkansas of 350,000 to 400,000 tons.

While we do not treat and process the ore, we do hold a pratical monopoly on it, and can hope that the time will soon come when we will have plants in Arkansas to process and finish chemicals and abrasives. As Mr. Haddock says "this field today offers the state its greatest industrial opportunity."

John F. Evans.

Little Rock.

Big Aluminum Clay Silicate Deposit Found

Dec 14, 1935

Special to the Gazette.

Batesville, Dec. 13.—What is believed to be one of the greatest discoveries of aluminum silicate clay in the United States is claimed here by J. P. Herndon, 50, lumber manufacturer of Batesbille. The accidental find made about 30 days ago is located 40 miles northeast of here, in Lawrence county, and 10 miles north of the Missouri Pacific railroad.

Mr. Herndon made his find while prospecting for lead and zinc. The aluminum deposit was found on the edge of a creek bed where water had washed the dirt away from the chalky rock substance. He did not know at first what he had found. He chipped off pieces and sent them to assayers in Philadelphia, Chicago and Little Rock.

Geologists from all three places pronounced it a rich aluminum silicate clay. Assayers in Chicago went so far as to predict that if the material could be found in large quantities and properly mined, Mr. Herndon had stumbled onto a valuable find. Eastern capitalists have heard of the discovery and are making efforts to buy the lands, it was said.

The assay was pronounced 'the purest ever seen of its type" by state geologists.

Mr. Herndon has bought 120 acres of this land and says that he has explored in various sections and found the same chalk rock bed. He said that he has dug a hole 40 feet deep and still did not reach the end of the chalk bed.

Cheap farm houses surround the territory. Land in this vicinity has been valued cheaply since it could not be used successfully for the growing of crops.

Mr. Herndon said that he will either form a stock company and refine the clay here or sell the entire deposit.

Bauxite Plant Audits Net State $5,032

Dec 22 1935

Severance tax collections resulting from audits of records of five bauxite producers and one lime producer by J. Fred Brown, state severance tax agent, amount to $5,032.16, Dr. G. C. Branner, state geologist, reported to state Comptroller Griffin Smith yesterday.

The severance tax agent was appointed by Dr. Branner July 15 under Act 286 of 1935 providing for such an agent to work under direction of the state Geological Survey to determine whether provisions of the severance tax law have been complied with fully.

Transmitting a report on activities of the severance tax agent from July 15 to December 15, Dr. Branner wrote the comptroller that two of the five bauxite producers have paid $4,463.77 and the lime producer $568.39, without litigation, to adjust underpayments which extended over several years.

Mr. Brown now is engaged in auditing records of seven natural gas gasoline extraction plants. Dr. Branner said Revenue Commissioner Earl R. Wiseman has co-operated in the investigations and has furnished Mr. Brown an assistant from time to time.

Brown's report to Dr. Branner explained that bauxite is produced and sold either as green ore, as dried ore, or as calcined ore, depending on market requirements.

Green ore, which is ore in its natural state, contains an average of about 13 per cent free moisture and in addition about 30 per cent chemically combined moisture, the report said.

Recovery of Tax Reported

Severance Tax Agent Reports on Collection of Levies.

Dec 22-1935

The state recovered $5,032.16 in delinquent severance taxes from two bauxite producers and one lime producer during the period from July 15 to December 15, J. Fred Brown, severance tax agent, reported yesterday to Dr. George C. Branner, state geologist.

The report, showing an audit of the five companies producing bauxite in Arkansas, was forwarded to Comptroller Griffin Smith by the state geologist. In addition to the investigation of books of bauxite companies, which showed tax of $4,463.77 due the state, Mr. Brown investigated one lime company and collected tax totaling $568.39.

The severance tax agent, working under provisions of Act 286 of 1935, now is engaged in an audit of books of seven natural gas gasoline extraction plants. All collections of delinquent severance taxes to date have been made without court action, it was pointed out.

"The purpose of preparing these various audits was to determine the value of the crude ore at the point of severance and to require all producers to report and pay on an equal basis," Mr. Brown reported. "The amount of back taxes which has been received will equalize the taxes of all producers for the past five years."

As a result of the audits, producers were advised that a new schedule for computing the amount of tax would be effective after November 1, 1935. They were advised that they were to multiply their dried ore sales by 1.15 and their calcined ore sales by 1.65 to ascertain the correct tonnage to be valued at $2.25 per ton. This valuation is to be changed as market and cost conditions require, Mr. Brown said.

"I estimate that the additional revenues from these new rates will exceed $3,000 per year, this estimate being based on the past four years' distribution of sales," Mr. Brown reported. The new schedule set up for collection of severance tax on lime will increase by two-thirds the amount of tax paid to the state by this one producer, he said.

Producers have, so far, shown a willingness to co-operate with Mr. Brown in arriving at a fair estimate of the severance taxes due, Dr. Branner said.

Aluminum In The South

Feb 16 1936

The First Important Southern Activity in Connection With the Aluminum Industry Began in Arkansas at Bauxite.

By GEORGE R. GIBBONS

Senior Vice President, Aluminum Company of America.

(George R. Gibbons, the author of the following article, reproduced with special permission from the Manufacturers Record, is the son of the late Col. John R. Gibbons, who established and was superintendent of the Republic Mining and Manufacturing Company's plant at Bauxite. Colonel Gibbons remained as head of the plant until his death in 1919. His widow, the mather of the author of this article, still resides at Bauxite. Colonel Gibbons was transferred to Arkansas from Georgia by the Aluminum Company of America, which established the plant at Bauxite.)

If measured in tons, consumed aluminum ranks fifth in the scale of metals. This is truly remarkable when it is recalled that the commercial history of aluminum is less than 50 years old and that it has attained this rank in competition with other metals and materials whose uses are centuries old. It is all the more interesting in relation to the development of the South when one remembers that bauxite, the ore from which aluminum is extracted, was found in commercial quantities in Georgia about a half century ago, and that the hydro-electric possibilities of the South were recognized within the past quarter century.

The discovery by Charles Martin Hall, a 22-year-old lad, at Oberlin, O., made possible the modern commercial development of the aluminum industry. Interested in chemistry from boyhood, after his graduation from Oberlin College in 1885, Hall pursued his efforts to solve the metallurgical riddle of aluminum which had intrigued scientists since early in the Nineteenth century. He worked in an improvised laboratory in the "back woodshed" of his home. Believing that the electrolytic process was the method by which aluminum could be produced on a commercially successful scale, Hall patiently followed this line of experimentation until success finally crowned his efforts on the morning of February 23, 1886. Using molten cryolite as a bath in which to dissolve his ore of aluminum oxide, and substituting a carbon for a clay crucible, Hall sent the historic electric current from his home-made battery through the "charge" in his crucible there, at last, in the bottom of the crucible were the shiny globules of aluminum!

Prior to Hall's discovery, aluminum was produced by expensive chemical processes. Although the most common of the metallic elements and comprising one-twelfth of the earth's crust, the separation of aluminum from the compounds in which it exists was so difficult that prior to 1886 it was a semi-precious metal, never having sold at less than $8 a pound. The existence of aluminum had been foretold by Sir Humphrey Davy in 1807 and it had been isolated in metallic form by Oersted, a Danish chemist in 1825. A quarter of a century later, Deville, a French metallurgist, had devised a controlled but costly chemical method of producing aluminum. But it remained for Hall, the youthful son of a minister, whose family had moved to Oberlin, O., and who were pinching pennies to educate their children at the college located there, to achieve an invention which was to create a great industry and bring fame and fortune to the inventor.

When Charles Martin Hall died in 1914, he left to educational institutions a fortune amounting to $30,000,000. These beneficiaries were schools which provide an education for boys and girls in humble circumstances. One of them was his alma mater, Oberlin; another was a famous school of the South, Berea College at Berea, Ky. Those [illegible]

obstacles in his efforts to peddle his process in the manufacturing centers. Prospective financial backers were either unimpressed, lacked vision or wanted to allow Hall very little for his share.

The Pittsburgh group, headed by Capt. Alfred E. Hunt, agreed with Hall to undertake the commercialization of the new metal. This group raised the sum of $20,000 and incorporated a small experimental company, known as the Pittsburgh Reduction Company, and gave Hall, rightfully, a generous share of its stock for his patents. This small corporation constituted the commercial beginnings of the aluminum industry. Its experiments were to lead to the practical application of this new metal in many fields and the Pittsburgh Reduction Company was to become the Aluminum Company of America. It is interesting to bear in mind that this industry was inaugurated less than 50 years ago; today there is invested in it many hundreds of millions of dollars in capital and it gives employment to many thousands of men.

Some years prior to Hall's discovery, an ore rich in aluminum content had been found in France upon the estate of an ancient family whose name, Beaux, had been given to the village near which the ore was discovered. This newly found mineral was appropriately called "beauxite," later Anglicized by omitting the "e" in the first syllable. By purifying the ore through an elaborate chemical process, the oxide of aluminum is obtained. This oxide, known as alumina, is employed in many of the arts for purposes other than the manufacture of aluminum, its use in abrasives, alum and polishing compounds being among the most important.

Bauxite was first found in the United States in 1883 at Hermitage, near the town of Rome, Ga., and the ore was first shipped from Georgia for industrial use in 1889. In 1887, bauxite was found in Arkansas near Benton, about 22 miles west of Little Rock, by John C. Branner, Arkansas state geologist, although this discovery was not announced until 1889. It will be noted that these mineralogical discoveries of bauxite in the South, broadly speaking, coincided with the metallurgical discovery of the aluminum process in the North.

The bauxite deposits in the Southeastern states are found in northwestern Georgia, northeastern Alabama, southeastern Tennessee and central Georgia, and have been drawn upon extensively by the abrasive, chemical and aluminum industries, which grew very rapidly during the early years of the present century. At present these industries are also obtaining a large part of their bauxite supplies from the substantial deposits located in Arkansas. It is to be hoped that these are sufficient to meet the increasing industrial demands for this ore. Fortunately, the reserves of this important mineral in several foreign countries appear to be inexhaustible and could be drawn upon should our own deposits bcome depleted.

Mining bauxite by the open pit method at the Republic Mining and Manufacturing Company mine, Bauxite.

Hall's discovery of the aluminum process and the location of bauxite in the United States came at a time when electricity was becoming recognized as the chief source of power for performing man's work; and, indeed, the reduction of aluminum is an electrical process which employs greater quantities of electrical energy, relatively, than is used in the production of any other metal. The existence of bauxite within its areas, as well as the realization that great hydro-electric resources were located in the South, was the controlling factor in bringing the aluminum industry to that section.

From its meager beginning in 1888, the infant aluminum industry grew so lustily that its present and future need for electrical energy could, by 1910, no longer be satisfied by the power developments of Niagara Falls and Massena, N. Y., upon which it had at first relied. It became necessary, therefore, to seek out reliable hydro-electric resources so located as to be within reach of the markets for aluminum. A careful survey resulted in the selection of two sites in the Southeastern section of the United States as fields in which the aluminum industry should be further developed. One of these locations was at Badin, N. C., on the Yadwin river, and the other at Maryville, Tenn., on the western slope of the Great Smoky mountains, accessible to the Little Tennessee river and its tributaries. These selections were based not alone on the natural resources which were available but upon the intelligent legislative regulation and happy living conditions which it was anticipated would be realized and which experience has shown have been enjoyed.

The aluminum industry has accordingly located its most important fundamental operations in the South for the reasons that superior natural resources and excellent operating conditions are there available. These resources and conditions are several fold; Primarily, the existence of bauxite, the ore of aluminum; next, the existence of water power of a permanence, quantity and cheapness unequalled anywhere else in the eastern part of the country; and finally, unsurpassed climate and wise co-operation by state governments. These Southern locations were selected in the face of the fact that the principal markets for the products fabricated from the metal aluminum are to be found in the more northerly sections. The advantages, therefore, of Southern locations more than counter-balanced the cost of transporting the crude and semi-fabricated metal from the South to those point at which it is finally prepared for market consumption.

The aluminum industry has not failed to justify the welcome which was extended to it by the South, in that its operations have been conducted there in such a manner as to constitute a contribution to the welfare and happiness of its employes and neighbors and to this section in general. The first important Southern activity connected with this industry was begun at Bauxite, Ark., at the site of the present principal mining operations.

At this location there has grown up a town of model cleanliness and healthfulness; schools of the highest standards are maintained, and community houses and other similar social facilities insure excellent living conditions to those who derive employment from this activity.

At Badin, N. C., three dams in the Yadkin river generate electrical energy consumed to produce aluminum in a large plant at Badin. The living conditions here are the equal of any in the South. At

(Continued On Page 5.)

Alcoa, Tenn., is located a huge manufacturing plant, in which carbons are manufactured, aluminum produced, and aluminum sheet and plate rolled. The employes here work under splendid conditions. Their welfare is served by hospitals, swimming pools, schools and good homes. The electrical energy here employed comes from three immense dams in the Great Smoky mountains of eastern Tennessee and western North Carolina. At East St. Louis, Ill., across the Mississippi river from St. Louis, and therefore in effect also in the South, a large plant purifies Arkansas bauxite into alumina (the oxide of aluminum).

That the aluminum industry, born as an invention by a college boy in Ohio and made a commercially successful enterprise by a group of young men in Pennsylvania, should have turned to the South to establish some of its principal activities, is happy evidence of the fact that the resources of the Southern states may confidently look forward to the time when capital or initiative, wherever it may originate, will seek them out as offering high opportunity for any industrial development for which these states are fitted. It is hardly in the realm of prophecy to say that due to the all but fantastic growth of the aluminum industry, Southern sections may be assured of great benefits in the future as the expansion of this industry goes forward. This is a foregone conclusion if the Southern states continue to encourage the growth of industry by intelligent legislative policies and a co-operative spirit on the part of the citizenship.

Like the Western farmer who said of the first railroad train that passed through his town, "They'll never start 'er," and as it puffed out of the station, "They'll never stop 'er," people of every locality look with skepticism upon most developments fraught with great future significance.

"Thar ain't no use'n yoreall atryin' to stop that thar river by pourin' concrete into it; yore just awastin' uv youre time. The fust spring freshet 'll come a whoopin' down hyar and wash everything out yoreall done put in thar." With these words a mountain man offered comment upon the first undertaking to dam one of the turbulent streams of the Great Smoky mountains whose vast power potentialities were being harnassed to the wheels of industry.

In so speaking, he voiced the fundamental difference between the concepts and knowledge of a passing age and the vision of a non-sectional people as to the vast resources and possibilities of a particular section of this great country. This is especially true of the South. Men who were born there and have moved away or who grew up elsewhere, are seeking it out as a promised land. Any number of illustrations could be cited in token of this movement. The aluminum industry, a typical example, is distinctly clearcut in its recognition of the promise offered by the resources of the South for stable expansion and assured security.

fact. But finally he forced himself to know the truth.

He tried to thing it out. He wasn't a bad boy. He didn't try to annoy any one. He

Within six months he almost [illegible]
he had been odd and that boys had made
fun of him and that he had worn glasses.
By the time Carter Blake was out o

mother. And he knew what the end would
be. O, well, as long as his mother had
her mind set he might as well give in.

you imagine me a [illegible] dmy to marry
me? I couldn't keep her in stockings—and

(Continued On Page 11.)

Aluminum Made Useful Only Half Century Ago

Coffeyville Weekly Journal 3/28/1936

The Semi-Centennial of Commercial Production of This Widely-Distributed Metal Is Being Observed This Year.

IN 1886 Charles M. Hall, just graduated from Oberlin college, Ohio, discovered an inexpensive way of separating aluminum from its compounds by electrolysys of fused ore.

Before that time the production of aluminum, altho found in the earth almost everywhere, was so expensive that it was considered a precious metal. The story is told that Napoleon III, of France prized it so highly that at a state dinner he had honored guests served from aluminum plates while the others had to be satisfied to eat from ordinary plates made of pure gold.

From $8 a pound, cost of production of aluminum has been reduced to about 20 cents a pound and it now competes with iron, zinc, copper and tin instead of with gold and platinum.

In recognition of the semi-centennial of commercial production of aluminum, News-Week magazine describes how extensive its use has become in this half century. According to a recent report of the U. S. Bureau of Mines this country in 1935 produced over 54,000 tons valued at $22,000,000—20 per cent of the world total—and almost twice as much as in 1934.

To the average person aluminum is most commonly known as a metal for the making of kitchen utensils. However, transportation equipment now is taking a greater percentage of it than any other industry—37 per cent of the entire output.

Light alloys, first developed in 1909 for Zeppelins and today forming the structure of the new LZ-29, find other aviation uses. Douglas, Boeing, Martin, Sikorsky and other major builders make plane frameworks of duralumin—aluminum, copper and manganese alloy.

The metal has also entered the construction field. Architects specify it not only for its decoative value, but also because it combines strength with lightness. Engineers in rebuilding a bridge over the Monongahela river at Pittsburgh decided on an aluminum flooring to replace steel. The lessening of the weight load has extended the life of the bridge an estimated 25 years.

Rolled paper-thin, the metal becomes a foil. In addition to its use as a wrapper, aluminum foil is a valuable thermal insulating material. Its shiny surface reflects 95 per cent of heat waves. Sheets of the foil helped keep Rear Admiral Richard E. Byrd's Little America hut warm. The navy found that it reduced the weight of insulating materials on the U. S. S. New Orleans from 100,000 to 2,000 pounds.

Bauxite Plant Audits Net State $5,032

Dec 2 1935

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Big Aluminum Company to Enter State

Democrat 11-16-36

Plan Large Scale Production of Pig Ore for Sale to Manufacturers.

Starts Next Year

Smelting Plant to Be Located Near Decatur, Alabama.

Entrance of a large independent aluminum producing company, a company large enough to compete with the Republic Mining & Manufacturing Company, which operates the immense properties at Bauxite, in Arkansas's bauxite fields, is expected shortly after the first of next year, according to information obtained by the Arkansas Democrat yesterday.

The new concern, known as the Standard Aluminum and Alloy Company, is said to have acquired large bauxite properties in Saline county. The company, although officials declined to give details, is said to have the backing of the Reynolds Tobacco interests in North Carolina, and also wealthy individuals of New England. R. J. Gaudy, a power engineer who has specialized in aluminum developments, is acting head of the concern.

According to dispatches received by the Democrat yesterday, the company owns bauxite properties with an estimated ore content of 10 millions tons. Most of these properties are in Saline county, with some in Pulaski and Grant, and with scattered bauxite producing properties in Alabama, Georgia and Mississippi.

Smelter in Alabama.

The company plans to construct a bauxite smelting plant near Decatur, Ala., where TVA power from Muscle Shoals is available. Later, should sufficiently cheap power become available, a secondary plant will be established near Benton or Bauxite in this state. The company will not make aluminum utensils, but will refine the ore and sell pig aluminum to manufacturers.

Purchases contemplated by the company would include about $15,000,000 from producers in the heavy industries. Plans call for production of 70,000 tons of pig aluminum annually.

Officials of the company said it was capitalized at $20,000,000 and that "there is no stock for sale." The same interests, it was understood, applied to the R. F. C at Washington about two years ago for a loan to finance such an operation.

Local People Not Informed.

Although the dispatches indicated private independent interests had put up the capital, there was no information whether the loan application was still pending or whether there had been a loan from the R. F. C.

Local people close to the Arkansas Power & Light Company, said they had no information on the project, and the same was true of the Republic Mining & Development Company at Bauxite. The latter company is controlled by the Mellon interests of Pittsburgh, Pa.

At present the Republic Company ships its raw ore to the Mississippi river my rail, and from there by barge to St. Louis and other points for smelting.

Production of Bauxite Shows Huge Increase

Democrat 12-27-36

Washington, D. C.—World production of bauxite, the basic material in the manufacture of aluminum, registered an appreciable increase in 1935 compared with the preceding year, a report to the Department of Commerce from Assistant Trade Commissioner E. C. Taylor, Paris, stated yesterday.

Aggregate world production in 1935 totaled 1,747,200 tons compared with 1,251,400 tons in 1934, and 1,867,200 tons in 1929, statistics show.

France is the world's largest source of bauxite, accounting for 505,000 tons in 1935. Hungary was second with 250,000 tons and the United States ranked third with a production totaling 237,000 tons. Other important producers with the 1935 totals were: Yugoslavia, 190,100 tons; Italy, 170,000 tons; Soviet Russia, 130,000 tons; British India, 113,30 tons; and Dutch Guiana, 110,000 tons.

Out of the total 1935 production of 1,747,200 tons of bauxite, the report states, 1,000,000 tons were absorbed in the manufacture of aluminum, the remainder being employed in the production of aluminum cement, aluminum salts, abrasives and various refractory products.

Greek Bauxite Now On World Markets

Democrat 1-7-37

Washington, D. C. — That Greek bauxite is entering world markets on a large scale is indicated in official figures just issued, a report to the Department of Commerce from its Athens office stated today.

Exports of bauxite from Greece in the first nine months of 1936 totaled 71,065 metric tons against 5,550 tons in the corresponding period of 1935. Great Britain was the sole purchaser of Greek bauxite in 1935 while during 1936 shipments were made to numerous markets, the report states.

Germany ranked as the largest market in the nine-month period of 1936, taking 38,215 tons and was followed by the United Kingdom with 12,200 tons; Norway, 9,950 tons; and Japan, 8,000 tons, it was stated.

The value of the bauxite exported from Greece in the January-September period of 1936 was approximately $325,000 compared with $23,000 in the first nine months of the preceding year.

Bauxite Ore Deposits Defined

Gazette 2-7-37

There is little probability that the bauxite producing areas of Saline and Pulaski counties will be extended beyond the deposits now known to exist, it was said in a booklet on "Geology of the Arkansas Bauxite Region," released yesterday by Dr. G. C. Branner, state geologist.

Field work on which the report was based, including drilling of 55 test holes to an average depth of 167 feet, was done in 1934 under direction M. N. Bramlette, associate geologist of the United States Geological Survey, and the report was written by Mr. Bramlette. The survey was financed by the Public Works Administration and the report was published by the state Geological Department.

Arkansas supplies over 90 per cent of the total annual production of bauxite in the United States, but the supply will not last more than about 40 years at the average rate of production from 1924 to 1934, the report said.

Bauxite is the only commercial source of aluminum at present. The commercial deposits in Arkansas are restricted to two arears, the larger near Bauxite in Saline county, and the other southeast of Little Rock, Pulaski county.

"The bauxite deposits of these are derived from the surficial alteration of a nepheline syenite, generally known in the region as "granite, and the economically important ore deposits are confined to areas near this rock," the report said.

Report Technical.

The report is largely technical and contains complete statistics regarding production and detailed reports on the log readings of the drill tests.

Among the geological deductions and conclusions of general interest is the statement that the Arkansas bauxite deposits probably were formed in a period of about 1,000,000 years during the Eocene period, estimated to have covered a period of 13,000,000 years, and that it was formed through the alteration or weathering of surface rocks under tropical, or sub-tropical climatic conditions.

After discussing the origin and formation of bauxite, Mr. Bramlette concluded that the Arkansas bauxite "was formed through the alternation of surface rocks, and that this alteration occurred at a particular time in the Eocene epoch. As the alteration was the result of weathering and as this normal process has produced no comparable results before or since that time in the region, there must have been especially favorable conditions at that particular time."

The report said Arkansas bauxite first was recognized by John V. Branner, father of the present state geologist, in 1887 when rock from the Sweet Home section was being used to surface the road from Sweet Home to Little Rock.

Described in 1842.

The rock formation was first described in 1842 by Dr. W. Byrd Powell, who noted the peculiar character of the rock in Fourche Cove but did not recognize its true nature.

Dr. John C. Branner's first published report and recognitin of bauxite appeared in 1891, a few years after the discovery of bauxite at Rome, Ga., and three years after the Pittsburgh Reduction Company had been organized to commercialize the Hall process of aluminum production.

There was little activity here for several years because there was slight demand for such ore. Active development began in 1895, with the purchase of land and mineral rights, and the first shipment of 20 tons of ore was made in 1896.

The Pittsburgh Reduction Company, now the Republic Mining and Manufacturing Company, a producing subsidiary of the Aluminum Company of America, entered the Arkansas bauxite field in 1899 and produced 1,720 tons of ore that year.

Several other companies soon entered the field and production reached 200,000 tons in 1914. The World war brought new demands and production reached more than 500,000 tons in 1918. It dropped after the war, but was back to 500,000 tons in 1923, about half the world production for that year. Since that date increased production of foreign ore, especially in northern South America, has handicapped Arkansas production.

The depression reduced the output further until in 1932, only 98,779 tons were producd in this state. Production has increased gradually since and was 145,764 tons in 1934.

The United States Department of Commerce said in a report released yesterday that bauxite mines and associated plants in the United States employed 559 wage earners in 1935 and paid wages totaling $330,196.

The report said the entire industry is centralized in Arkansas, Alabama and Georgia. Salaried officers, technical and supervisory employes and others working on a salary basis totaled 77, with salaries amounting to $130,721. Expenditures for supplies and materials, fuel and purchased electric current amounted to $357,525.

Total value of products of the bauxite industry in 1935 was $1,545,050 of which all except $62,814 was in Arkansas. Wage earners employed at seven operating mines in Arkansas ranged from 340 in January to 617 in December, the average for the year being 493. Their wages totaled $308,615 and supplies and materials used by the Arkansas mines totaled $326,020. All but four of the 77 salaried employes were in Arkansas. The 66 wage earners employed at bauxite mines in Alabama and Georgia received $21,581.

2-6

The Discovery of Arkansas Bauxite

Gazette 2-28-37

Revealing for the First Time How the Paving of the Sweet Home Pike Brought About Find.

By John H. Page

The history of the discovery of bauxite in Arkansas is not without interest, yet has never appeared in print, as far as I know. The story was related to me about 20 years ago while I was serving as commissioner of mines, manufactures and agriculture, by the late Ed Weigel, a resident contractor and business man of Little Rock.

Mr. Weigel said that the discovery occurred in 1888 or 1889. He had been awarded a contract to build what was known as the Sweet Home pike, extending from Little Rock to Sweet Home. When the surfacing was nearing completion, the supply of gravel in the deposit nearby, from which it had been procured, was exhausted. As there remained only a short stretch of the road to surface, the contractor, knowing of a deposit of a gravel-like rock formation nearby on a tract of land owned by Judge Ratcliffe, between Little Rock and Sweet Home, told his workmen to get the material from it and crush and use it to complete the job. Mr. Weigel remarked to his foreman that the material was on Judge Ratcliffe's land and since he was the judge's friend, he did not believe he would object to his using the material on the road.

The foreman and workmen followed instructions and crushed and spread the pebbly soft stone on the remaining unsurfaced roadbed. During the progress of the work Mr. Weigel was impressed by the peculiarity of this pebby formation and became curious about it. While inspecting the work he picked up some of the broken pieces, put them into the back of his buggy and brought them to Little Rock. He took them to the office of the late Dr. John C. Branner, then state geologist. Mr. Weigel handed his paper bag of specimens to Dr. Branner and asked what the peculiar formation was, and if it had any mineral content of value.

Dr. Branner emptied the bag of broken pieces on his desk, looked them over with care and interest for some moments, and then turning to him, asked:

"Ed, where did you get this?"

Mr. Weigel replied: "Never mind where I got it, just tell me what it is."

Examining it a little closer, Dr. Branner turned again and repeated his question: "Ed, tell me where you found this?"

The query met the same response.

The geologist took the specimens into an adjoining room, and was gone for some time, presumably in making further examinations or tests. Upon his return he repeated his query: "Where did you find this?"

Mr. Weigel again responded with a refusal.

Dr. Branner then insisted upon knowing the source of the specimens, displaying keen interest. With his insistence he assured his friend that he would not violate his confidence, but would protect him in his right of discovery if he valued it.

Mr. Weigel then told Dr. Branner of the location and related the circumstances of his using the material.

Thereupon Dr. Branner told him that what he had brought to his attention was bauxite, from which aluminum was made and which, while not extensively in use and demand at that time, was a valuable metal, destined to come into general use for many purposes in the future. He concluded by saying: "Ed, you can always rest assured that this short stretch of road you have surfaced with this material has been finished with the most valuable road-building material ever used on a highway in Arkansas."

Mr. Weigel assured Dr. Branner that there was an abundance of the material, and the following day took the geologist in his buggy and they inspected the deposit, from which Dr. Branner procured specimens.

Later Dr. Branner made a thorough and exhaustive investigation of the bauxite deposits and of course his findings and the results of his investigations received proper consideration in his official reports.

Since bauxite developments began, millions of dollars worth of bauxite ores have been mined and for many years one-third of the world's production and more than two-thirds of the American production was derived from the deposits in Pulaski and Saline counties.

Mr. Weigel apparently had first call to profit from the vast deposits of bauxite, having had the advantage of priority of knowledge of its presence and abundance, yet, according to his statement a score of years ago, he never profited by it or made any investments in bauxite-bearing lands. He said it was so plentiful and so common that he was not impressed that there was much value to it, or that such possibilities as the future held for its exploitation and processing existed.

This is a heretofore unwritten chapter in the history of the discovery of the vast deposits of Arkansas bauxite that have made such important contributions to the great volume of aluminum and numerous by-products that have been devoted to so many useful purposes in manufacturing during the past quarter century.

State's Bauxite Mines Show Unusual Activity

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By B. N. TIMMONS.
Democrat Staff Correspondent.

Washington—Arkansas, the only state in the country in which Bauxite is produced in an appreciable quantity, realized in excess of $2,000,000 for the sale of the product during 1936, the Bureau of Mines of the Department of the Interior announced today.

During 1936 there were 354,943 long tons of Bauxite mined in Arkansas with a total value of $2,089,196. The only other states in which this product is mined are Alabama and Georgia. In both of these states during the same period only 17,062 tons were mined.

The total amount of Bauxite shipped from mines throughout the entire country during this period was 372,005 tons with a total valuation of $2,198,523.

Arkansas supplied 95 per cent of the total output in 1936. Nine mines near Bauxite, Saline county, and five mines near Sweet Home, Pulaski county, furnished the Arkansas output. The Bauxite was used mainly in the aluminum industry although abrasives, chemicals and refractories took considerable quantities.