HARRY KELLEY RECALLS EARLY DAYS IN CITY

Southwest Times Record 2-11-36

Pioneer Civic Leader Finds Many Interesting Stories In Old Book of Clippings Saved for Half Century

By MARGARET COUGHLIN

Harry E. Kelley reads something that appeals to him, so he clips it and pastes it in his scrap book.

He has been doing this for over half a century and as a result now has one of the most valuable collections in town.

So extensive is the subject matter covered in the scrap book, it seems that surely something on everything in the world is contained therein. There is much poetry. Mr. Kelley loves poetry. He is particularly fond of Kipling.

"I remember when Kipling's "Recessional" first was published. We were discussing it, my friends and I, and well I remember an English cotton buyer named Taylor in the crowd. He resented Kipling's punch at the English," Mr. Kelley said, thumbing through his files.

Discussing the great joy he has received from his scrap book, as well as from collecting other data for his office files, Mr. Kelley recalled:

"I guess I got that trait from my mother. She used to love to save clippings for her scrap book, too."

"You know," he went on, "50 years is a long time. I came to Arkansas from Kansas when I was 24 years old. My father was a captain in Powell Clayton's Fifth Kansas Cavalry and so, of course, he had been all through this country during the Civil war.

"When I told him I was going to Arkansas he asked me, "What in the world are you going there for?' You see, that was many years ago and there wasn't much development here then. But, Jay Gould had just bought a railroad down here and I felt it would be a good country for a young man, so I came.

Small Fortune Saved

"How well I remember Fort Smith of those days. There were 62 saloons on Garrison avenue. Can you believe it? There I was—24—full of ambition, a republican and a prohibitionist in this strange—new country. Sixty-two saloons and me a prohibitionist!

"Not many moons passed before Mr. Kelley acquired what he said was considered a sizeable fortune for those days, so he decided to establish a newspaper. He located the plant in the building now occupied by Fox and Turner Clothing company at 607 Garrison avenue. Fire however, later destroyed this building, so the newspaper was established on South Sixth street, where the Western Union now stands.

The newspaper lived only five years, but when Mr. Kelley was publishing it, (it changed owners once or twice during those five years) it was indeed a hectic life. He gave it up when the panic of '93 struck. "Did you ever hear of that panic? Well, it made this last so-called depression look like 30 cents," he said.

But, back to the story of his life as a publisher. Mr. Kelley said he crusaded for sewers and "they thought I was nuts." But, the sewers arrived in Fort Smith as a result of his work, in 1887.

Few Old-Timers Remain

Then he crusaded for paving on Garrison avenue, and "they thought I was nuts." But, the paving arrived in 1889. The base of the Garrison avenue paving is a source of great pride to Mr. Kelley. "It'll just begin to wear in a thousand years from now," he said, perhaps exaggerating his point a little, but that is the way he feels about it.

Many years have passed since those days. In fact, there have been so many years that Mr. Kelley said he believes only Judge Joseph M. Hill and himself remain of a group of men who used to meet every Sunday morning at the Arkansas club (now the Loden Motor company) building for discussions on the topics of the day.

But, with all those passing years, it is a safe bet not one has slipped by that has found Mr. Kelley without some public work on his hands.

And the strange fact of it is that while he has been a public figure, so to speak, all these years, he has never run for a public office, nor drawn a penny of public money. True, he was secretary of the board of improvement districts for 26 years, but that is when the job carried no salary. Now it does carry compensation.

Life Is Very Active

Mr. Kelley was one of the first to promote the forest reserve movement in Arkansas, which resulted among other things in obtaining Hot Springs National park for the state. He has been active in flood control and other river projects; in gas field development; in cattle and sheep raising movement; has untiringly urged the planting of Bermuda grass for better pastures—in fact, the number of enterprises in which Mr. Kelley has been and is interested, are countless.

If he does not take an active part in a particular movement for the development of Northwest Arkansas or the state, chances are that whatever the undertaking Mr. Kelley's opinion will be sought. And in many, many movements, those opinions have resulted in the ultimate success of the undertaking.

Mr. Kelley has as wide, if not the widest, acquaintance of any business man in the state. He has traveled extensively and is by nature a great student. He knows personally William Allen White and Ed Howe as well as any number of other prominent people.

Outlines Boundaries of Ozark Mountain Group.

10-3-37

To the Editor of the Gazette:

An often-asked question by tourists is "Where do the Ozarks begin and where do they end?"

The Ozark mountain group is a sprawling one and stories of mountain folk could be told of those who live in the Ozarks of Arkansas, Missouri and even in spots in Kansas and Oklahoma.

However, about 100 years ago a historian wrote that the Ozark mountain range was 80 miles long. But he didn't happen to know his Ozarks.

The Ozark mountains have for their northern boundary the Missouri river; the eastern boundary is the Mississippi river; the Southern boundary is the Arkansas river. But to name the western boundary is not an easy task, but one can say that approximately it is from Muskogee, Okla., to Clinton, Mo.

In northwest Arkansas one finds the highest and most rugged elevations, especially in Newton county.

The boundary line of the Boston mountains meets the Springfield plateau near Winslow, Prairie Grove and Lincoln, which form roughly the area drained by the upper part of White river.

The elevation of Washington county scales between 1,000 feet and 2,000 feet. Washington county is partially in the Boston mountain range of the Ozark mountains and is also in the Springfield plateau, which is a part of the Ozark mountain territory.

The southern part of Washington county is in the Boston mountain range and the northern part of the county is in the Springfield plateau.

There are three divisions of the Ozark plateau. The northeast part is called the Salem plateau. The western part is called the Springfield plateau and the southern part is the Ozark plateau.

Going north from Fayetteville the Boston mountain range ends at the Veteran's Facility Hospital. Beyond that is the Springfield plateau.

All of Fayetteville is in the Boston mountains and going south one reaches the Arkansas River valley at Alma.

Zillah Cross Peel.

Fayetteville, Ark.

Catalogue Of Resources Completed

Gazette 10-24-37

With the assistance of federal relief agencies, the state Geology Department has completed for the first time an inventory of existing data on Arkansas's resources, Dr. George C. Branner, state geologist, said yesterday.

The work was started under the old Civil Works Administration in December, 1933, and continued under the Federal Emergency Relief Administration and the Works Progress Administration.

The work of cataloging 17 volumes of information on the resources was financed by $58,022.06 in federal funds for payment of salaries and wages, and $19,135.90 in state funds for office equipment and supplies, publication of reports and traveling expenses and wages of employes of the Arkansas Geological Survey.

Mapping Work.

In addition, the state department has completed in this time with federal assistance a total of 2,394.22 miles of mapping. The federal government contributed $202,152.06 and the state and other agencies $18,459.48.

The mapping projects included 250 square miles of topographic mapping of what is known as the Blakemore quadrangle east of Little Rock. The project reduced to 14,068 miles or 26 per cent, the territory of the state yet to be mapped. Added to this total, however are 20,689 miles or 38.77 per cent of the state which is inadequately mapped. A total of 18,578 miles has been mapped adequately. Most of the latter is in eastern Arkansas.

The unmapped areas of the state include the new oil fields in Union, Miller, Columbia and Lafayette counties.

Dr. Branner said that he has had several requests in the last few months for mapping information in the new fields.

A total of 1,564.81 vertical control lines and 579.41 horizontal control miles have been mapped. In addition 1,094 monuments or bench marks for measurement purposes have been set up.

Of the mapping work, 756.81 vertical control miles, 199.41 horizontal control miles and 550 bench marks were completed with $142,000 in CWA funds; 117 vertical control miles, 35 horizontal miles and 67 bench marks were completed with $8,969.32 in FERA funds, and 250 miles of topographic mapping, 345 miles of horizontal control mapping, 691 miles of vertical control mapping and 477 bench marks were completed with $51,182.74 in WPA funds.

Program Necessary.

Dr. Branner said the mapping work was a necessary preliminary for soil erosion and irrigation projects, water power projects, drainage, state parks and forestry projects.

For the resources cataloging projects the CWA allotted $4,364.40; the FERA, $2,018.20, and the WPA, $49,639.46.

Cataloging projects completed follow:

Elevations in Arkansas in nine volumes. Contain descriptions and elevations of bench marks and railroad or estimated elevations of practically all towns, community centers and mountains in the state. The volumes contain 14,421 elevations.

Directory of Arkansas Mineral Producers for 1935. Contains list of mineral operators in 1935 alphabetically, by minerals and by counties.

Geology of Arkansas Bauxite. Discusses the geology of the Arkansas bauxite region in Saline and Pulaski counties as determined from test holes; indicates the maximum depth to which bauxite deposits extend and gives the history of development and production and partial estimate of bauxite reserves.

Other Statistics.

Mineral production statistics of Arkansas for the period 1880-1935. A compilation of all available figures concerning the quantity and value of each mineral produced in Arkansas yearly during the period 1880-1935.

List of Arkansas oil and gas wells. Contains information on 2,109 wells drilled in Arkansas from 1887 to October 31, 1936, located outside the intensively drilled areas in south Arkansas. Contains maps of 70 counties showing locations of wells drilled, information on production, cost of drilling, history of development and a section of oil and gas possibilities.

Water Wells in Arkansas.

Springs in Arkansas.

Lakes in Arkansas.

Sand, Gravel and Stone Deposits in Arkansas.

Field Survey Needed.

Dr. Branner said that a state-wide field survey is now needed to complete the compilation of data on the state's resources. Application has been made to the Works Progress Administration for $315,000 to help finance such a project. The state would contribute $36,000. A total of 542 workers would be employed in the project for one year.

The WPA in Washington has approved the project but the state WPA has been unable to make place for it since its rolls have been reduced.

A similar project recently was completed in Okahoma.

ARKANSAS OIL THAT IS DEEP UNDERGROUND.

Gazette 11-5-37

Report comes from El Dorado of at least three and possibly four new deep test wells, one several miles outside the proven area.

Improvements in drilling equipment made in the last decade have added untold millions of barrels to the estimated total of potentially recoverable petroleum in Arkansas and other oil-producing areas.

When the first drilling campaign in Arkansas was getting under way sixteen years ago in the El Dorado "South Field," the mile-deep producing strata that had been recently tapped in California fields were believed close to the limit that could be reached with rotary drilling equipment. A few years later a sand discovered at 2600 feet in the Smackover field was called "the deep sand." And for many of the rigs that had been used in drilling wells in the shallower sands it was literally deep.

Heavier drill stems, more durable bits, sturdier construction of pumps which bring to the surface cuttings made by the bit's rotation, and greater power equipment enabled drillers to drill to sands hitherto considered beyond reach. Oil today is being produced in Miller county from a depth of 6,500 feet and in the Shuler, Union county, field, from 7,500 feet. A well nearly two miles deep has been drilled in Louisiana, and if there is oil at that depth in Arkansas it will be discovered.

In the deeper, geologically older strata of the new Arkansas fields nature made a lighter grade of oil, more valuable in gasoline and lubricant content, than that found in shallower sands. The riches of these reserves have been added to the state's great wealth in mineral resources.

Book on State's Resources to Be Published.

Gazette 11-25-37

The state Geology Department is preparing for publication an eight-page envelope stuffer containing facts about Arkansas' mineral and other resources which will be miled throughout the country in official correspondence, George C. Banner, state geologist, said yesterday. The booklet will come off the press about December 15, he said. About 2,000 will be printed.

The booklet will contain facts on physical characteristics of Arkansas, including area, elevation, population, agriculture, timber, manufactured products, transportation, steam and hydropower, occupations, distribution of mineral products, index and topographic maps, soil survey maps and lists of all publications of the state Geology Department.

News of Other Days

One Hundred Years Ago.

(Arkansas Gazette, December 5, 1837.)

The steamers Arkansas and Ozark are noticed in the New Orleans papsers as having arrived there in the last month.

Gazette 12-6-37

Fifty Years Ago.

(Arkansas Gazette, December 6, 1887.)

The first annual report of the state geologist, Dr. J. C. Branner, was issued yesterday. It is in pamphlet form and is intended only to show how well the work has been begun and how well it is progressing. Dr. Branner says: "A valuable geological report cannot be written without an accumulation of facts, and the accumulation of these facts requires time and labor. Although a vast amount of useful information has been accumulated and a great deal of valuable work accomplished during the brief existence of this survey, there has not been time to digest these facts, to write the reports and prepare the maps and sections, to say nothing of the time necessary for the engraving of maps and illustrations, or the printing and binding of the reports." Dr. Branner deals with all departments of the survey, giving the name of each man employed and the amount of work done.

"The excitement existing in this state and in mining circles outside the state," he continues, "regarding the discovery of gold and silver in certain counties in Arkansas, especially in Garland and Montgomery, seemed to demand a special investigation." This was done by Dr. Comstock, who finished his field work in September and returned to his laboratory at the University of Illinois to work up the results of his investigations and report on them.

The span of iron-gray horses sold to Dr. Bryson on Saturday last by J. B. Lindsey is a team unexcelled for the road or for single or saddle purposes. The horses fell into the hands of a gentleman who appreciates good stock.

Los Angeles' Moving Mountain Recalls Series of Landslides In Ozarks During Recent Years

Democrat 12-11-37

St. Joe—While much publicity is attracted by the "moving mountain" at Los Angeles, this section of the Ozarks can tell of a score or more landslides of equal or greater magnitude extending over a period of years attended by many unique incidents.

Will Perry, prominent Snowball merchant and land owner, cites two landslides on the Point Peter Mountain west of Snowball. On what was known as the Edley Woodward place on the west slope of the mountain a few years ago there was a slide of a section about a quarter of a mile square which tore many large trees out by the roots, moved others on down the slop in an upright position without apparently injuring them. On the Charles Duco place on the east side of the mountain there was a slide of almost equal extent. In both slides much timber was torn out by the roots, and in each about 20 acres of good farm fields were so torn up and littered with debris as to be ruined for cultivation.

Mr. Perry explains that the core of many of the mountains where these slides occur is of limestone on which a sort of soapy clay soil has formed, and after freezes and in extremely wet weather this mass slides on the slick rock slope.

One of the most notable slides in this section was on the Backbone Mountain between Marshall and Leslie during the construction of Highway 65 about eight years ago. After the grading and graveling had been finished several hundred yards of the highway moved two rods on down the slope, destroying several thousand dollars worth of construction work and necessitating the changing of the location and the building of massive rock retaining walls.

Newton county's mountains have been the scene of many landslides in past years. The most extensive have been in the vicinity of Mt. Judea, where whole forty-acre tracts have slid several rods with great destruction of timber, fields and some farm buildings.

One of the most remarkable related by old timers concerns a land slide on the west side of Point Peter Mountain near the McCutcheon Gap more than a quarter of a century ago. On the James Drewery place the farm buildings and an adjoining field moved more than a rod down the slope. At the back door of the house was a well, which moved with the buildings and the water in the well was not even muddied. At the north end of the mountain, seven miles west of St. Joe, at some early date a great section of the mountain slope had moved a short distance leaving a crevice 30 or more feet deep which can still be traced along the east slope of the mountain for more than a half mile.

Road-Building Material Found In Independence County.

11-3-38

Special to the Gazette.

Batesville, Nov. 2.—Discovery of an extensive deposit of hard, flinty chert in the southwestern part of Independence county has solved the road-building problem in that section, W. G. Rinehart, supervisor of the county mineral survey, revealed today. Only soft sandstone had been available for road building in that section. On one project gravel was being hauled 25 miles.

Beehive in Cliff Hundred Years Old

Gazette 1-24-38

Shirley, Jan. 23 (AP).—Bees have swarmed unmolested about a sheer cliff overlooking Red river here almost a century in defiance of man's every attempt to reach their hive.

During the honey gathering season streams of the bees constantly come and go from a cleft in the high bluff.

Old settlers of Van Buren county say it is the oldest and largest colony of bees in Arkansas, probably in the South. They say the age of colony can be traced to 1844—even then the cliff had been named for the swarm—Bee Bluff.

Those who have struggled vainly to reach the home of the bees say that goal could be obtained only by the use of expensive equipment. The hive cannot be approached except from the top of the cliff by scaffolds or ropes.

John Henry, owner of the land upon which the hive is situated, several years ago attempted to reach the hive. He dug around the side of the bluff and got within 12 feet of it but solid rock cut him off there and he could get no further without blowing off the face of the cliff. That probably would have destroyed the hive, so he abandoned the plan. Tons of honey are believed stored in the hive.

Taeniolite Found In Magnet Area

Gazette 5-8-38

Nobody appears to know what will come of it, but excavations will be extended in shafts around Magnet where Lawton D. Kimzey has discovered several deposits of "taeniolite" an extremely rare lithium magnesium mica—George C. Branner, state geologist, disclosed yesterday.

The rare mineral—used primarily for lithium salts and for glazes and enamels in ceramic uses—was discovered by Mr. Kimzey on land in Hot Spring county owned by Adam Smith, while searching for titanium, considerable of which was found.

It was found in irregular veins about 50 feet in rock, and was identified by the United States Geological Survey by chemical and X-ray analyses, as a particularly rare lithium magnesium mica. The analysis showed the stuff to be 3.1 per cent lithium oxide.

Dr. Branner was asked to examine the deposits. Mr. Smith sought the aid of State Senator Joe Kimzey of Magnet in determining the quantity of the mineral available, and whether it would be "available," or sufficently easy to excavate to be profitable for production.

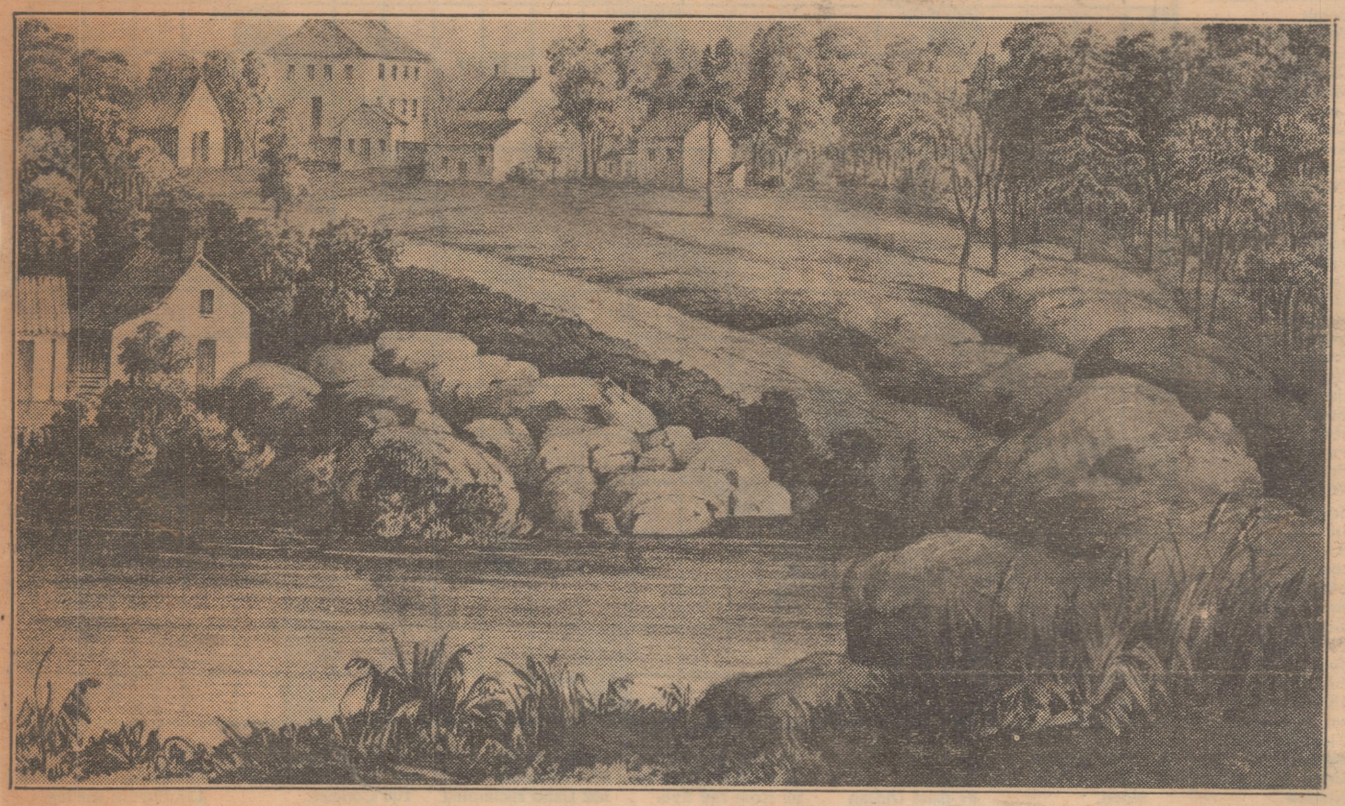
Two chemical companies with whom Branner communicated have expressed an interest in the deposits as a source of the mineral for lithium salts. The Ceramic Engineering Department of the University of Illinois expressed a desire to obtain the mineral for ceramic material.

MARKING THE
Southwestern Trail

Bronze Markers Are Being Placed at Eight River Crossings on the Earliest Travel Route Through Arkansas.

By Virgil E. Barnwell

Gazette 1-23-38



Where the Southwestern trail crossed the Ouachita river at Old Rockport, near Arkadelphia.

When the pioneers first began settling Arkansas the only passable trail had been made by the Indians. History records that de Soto and the members of his expedition were the first white men in Arkansas. They camped during the winter of 1541-42 somewhere close to the Ouachita river. For many years no other white man came to this country.

Next came the French traders, who established a fur trade. Little by little other settlers made their way to the new country and began blazing the trail for future generations.

The new country was an open invitation to adventurers and traders. There was plenty of room for all and natural resources provided the needs of man without too much physical effort. Clad in buckskin and armed with heavy rifles, good men and bad men forced their way into the new country. History was in the making and this "obscure path" played a most important part.

Down the Southwestern trail, according to legend, came James Woodson Bates, first territorial delegate of Arkansas Territory to Congress and for whom the city of Batesville is named. Andrew Scott and Robert Crittenden, too, rode down the trail on horseback to seek their fortunes and added much to the history of Arkansas.

The ferries were the first industries in the territory and it is for this reason that markers are being placed along the trail to designate the course of the old route. The following sites have been approved for marking on the Southwestern trail:

Hix's ferry, on Little Current river, in the northeastern corner of Randolph county.

Davidsonville, in Lawrence county.

McNeil's ferry across the White river, in Independence county, near Batesville.

Ferry across the Little Red river, in White county, near Searcy.

Ferry across the Saline river, Saline county, near Benton.

Ferry across the Ouachita river, near Old Rockport, Hot Spring county.

Ferry across the Caddo river, near Arkadelphia, in Clark county.

Crossing on the Little Missouri river, in lower Pike county.

These sites show the course of the trail across Arkansas from the Missouri line to the Indian Terrotory at the Red river crossing, at Fulton. At the latter crossing a marker has been erected.

The establishment of these ferries took place early in the last century, probably shortly after the Louisiana Purchase. In 1803, at the time of the purchase, there were about 600 white inhabitants in the area now covered by Arkansas. Most of these were in the eastern part of the territory and along the principal waterways.

The old Southwestern trail was the first all-land route to the Southwest. It follows, for most of its distance, through Arkansas and Missouri, the old Indian trails that had been used by the Indians in their journeys through the Southwest to the Northeast.

Shortly after the Louisiana Purchase, trappers, traders and adventurers began crossing the Mississippi at various points and going into the interior. It was early discovered that one of the most passable routes was across the river to Bainbridge, thence in a southwesterly direction, crossing the Little Current river about where the present Arkansas-Missouri line is located. Then southwest along the first hills raising above the coastal plain, using as a road the old Indian trails that had followed the same terrene.

That these trails are all old is evidenced by the fact that artifacts of civilization preceding the Indians have been found along practically all of them. It is not beyond reason to believe that the Toltecs coming to this section many years ago, used the trails in their pilgrimage from Central America.

When the government recognized the value of this transportation lane, appropriations were made to improve it for military purposes. In time it acquired the name Military road and certain sections of the old Southwestern trail are now known exclusively as the old Military road.

Apparently two Military roads were built by the government, but the Southwestern trail (which was the north and south Military road) was begun as early as 1832 in Arkansas Territory. It was opened at Hix ferry on Current river, continuing through Little Rock on to Fulton and into Texas.

This road was used by trading parties from St. Louis loaded with cargos of many kinds of goods for trading with the people of the far Southwest. During the War of 1812, soldiers used the old route through Arkansas. It was romantic, adventurous and dangerous. Every inch of the way was the constant threat of danger, either from outlaws, animals or Indians.

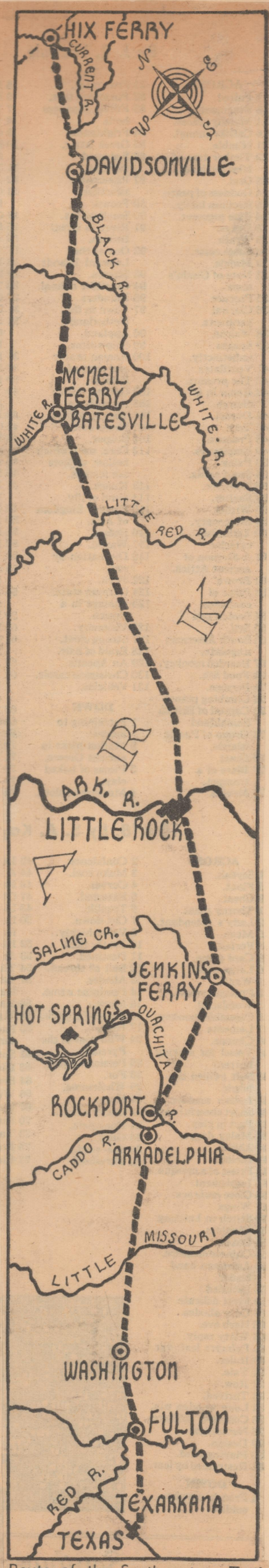
With the increased ingress of settlers the means of travel changed. Trails became more marked and joined together into a condensed route which was greatly improved, first by the settlers themselves and then by the government, until sections of it were usable for the wagons and stage coaches.

About 1815, more men brought their entire families into the new territory and the Conestoga wagon played an important part. Introduced in the East a few years earlier, this wagon, boat-shaped to hold the goods in place and arched with hoop-shaped slats covered with canvass to protece the merchandise, was popular with the pioneers. Named for the town of Conestoga, Pa., where it was made, it soon acquired another, more suitable name. West of the Mississippi the settlers called it the "praire schooner" and the "covered wagon." It was practically the only vehicle on wheels used by the incoming pioneers.

Most of the travelers used the "big route" into Arkansas and regardless of the danger, men brought their families, built crude cabins, planted cotton, corn and some vegetables and made their homes permanent. Each year newcomers pushed farther into the wilderness.

About 1835 or 1836, the stage coaches made their appearance and took over the mails and freight, and the carrying of passengers.

The trail was still the main road of travel, swinging down from St. Louis to the foothills of the Ozarks, crossing the Arkansas river at Little Rock and



Route of the Southwestern Trail.

deeper and wider and developed into a crude highway.

During the hostilities with Mexico the volunteer fighters from Arkansas were encamped at Washington and ready to march to San Antonio, but shortage of provisions delayed them. An investigation showed the supplies had been delayed at Fulton because Red river was at a low stage. The supplies would have to be sent by wagon train or the troops re-routed and this meant further delay, because of the roads. Later it developed the commander of the companies had failed to receive a letter informing him of the change in plans.

After Texas won her independence the migration of settlers to Texas increased. An article in the Gazette Centennial says: "The movement of settlers to Texas through Little Rock, over the old Military road has come to be almost a continuous procession."

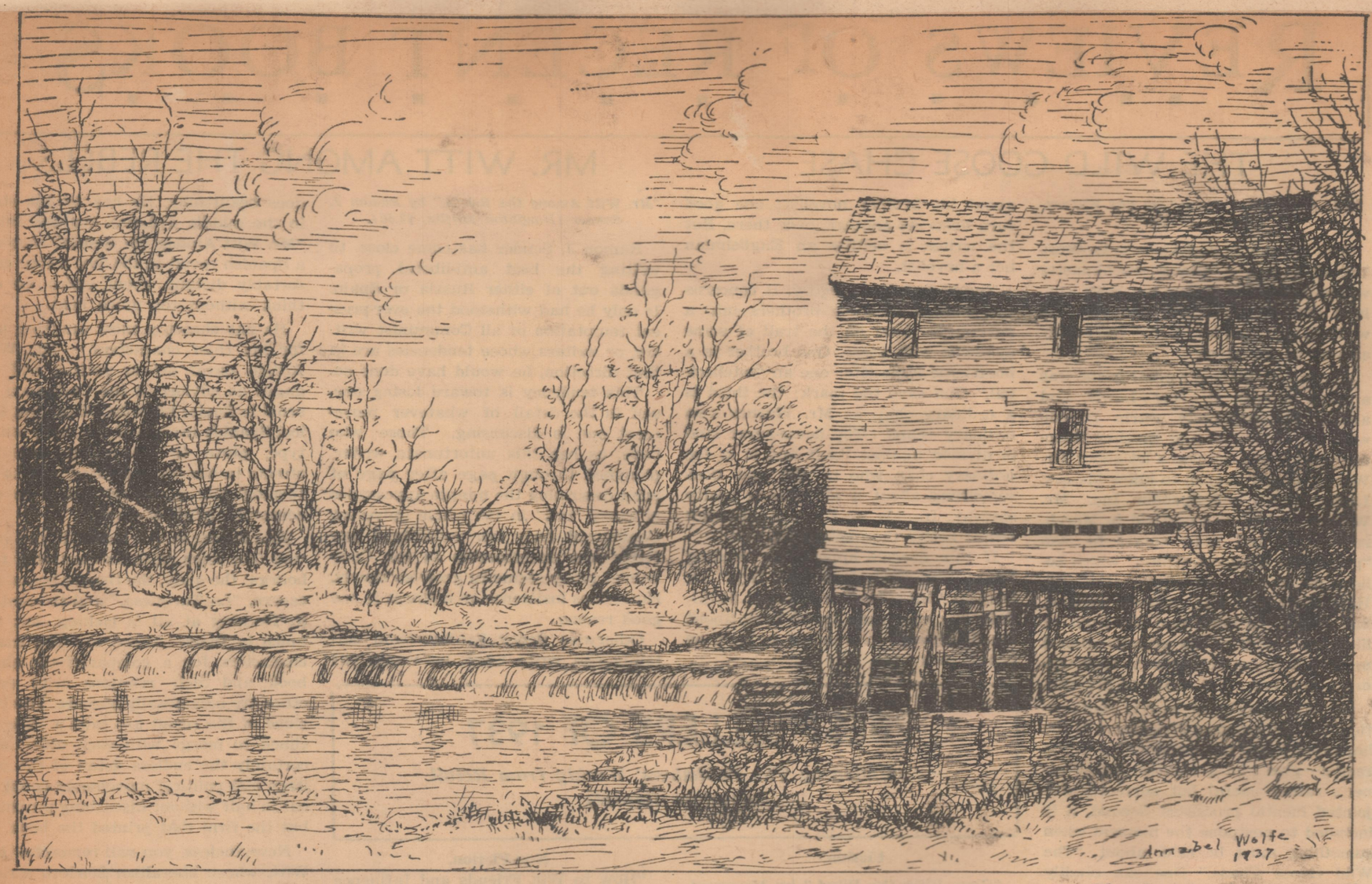
Davidsonville, in Lawrence county, one of the places to have a marker, was the site of the first courthouse in Arkansas Territory. The mails were always late until a postoffice was established in June, 1817, at Davidsonville, where the post rider left the packs of mail. Even then it wasn't always on time, the weather having much to do with the conditions of the roads.

Another historical place along the trail was Washington, in Hempstead county. In 1863, during the Civil war, and the capture of Little Rock was anticipated, the capital was moved from Little Rock to Washington. Stephen Austin, founder of Texas, Sam Houston, Albert Pike and Augustus Garland were among the many famous men associated with this little town.

After the Civil war and during the Reconstruction period, transportation was a problem. During the summer roads were dry and dusty, the dust lying inches thick on the roads. Worse, by far, was traveling in winter when the roads were just mud.

The automobile made its appearance about 1900, and the owners used their influence for road improvement. With swifter transportation came the need for better highways.

From the early days before the Louisiana Purchase, each generation has contributed some improvement on the old Southwestern trail until today it is known as United States Highway No. 67, and though incomplete as to the original program, it serves as a link connecting Arkansas with other Broadways of America.



Sketched by Annabel Wolfe.

OLD HAWKINS WATER MILL

Gazette 1-30-38

Pictured above is the old Hawkins water mill, located five miles from Huntsville on War Eagle creek. It is said to be the oldest water mill still in operation in the Arkansas Ozarks. The mill was built in 1835 by Matt Hawkins, one of Madison county's earliest settlers. At that time Huntsville, the county seat, was a settlement of a few log cabins and a trading post. This mill served a large area of the mountain country. People came as far as 50 miles to have their grain ground, and generation after generation has followed them. The pioneer customers of the old mill claim the grain ground on the old water mill makes a superior grade of meal. During the Civil war the old mill was used as a fort by the owner and settlers in the community. The many bullet holes in the walls are mute testimony of the shooting that occurred there. Although 103 years old, the mill has been in the Hawkins family ever since it was built, until recently when it was purchased by Bud Combs and Virgil Weathers, who operate it. It is said that the millstones were imported from France, unloaded at New Orleans and brought by water to Clarksville up the Mississippi and Arkansas rivers, then taken by ox wagon to the mill site. The old mill is three stories high and while it once was lighted with tallow dip, it now has electric lights, the current furnished by a small dynamo on the ground floor, turned by the water wheel. There are many descendants of the mill's builder in and around Huntsville.

Gives Some Facts About the Old Military Road.

1-30-38

To the Editor of the Gazette:

I read with pleasure in the Gazette Magazine that markers are to be placed in Arkansas at some of the most prominent places along the old Southwestern Trail, which in this (Lawrence) county is known as the old Military Road. Here it is understood to have been opened in 1811. It is the route over which most of the early settlers came into this county. It is no longer a through route of travel but sections of it are used locally. Enough of it remains to make it easily treaceable through the county. It crossed Spring river from Randolph county a short distance down the river from Imboden and passed through the county by way of the village of Denton and Lynn, crosses the Strawberry river at the still so-called Old Military Ford and passes just west of Saffell into Independence county.

Until I saw the map in the magazine I never heard that the road went by or very near Davidsonville. If it had gone by Davidsonville in order to continue its course it would have been necessary for it to cross Spring river below its junction with Eleven Points river, at which point the river is not fordable, and a bridge has just recently been built across that part of the river.

However, tradition says that Solomon Hewitt was operating a ferry aeross Spring river at the mouth of Eleven Points river in 1818, and there was evidently a mail route from Davidsonville toward Batesville. The court record at Powhatan reveals that the first court appointed a commission instructed "to lay out and mark a road from the town of Lawrence (Davidsonville) to the Arkansas county line in the direction of the town of Arkansas (Arkansas Post.)" The records do not reveal that the road was ever opened. It probably was not opened as an independent road, but only far enough to connect with the Military Road a few miles to the southwest.

These facts reveal to my mind that Davidsonville was not on the Military Road by a few miles.

I have been advocating a suitable marker for Davidsonville, not because it was on the Military Road but because of its historic interest by reason of its being the first county seat of Lawrence county and the first postoffice in the state. The first court in the county was not held at Davidsonville, but three or four miles from there at the home of Solomon Hewitt on the bank of Spring river, early in 1815. Davidsonville was not made the county seat until 1816. The postoffice was established there in 1817. On the spot where the courthouse stood a suitable marker should be placer, whether or not it was on the Military Road, or better still a memorial park made of the entire town site, or at least of the courthouse square.

W. E. McLeod.

Walnut Ridge, Ark.

THE OLD ROAD TO GREENSBORO

Gazette 1-30-38

By W. Clarence Adams.

Winding through the hills northeast of Jonesboro, past decaying farm homes that were beautiful mansions in the 90s, is the old Greensboro road—a romantic thoroughfare down which the early settlers traveled to old Wittsburg in the ante-bellum days before either Jonesboro or Paragould were laid out.

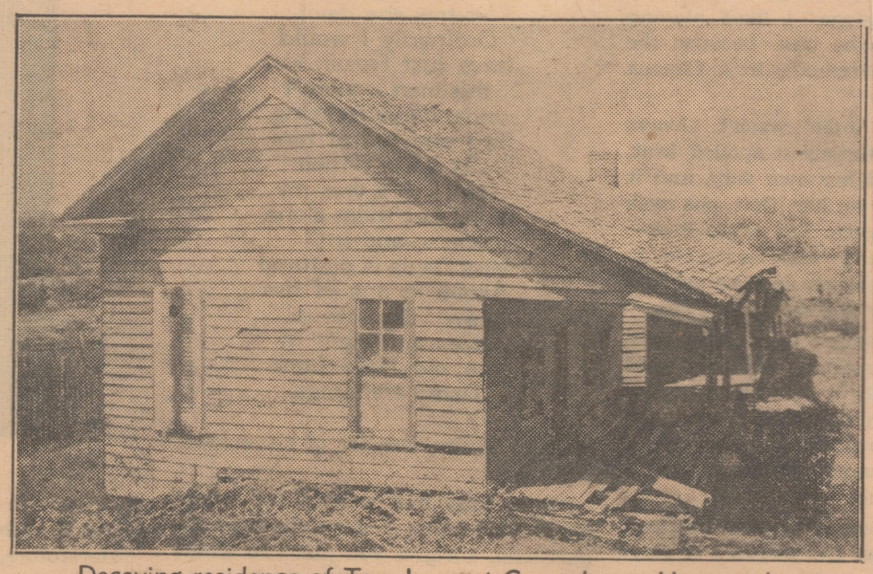
Like other early roads in Arkansas, it was cut out along an old Indian trail. The road follows closely the old trail leading from the Delaware Indian village, just north of the present site of Greensboro, to Jonesboro and down Crowley's Ridge almost due south to Wittsburg, an old river port on the St. Francis river near Vanndale.

With the development of Wittsburg as a river port, merchants and traders from Greensboro, Gainesville and other northeast Arkansas towns, including old Davidsonville, traveled down the road to obtain goods.

Greensboro was laid out along the headwaters of Lost Creek, 12 miles northeast of Jonesboro, in 1837 and in 1847 Gainesville, just north of Paragould, was established.

Down the road came creaking ox carts from Missouri, Kentucky and Tennessee. Along the roadside were homes constructed as pioneer families surveyed out their lands and settled. The land was all forests in those days, but plots were soon cleared up for cultivation

Driving out from Jonesboro today the visitor can see the site of many of these old homes—and not a few old log structures still standing, though few are used. Perhaps two or three homes may be glimpsed where the occupants have remodeled the homes.



Decaying residence of Tom Lane at Greensboro. He was the first sheriff of Greene county.

It was along this road that Joe Clark, the first photographer in Craighead county, first lived. Nearby is the old homestead site of Ben Freeman, who kept the mail for the settlers, his home being the half-way house for the mail riders who carried the mail from Bolivar to Gainesville and Greensboro.

Further up the road the Ransome family resided, adjoining the Ransome cemetery. Not far away is the site where Major Warner erected the first brick house in the county in 1862. Two miles up the road stands the old J. N. Burk home, occupied by the county's first surveyor.

The homestead site purchased by W. T. E. Armstrong, the county's first sheriff, is nearby, now owned by the William Burdyshaw estate. The old log house where Mr. Armstrong lived has been torn down.

Scattered along the road are homes and the sites of early homes where lived the Kitchens, Gibsons, Willeys, Dicksons, Culberhouses, Nutts, Smiths, Puryears, Nisbetts and the McCullars.

The road winds over the hills, into valleys and over hills again. Atop a little hill six miles out from Jonesboro the visitoir slows his car to gaze out westward over the wide expanse of the Lost creek bottoms. When the road was first hewed out from the wilderness, the valley was in forest, and wild game abounded, including deer, bear and other animals. But today it is all in farming lands.

Within two miles of the site of old Greensboro, the road cuts sharply into the hill. On each side are high walls—showing unmistakable signs of heavy traffic that must have passed along this way in the early days when the road was first cut out before the Civil war.

At the top of the hill overlooking the little valley of Lost creek, the site of old Greensboro, is the old decaying residence of Tom Lane, one-time sheriff of Greene county and father of W. T. Lane Jr., present sheriff of Craighead county. The house is not occupied now and is rapidly falling into decay.

Descending the little hill into the valley, the visitor sees little evidence of the bustling little town that thrived there from 1837 through the 80s. A wooden bridge crosses Lost creek, about the spot that was known as the main street of Greensboro. To the right is the site of the old postoffice and upon the eroded hillside nearby is the site of early business houses.

It's a lonely road—the Greensboro road that leads northward up from Jonesboro. What a thrilling history it could unfold of the early days if it could only speak! Down it rode the pioneer families of Craighead county in their oxen carts. Down it came the early merchants and traders with their goods. Down it came the early settlers of Jonesboro and surrounding vicinity, following the decline of the old town.

Today it is "just a country road."

The History Of Flat Creek Valley

Only a Few Descendants Remain of the Early Pioneers Who Settled Along the Springs of Flat Creek in Southwest Corner of Flat Creek.

By W. E. McLeod.

Gazette 2-6-38

The old Military road through Flat Creek Valley, said to have been opened about 1811.

Arkansas pioneers selected the sites for their settlements usually along streams, for their abundance of water. In the southwest quarter of Lawrence county was one of those favorable spots, probably the most favorable within the present limits of the county. It was the valley of Flat creek, extending from the part of the county called the Flat Woods on the northwest and from the divide between Black and Strawberry rivers on the west, in a southeast direction, to its junction with the Black river bottoms at the bridge on the Powhatan-Lynn road, two miles southwest of Powhatan.

Through this valley from end to end flows Flat creek, fed by many springs. The two prongs of the creek each have a spring as a source, and from there to its entrance into the flood plane of Black river, the springs seem to have been spaced at exactly the right distance apart for homesteads. It is the same on the several lateral branches.

The low land along the creek is from a few yards to a quarter-mile wide, but the higher slopes of the valley are, for the most part, gentle, affording fine locations for homes. In its primitive state the soil of the valley slopes was fertile and covered with heavy timber, oak, hiskory, gum, etc.

At about equal distance to the west and the east of the valley, after about 1836, were the young towns of Smithville and Powhatan.

At the spot now called Denton, about the middle lengthwise of the valley, two roads crossed, the Military road extending north and south through the county, and the then new Smithville-Powhatan road, extending east and west along the northern slope of the valley. These roads gave unusual facilities for getting into and out of the valley. The valley must have seemed very attractive to the incoming home-seekers.

That is a picture of the valley about 1840, ready and waiting for its inhabitants. Before that date and soon after, a few bold "squatters" located there. The dates of their coming are hard to determine exactly. The dates of the entry of their lands may or may not be the same as the dates of their first settlement. They may have "squatted" for years on their lands before entering them. In that they were protected by the pre-emption laws of the federal government. The dates here given are the dates of land entries. Judging from some of the dates known and other information, there is reason to believe that the dates are of settlements as well as of entry.

Tradition says that William Stuart of Virginia, was the first settler in the valley, in 1816. He and his wife, Rebeca, are the ancestors of one of the outstanding families of this county. A son, C. T. Stuart, was one of the leading business men at the old county seat at Davidsonville, and when the county seat was moved to Jackson, in 1839, he moved there; but when the county seat was moved, in 1836, to Smithville, he located for a time on a farm on Stinnett's creek and later moved to the new town of Powhatan, where he spent the remainder of his long life in various kinds of business. Records show that he entered much land, so it is presumed that he speculated. He had a fine home for that day in Powhatan. He was treasurer of the county from 1836 to 1840. He was the father of Cicero, C. A., F. C. and C. T. Stuart Jr., who were leaders in the affairs of the county after the Civil war. Capt. C. A. Stuart was sheriff of the county from 1880 to 1886. The other brothers did not seek office, but for many years were identified with the Democratic party.

While tradition says that William Stuart settled in Flat creek valley in 1816, the records do not show that he ever entered any land. He could not have done so before 1820, when the lands of Arkansas Territory were opened for entry. The records show that his wife, Rebeca Stuart, entered 320 acres in 1825, which no doubt was the land on which they had lived since 1816, and she entered it probably after his death. This family played an important part in the religious development of Flat creek valley. It is said that it was through the influence of Mrs. Rebeca Stuart and others of like mind, that the first Methodist church in Lawrence county was organized there in the valley, and some have said that it is the oldest Methodist church in Arkansas. It may be; there is no positive proof to the contrary; but it seems improbable. It is a fact that Eli Lindsey, a pioneer Methodist preacher, established the Spring River circuit, the first in Arkansas, and embracing all the state north of the Arkansas river, in 1815, and the next year reported it to the Missouri Conference. After that time preachers were assigned regularly to the circuit, but, so far as known, none of them preached in the present limits of Lawrence county before the Rev. Isaac Brookfield came in 1820. The Rev. Mr. Lindsey also is credited with having organized Flat Creek church, but it hardly could have been that early, for at that time there was, so far as can be ascertained, only one family in Flat creek valley, and apparently there were not a half-dozen families there until after 1840. But recorded evidence reveals that there was a Flat creek "meeting house" as early as 1844.

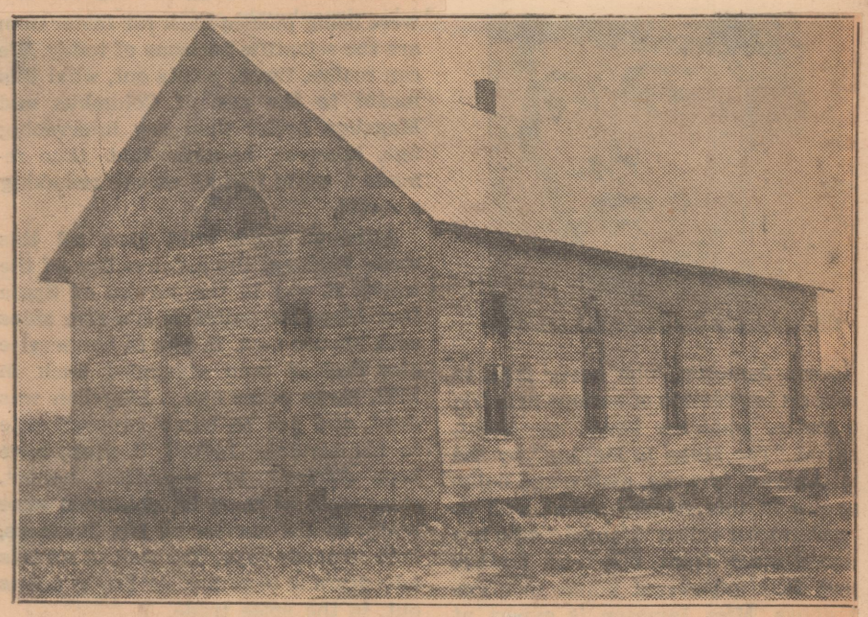
The only other settlers known to be in the valley before 1850 are William Wayland (1826), Taylor Fortenberry (1836), Hugh Rainwater (1849) and Hiram Dorter (1849).

Many Waylands were among the pioneers of the county. They settled mainly in the Spring river country, some miles to the north of Flat creek valley. One of them, Jonathan Wayland, was a noted local Methodist preacher, who had much influence in shaping the religious life of the Flat creek community. Another local Methodist preacher in the valley was Hugh Rainwater, father of the numerous Rainwater tribe in this county. Hiram Dorter is said to have brought in the first copper bottom evaporating pan for making sorghum molasses, an important substitute for sugar in those days. His son, John Dorter, was an early school teacher in the valley and was surveyor for the county from 1876 to 1880, and sheriff from 1880 to 1886.

The influx of settlers into the valley started in 1850 and continued for ten years, with the greater number coming in 1850 to 1854. I will attempt to name only the well known families. In addition to those already mentioned, they were, in somewhat regular order down the valley: A. F. Phillips, 1851; John Davis, 1854; S. W. Dodson, 1853; Allen Moore, 1851; W. E. Moore, 1852; W. G. Howard, 1850; Joshua Moore, 1851; S. W. Moore, 1850; W. L. Wasson, 1851; Jefferson Webb, 1851; D. W. Moore, 1850; W. G. Hammond, 1850; John L. Matthews, 1852; Jeremiah Brady, 1851; G. B. Richie, 1854; W. J. Matthews, 1852; Thomas J. Guthrie, 1854; Marston Morris, 1850; W. G. Morris, 1854; W. H. Richie, 1854, and W. M. Moore, 1851.

A few of those who were a little later residents in the valley were James Davis, Emanuel Good, Murdoc McLeod, John W. Wasson and Jenj Ivie. All the names are mentioned because those to whom they belonged played important parts in the economic, moral and social development of the valley.

In the days when the valley was new and the soil fertile, the farmer population was prosperous for that time, and the valley was outstanding, for its good citizens. They were of good families, mostly of English descent, through Virginia and Tennessee, for the most part. They were religious folks and believed in education. So they attached themselves early either to Flat Creek Methodist church in the lower end of the valley or to New Hope Baptist church near the upper end. That church, one among the oldest Baptist churches in northeast Arkansas, was organized with five members in 1844. Both churches were in existence several years before 1850. Both had church-school houses, and schools before the Civil war. Both had noted camp grounds at which great camp meetings were attended by people from all over the county, and even beyond the borders of the county. The valley, with its two oldest churches in the country, was easily the religious center from which the influence radiated that led to the formation of several other churches of both denominations.



The New Hope church, the third building on the site in Flat Creek Valley. The first building of the congregation, organized in 1844, was built in 1853; the present building was built in 1892.

Each church occupies its third building. The site of the Flat Creek church was moved in 1884 to its location on the Smithville-Powhatan highway, three miles west of Powhatan. New Hope church built a new building on the original site in 1892. It is on the Smithville-Powhatan road about four miles east of Smithville.

Today on every hand are marks of decay and erosion. Nearly all the old homes are gone. The creek, fringed with cotton wood trees, still winds its way through the valley, but the once fruitful soil, robbed of its fertility, no longer responds with bountiful harvests. About the only thing that remains unchanged are the crystal waters that gush from the springs, once the joy and pride of their owners.

Descendants of the pioneers have wandered away to seek a livelihood in other parts. If the call of the names of the pioneer families once in the valley were called, only a very few could answer here.

2-13 Firty Years Ago. -38

(Arkansas Gazette, February 13, 1888.)

The Literary and Music Club entertained most pleasantly last night at the rooms of the Young Men's Christian Association. In addition to the usual exercises, the members of the club and their guests enjoyed an old-fashioned candy pulling.

The McCarthy Light Guards had a very satisfactory drill last night. It is quite probable that they will attend the competitive military drills at Austin, Tex., and in order to get themselves in fine trim they will drill at all odd times. The Crystal Guards also held a meeting in the Senate chamber last night.

Jacob Brooks, who is employed by a New York syndicate as mineral prospector, writes Dr. J. C. Branner, state geologist, that he has been ordered to make a thorough investigation of mineral resources in this state and that he will be here as soon as weather opens sufficiently for field work. He wants Dr. Branner to allow him the use of his maps, etc.

Market For Bat Guano Developed

Gazette 2-13-38

Special to the Gazette.

Batesville, Feb. 12.—The first cash market for bat guano in the White river country, has recently been established at this place by Roy Jeffery, who is buying it, and drying it in the big sheet iron warhouse near the depot.

The price is gauged on the nitrate content, taking into consideration, the moisture. At present, it is bringing from $1 to $1.50 per point. Farmers are digging it from caves within hauling distance of this place. If the venture turns out to be profitable for both the buyers and sellers, markets will probably be established at points north of this place on the White River railroad. Guano being marketed here at this time runs around 10 per cent nitrate. It is the droppings of bats that hibernate in the caves.

Where the deposits are old, the guano has rotted and the nitrate content leached into the clay. During the Civil war, several of these nitrate caves in the White river country were worked by the Southern army, and the nitrate recovered used for the manufacture of powder.

Explains Discrepancy in Maps Of Old Military Road.

2-14-38

To the Editor of the Gazette:

When I saw on a map published in the Gazette Magazine two weeks ago the old military road located by Davidsonville, I challenged its correctness in a letter published in the January 13 issue of the Gazette. I did so because many old people here affirm that it was located by Jackson and I did not see how it could be located at both places when they are several miles apart in an east-west line across the direction of the road.

Since the publication of my letter I have received letters from two prominent men, one in Little Rock and one at Searcy, about the matter and I have thereby been prompted to try to get at the truth of the matter and I believe I have done so.

On a map made by Col. John R. Fordyce from one made by James Fallon's may of roads in 1836 and published in the Centennial Edition of the Gazette in 1919, the road is located by Jackson.

I think this apparent disagreement in the maps may be explained as follows: In 1808 when the road was opened there probably were no settlers at Jackson, but there probably was a small settlement at Davidsonville. This statement is supported by records in the courthouse at Powhatan, but no more can be said about it here.

A glance at Colonel Fordyce's map will show that from Black's Ferry, where the map shows the road crossed Eleven Point river, a ridge of land lies between that river and the Black river to the junction of Eleven Point and Spring rivers. It was on the lower end of this ridge that Davidsonville was located, surrounded on three sides by Black, Spring and Eleven Point rivers. These rivers are non-fordable all or most of the year. That ridge, with Davidsonville at the lower end of it, was, and is, an ideal location for a road. In 1808 when the road was laid out, Davidsonville was the only settlement in all that region, and naturally it was an inducement to locate the road by that place, notwithstanding the difficulty of getting across Spring river, two miles to the south. After the road was opened the settlers began to come in but much of the time they could not get across the river. So in order to overcome the difficulty they crossed Eleven Point river at Black's Ferry (or ford in dry weather) and veered a few miles to the west to a ford on Spring river at or near the present town of Imboden. This detour soon took the place of the original road by Davidsonville. Jackson grew up by it and Davidsonville lost its road, travel and trade, and in 1829 the county seat to Jackson, and soon after ceased to be.

In 1835, when Randolph county was cut off from Lawrence county, the county seat was moved to Smithville and Jackson slowly declined but the old road remained there. The first maps located the military road by Davidsonville, but after the rise of Jackson it was located by that place. This, I think, explains the disagreement in maps as to the location of the road.

W. E. McLeod.

Walnut Ridge, Ark.

Miners Making Big Temple Of Missouri Hill

Gazette 2-15-38

By HOWARD W. BLAKESLEE.

(Associated Press Science Editor.)

New York, Feb. 14.—Miners in Missouri, blasting rock for the calcium carbonate of toothpaste and other chemicals, are changing a limestone hill into a huge "temple" to surpass ancient Karnak's Temple of Amen, largest ever built.

The mining methods creating this Karnak were described to the American Institute of Mining and Metallurgical Engineers here today by Ralph W. Smith of Ste. Genevieve, Mo. The hill, nearly pure limestone, is located near there.

The portal is cut into side of the hill from the base nearly to the top. This entrance is 100 feet wide, 80 high, and 110 deep, and thousands of persons could be seated there. It opens into the "temple," a pillared labyrinth running deep into the hill's interior. Red flares light these depths as warnings of dynamite blasts.

The pillars are part of the limestone left to support the roof, which is the top of the hill, a crust of rock and dirt 20 to 60 feet thick. Each pillar is 80 feet tall, 20 square and there are 12 to the acre.

Egypt's Karnak temple began in prehistoric times. It was enlarged during 2500 years of Egyptian dynasties. The Missouri "Karnak" started in 1900. It will be several hundred years before the needs of commerce take the last limestone from this spot, a series of connecting hills. Ancient Karnak was square, enclosing 45 acres. The Missouri mining temple will enclose 150 acres and will be irregular.

These 150 acres are only a small bit of 12 square miles of similar limestone deposits in the Ste. Genevieve district.

At first mining of the hill was done to produce building stone. But using the essential stuff of limestone, calcium carbonate, became more profitable. Calcium carbonate is used for high-grade drugs, toothpastes and tooth powders, stomach disorders, paper coating, baking powders, grease making, gas purifying, brick, dyes, insecticides, tanning, ore dressing and steel and sugar mill operations.

Nation's Main Iron Supply To Last but 35 Years.

Thirty-five years is the limit of the present main iron ore supply of the United States, the engineers were told.

This supply is the reserves of the Lake Superior district, which furnishes 85 per cent of the country's present iron. After that supply is gone, it was predicted the country still will have iron, but at a higher cost.

The figures were given at a symposium of the institute's Steel Division by Carl Zapffe of Brainerd, Minn. He is manager of the iron ore properties of the Northern Pacific Railway Company.

Rare Metal Lengthens Life Of Auto Engine Bearings.

Gazette 2-16-38

By HOWARD W. BLAKESLEE.

(Associated Press Science Editor.)

New York, Feb. 15.—A new automobile alloy, made with indium, a rare, soft, white metal discovered 75 years ago, was announced by General Motors laboratories at the American Institute of Mining and Metallurgical Engineers here today.

The indium is used for linings of bearings for engine crank shafts and connecting rods. It lengthens the life of the linings by 200 to 300 per cent. The experiments were reported by C. F. Smart of the Pontiac Motor Division of General Motors.

Before indium was tried the linings were made of cadmium, another silver metal, silver and copper or nickel. But this mixture had the disadvantage, Smart said, of corroding with some kinds of lubricating oil.

Adding the indium to the alloy stops corrosion. Four to five-tenths of one per cent of indium is enough.

Gold Found by Electricity.

Discovery of a gold mine in northern Ontario by electrical prospecting was reported by Sherwin F. Kelly of New York. The new mine is near the famous Pamour Porcupine and Hallnor mines.

Electrical currents of 100 volts applied to the surface of the ground showed resistance in two areas. Engineers figured the resistance was about the amount which would be due to buried quartz veins. Borings showed the diagnosis was right. One of the veins was barren but the other contained gold in paying quantities. There is no electrical way of directly detecting gold.

Prospecting Made Easier By Chemicals

Democrat 2-17-38

New York (AP)—Invisible metals reveal themselves by imitating the brilliant, iridescent colors of beetles in a new method of prospecting reported to the American Institute of Mining and Metallurgical engineers today.

The prospector polishes a sample of ore and dips it in a chemical bath. The polished face, frequently a single uniform color before dipping, comes out of the bath spotted with rainbow colors. Each color reveals a different metal and indicates the quantity of it.

This discovery was reported by A. M. Gaudin, research professor of mineral dressing at the Montana School of Mines. He offered it as a short-cut to locating the largest class of commercial minerals, the sulphide ores which include iron, silver, copper, tin and most of the great metals of commerce.

For many years metallurgists have sought to identify metals in ores by color staining, the same way a doctor finds germs with his biological stains. But most metals did not take stains.

In place of stains, Professor Gaudin has substituted colorless liquids, which form thin films on polished ore. The films break up the waves of light and the reflected waves appear in colors. This is the same way that nature makes the iridescent colors of beetles.

These rainbow effects are named Newtonian colors, after Sir Isaac Newton, the scientist who discovered their secret.

Democrat 3-18-38

Historic Road To Be Surfaced

Washington, Ark.—It has been decided by County Judge Frank Rider and WPA officials that work will begin on surfacing and repairing the Military road, from here to Blevins, on the east and then to Columbus on the west, and surveys have been made.

This is one of the most famous roads in Arkansas and was built by Andrew Jackson more than 100 years ago, and was used for transportation of Indians to the Indian Territory, and also was used by men of national repute, as David Crocket, Generals Houston and Austin, and many thousands of covered wagons carrying travelers to Texas and the Indian Territory.

Wolf House Dedication Sunday

6-3-38

Special to the Gazette.

Mountain Home, June 2.—The Wolf house at Norfolk, built in Indian territory in 1809, will be dedicated as a museum Sunday.

The house has been repaired and the grounds landscaped by NYA workers under supervision of Dave Torrence. Many relics, including two spinning wheels, a yoke of oxen and old tools, have been placed on exhibit. Others will be donated. Miss Ruth Wolf of Chandler, Okla., descendant of Maj. Jacob Wolf, Indian agent, who built the house, will bring many of the family heirlooms, including two cowhide trunks brought to this country from Holland by his father, Michael Wolf. The anvil which Jacob Wolf used in his blacksmith shop still is in use at McPherson, and if possible will be added to the museum.

The program will begin at 10:30 a. m. Basket lunch will be served. Speakers will be John Q. Wolf and Sam Casey of Batesville, descendants of Jacob Wolf; the Rev. W. H. McCuistion and Judge R. C. Love. Tom Shiras will be master of ceremonies. A group of Norfolk singers will entertain.

First House in Baxter County.

The house was the first erected in Baxter county, and although it has stood for 129 years, the yellow pine logs in the walls are as sound as ever. The rafters were joined with wooden pegs and the door and window frames also were put on with pegs. The heavy clapboard doors still hang on the hinges of wrought iron, fastened with rivets made by Jacob Wolf in his blacksmith shop. The rooms are 18 feet square and halls, 12 feet wide, run the full length of the house. Large fireplaces of stone and home dried bricks are in every room. The largest room in the upper story was the scene of the first court held in this section, then Izard county. The other attic room was used during the War Between the States as a jail. A broad veranda faces the river where the Northfork runs into the White. This once was the dividing line between the white man's country and Indian territory.

Major Wolf was appointed Indian agent in 1809 and built the house in what was then Indian territory, as required by law. Kickapoo, Creek, Choctaw and Seminole Indians were under his control, and traded hides, venison and other products of nature with him for implements, blankets, tobacco, sugar and trinkets.

He also cultivated 100 acres with the help of Negro slaves, and operated a blacksmith shop. Later he was a member of the territorial legislature.

Already a Tourist Retreat.

The Centennial Commission last year erected a marker in front of the house, and it is visited by many tourists each year. It is on state Highway 5, just off the bridge recently built across the Northfork river on Highway 5.

Old Houses Show Limestone Used by Early Settlers.

Special to the Gazette 6-5-38

Evening Shade, June 4.—In speaking of the rapidly expanding use of native limestone in building houses, fences, porch columns and "underpinnings" as an innovation that has spread over north Arkansas, we are apt to forget a earlier use of these same stones. Namely, the chimneys that are to be found with practically all old houses.

Like much of custom, language, and folklore, the construction and use of these chimneys is rooted in a past that goes back to the Anglo-Saxon history of old England and France. The fireplace was first used in the feudal days of Europe, just before the discovery of America, at the time when England was soon to pass into the Elizabethan age. The old Saxon hall was large, being used for everything from kitchen to council hall. There was no opening to these first fireplaces. Smoke poured from the fire, to fill the great room and darken the faces of the inmates.

Finally, an overhead opening so that smoke and soot might escape, and then the chimney evolved with its height and draw. The fireplace came to be the chief social and decorative center of home, hall, and public tavern. The utensils changed from black pots and pans to shining copper and brass. But still food was stored in the chimney ovens that had been invented, and strings of vegetables and seasoning hung above the fireplace to cure and dry.

While early Arkansas houses followed the same pattern, this was not altogether true with the chimneys. Composition of the soil, presence and kind of stone in the vicinity, would determine the structure of the chimney. Three types of chimneys came into use, the stone, the "stick-and-dirt," and the "tom-cat." Of these the native stone was most generally used in north Arkansas.

The "stick-and-dirt" chimney was made of short poles or sticks, either hewn or merely barked and dried, and placed one upon the other from the ground upward. A large opening was left near the base to hold the cooking utensils. Clay was worked in between the poles, and the stack was plastered inside and out with similar clay. Such chimneys served their purpose well when new, but were dangerous when dried out. Dwellings were often destroyed by fire. The "tom-cat" chimney was so called because it was made of balls of palstic clay into which a binder of tough grass had been worked.

Branner Pamphlet Describes State

Democrat 6-30-38

"A Few Facts About the Natural Wealth of Arkansas" is the title of a 10-page folder received from the press this week by Dr. George C. Branner, state geologist.

The publication contains a store of facts and figures heretofore unassembled in a single text and shows the value of seven major state products, headed by agriculture. to be $380,648,715.

Agricultural products at $208,241,000 comprises 54.7 per cent of the values, with manufactured products at $97,272,122 being 25.6 per cent.

Other valuations are listed: Forest products, $32,386,250; minerals, $19,438,448; electricity generated, $11,635,216; wild life products, $6,250,000; water consumption, $5,425,679.

Transportation facilities are: Railroads, 4,740 miles; highways, 9,112, divided 2,274 miles hard-surfaced; 5,476 graveled and 1,362 earth surfaced; water, 2,248 miles, divided 1,558 miles in 17 navigable streams for year-round transportation, and seasonal transportation, 690 miles; airways, 278 miles.

Marvels Of Magnet Cove

Wide Variety of Minerals Is Found in Unique and Limited Area in Hot Spring County Which Has Been Visited by Many Scientists and Investigators.

By Mary Dengler Hudgins. Arkansas Gazette 7-31-38

Magnet Cove in Hot Spring county is appropriately named. It is a magnet which has drawn man's attention through nobody knows how many centuries. There is every evidence of the fact that the Indians knew "the Cove" and its natural wonders hundreds of years before the coming of the white man. Even in the early part of the Nineteenth century geologists found their attention turning toward Magnet Cove in Arkansas Territory. Reports made by these men led investors to try out commercial possibilities held in the bewilderingly wide variety of ores and gems to be found in the area. Collectors from all over the world have sought specimens of Magnet Cove minerals.

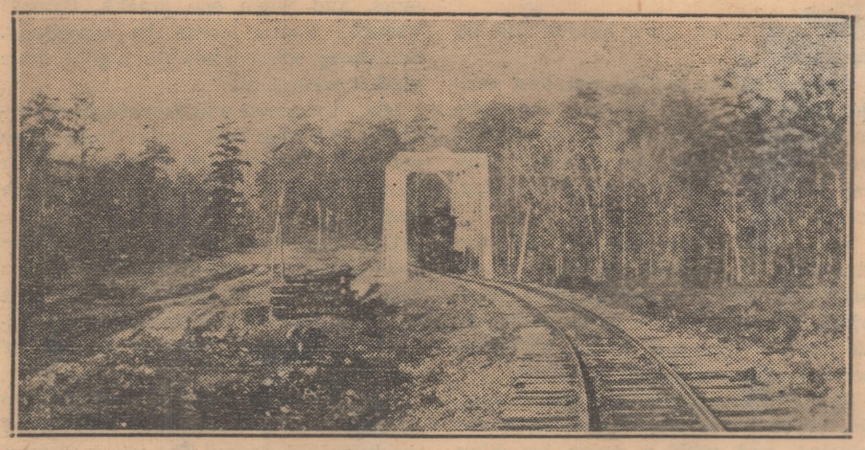
State Senator Joe W. Kimzey, who lives at Magnet Cove, says that one of the best and most elaborate collections to be assembled there was prepared and shipped to Germany about the year 1900 by Dr. Otto Koonce. It is believed to be in a Berlin museum. It has been said that there is scarcely a collection of minerals in the United States which attempts completeness that does not boast a few Magnet Cove specimens.

Books and pamphlets have described the region and its wonders for better than a century. Scientific brochures are released on Magnet as a whole and on certain of its products in particular with surprising frequency. G. W. Featherstonhaugh, Englishman, who visited Arkansas in 1834, was the first geologist to report on the district. The book he wrote about his trip, "Journey Through the Slave States," was published in London in 1834. The picture of Hot Springs reproduced with the Frederic J. Haskin page in the Gazette Magazine of May 29 was taken from the Featherstonhaugh volume.

Quite a number of details about the Cove are given in the book. The geologist was amazed and delighted with what he saw, both in quality and quantity of minerals. Since his time expert after expert has given serious attention to the phenomenon of Magnet Cove. A current pictorial map, "Historic Map of Arkansas," sold on behalf of the building fund of the 4-H Club girls' dormitory to be erected at the University of Arkansas and sponsored by the Arkansas Council of Home Demonstration Clubs, gives Magnet Cove a place of prominence. A pamphlet released by the Arkansas Highway Department describes the spot as a "Point of Interest" for tourist travel. The Encyclopedia Britannica neglects to mention the Arkansas diamond mines at Murfreesboro, but gives Magnet Cove due attention.

Many persons probably have passed through Magnet on United States Highway 270, 12 miles east of Hot Springs, without realizing they were encountering anything unique. This eliptical bowl when mapped looks a bit like a giant oyster on the half-shell. The whole district covers scarcely 5.1 miles—a space about 15,000 by 10,000 feet, at its greatest length and width. Yet within that space may be found more than 50 different minerals. There is every reason to believe that not nearly all of the varieties have yet been isolated.

Of the four-page list of "Gems and Semi-Precious Stones of Arkansas," distributed by the Geology Department (Miss Lucy Crooks is librarian for the extensive collection of books and brochures) 30 may be found in the Cove. Old-timers tell of finding garnets and opals lying on the surface. So many specimen hunters have traversed the little bowl and the district has been so long under cultivation that few are encountered today. But pyrites still may be seen gleaming along the shoulder of the highway between Malvern and Hot Springs. Up to the time of the hard-surfacing of United States Highway 270, fragments of magnet could be picked up in the middle of the road, especially in the stretch fronting on the Magnet Cove Consolidated School grounds.



The old "Diamond Jo" stopping to "wood up" at Magnet Cove in the early days.

Magnet is a strange district. Topping the hill just beyond the Remmel dam cut-off, the motorist dips down into the natural bowl of the Cove. Unless he is quite observant he will fail to notice anything unusual in his surroundings. Perhaps he will notice that trees tend to be all hardwood, instead a blending of pine and oak. Maybe he will note outcroppings of strange rocks, some of them gleaming with flashes of purple and red and green. If he knows tufa he can find at 50-foot hill of it, the only elevation in the bowl. But unless he is interested in geology and steps out of his car to walk, accompanied by a guide or a well planned itinerary (one is issued by the Geology Department) he is unlikely to find out very much about the natural wonders surrounding him. There is the story—to be read plainly—but one must know minerals to be able to read it correctly.

It is said that for its size, Magnet Cove has the largest variety of minerals of any spot in the world. It is also asserted that it is the bed of an extinct hot spring. But whether that completely accounts for the fact that such an accumulation of minerals was joggled into five miles of nature's handiwork, nobody can say.

Perhaps that is why few things have been done about it commercially. Now and then, however, someone discovers new possibilities. On June 8 this year the Arkansas Gazette carried a long story concerning the discovery of taeniolite, an extremely rare lithium magnesium mica (used chiefly in ceramics and enamels). The deposit came to light while Lawton D. Kimzey was searching for titanium, the product which has been most widely commercialized in the Cove. No one can say as yet what the results will be, but the findings of Dr. Branner and the United States Geological Survey have caused the Ceramic Engineering Department of the University of Illinois to investigate possibilities of the Cove product.

However, it didn't take modern laboratories to prove the importance of the Cove. "That ancient Americans engaged in mining," says one clipping, "is evidenced by the old novaculite quarries found on Indian mountain, three miles from Hot Springs, and in Magnet Cove. These mines were worked hundreds of years ago in search for the proper kind of stone fitted for shaping into cutting and piercing implements. Weapons were in demand and chert in several forms, including novaculite, jasper, agate and flint and some varieties of quartz with brittle eruptive rocks, were found."

Richard Buhlis, who has been connected with both the one-time Arkansas Permanent Exhibit at Hot Springs and the Arkansas Museum (now stored) in Little Rock, says: "From all indications, the American Indians were also very much interested in Magnet Cove—there being a prehistoric Indian village site near Lodestone Hill. Archaeologists also have found many artifacts made from the rocks and minerals of Magnet Cove in numerous localities of Arkansas, Louisiana and Missouri."

G. W. Featherstonhaugh, the first trained geologist in the area, visited Little Rock in 1834 and then made his way to Hot Springs by way of Magnet Cove, where he made extensive study of the formations. Of the human side of his trip, he said: "Colonel Conway, the surveyor general of Arkansas Territory, was at this time building a cottage for his family—and has been kind enough to give me a letter of introduction to his lady, desiring her to receive us hospitably for the night if we found it convenient to stay there. The cottage was in a secluded place called Magnet Cove.

"Mrs. Conway received us very politely and though unprepared for visitors, as she was with carpenters and labourers to provide for, she had some supper got for us. Seeing that we were very much in the way, we retired to rest in a room which was not enclosed and still open to the weather on the side the chimney was afterwards to be built.

"Colonel Conway informed me that on surveying the country the needle would not traverse on approaching this locality and the cause was here apparent from a mound in the Cove covered with pebbles of magnetite oxide from one ounce to four pounds in weight. Some of the specimens which I brought away, especially one which contained a portion of a large crystal of iron, possessed of an intensity of magnetic power which is truly surprising."

Featherstonhaugh, highly impressed by what he saw at the surface, predicted phenomenal possibilities in the commercialization of the magnetic ore. Later developments proved that the outcroppings are more concentrated than the deep-lying deposits. One of the largest specimens of lodestone was dug up by a steam shovel in excavating for the Hot Springs-Malvern highway. Buhlis estimates its weight at 100 pounds. Mrs. Bernie Babcock, head of the Arkansas Museum formerly housed in the City hall, Little Rock, refused to estimate its poundage, but said it was 12 to 15 inches in diameter and too heavy for her to lift.

Through the years which followed Featherstonhaugh's visit the Cove grew in reputation. "In 1891 the posthumous report of J. Francis Williams on the igneous rocks of Arkansas was published. This volume contained three chapters on Magnet Cove which constitute a classic in petrographic and mineralogic literature. Further contributions to the petrogenesis were made by H. S. Washington in 1900 and 1901 and by K. K. Landes in 1931."

Men and women have traveled far and near to study Magnet Cove's wonders. Senator Kimzey, who has perhaps the best private collection of Cove minerals in the state, wrote: "I have had the pleasure of being associated with many of the world's best authorities who have come here from time to time to visit and study minerals, and since my father's death in 1906 I have helped many eminent scientists complete collections from this section. My father did a good deal of such work for Drs. Jenny, Foote, Nevin and others, as well as Dr. John C. Branner."

In fact for many years the news that a famous scientist was to visit central Arkansas caused many to jump to the conclusion that Magnet Cove was the destination. Once it was rumored that Madame Curie was coming to Arkansas to investigate the possibilities of radium.

Titanium is a Titan among metals and it has proved so in the Magnet Cove area. The power of its inertia for many years kept it from being commercialized to any extent. It still remains most useful in pigments for paints; but it is also used in arc lamp electrodes, ferrotitanium and smoke screens, continually increasing in importance.

In 1890 Williams mentions rutile and brookite (both varieties of titanium) as occurring in the Cove. Probably on the strength of this report, H. E. Perkins attempted rutile extraction. He dug a shaft 81 feet deep with drifts west 100 feet and east 125 feet. Ore was reported to run high. Today the shaft has caved. Samples of ore still are lying on the old dump. This project was begun about 1912.

In 1931 Senator Kimzey aroused the interest of H. R. McKnight. The Titanium Corporation of America was formed. Shipping began in May, 1932. Since that time work has gone steadily along. The plant is small. The method of extraction is very simple, compared to the elaboration of some processes. But it is highly effective.

Radio is presumed to be affected by the magnetic deposits of the Cove. It has been frequently asserted that radio reception is poor throughout the district. However, many motorists assert that their auto radio sets are undisturbed by passage through the bowl. Programs continue to come through undisturbed, they report. Stephen A. Cisler, general manager of KTHS at Hot Springs, says he has driven all over the Cove for the purpose of determining loss of reception and has found no spot materially affected.

Cove residents love their country and believe in it. The Kimzey family has been untiring in its efforts to bring Magnet Cove into its own. A recent letter to the Gazette from F. P. Lappin proves that he, too, is alive to its possibilities.

It seems rather odd, with wonders of the Cove known to all that some of the wealthy men who have visited Hot Springs for many years have not taken advantage of its promises. When "Diamond Jo" Reynolds, millionaire grain dealer and owner of extensive mines, built his little narrow-gauge railroad from Malvern to Hot Springs he made provision for his pigmy engines to burn wood. The tiny tenders couldn't carry fuel enough for the whole trip. They would invariably stop to "wood-up" at the Cove. The late engineer John Ryan told of the fraternizing on the toy trains by Jay Gould, Phil Armour, Billy Sunday (while still a ball player) and "Gentleman Jim" Corbett. When firemen leaped off the train to throw on wood, millionaire and mauler hopped off too—laughing as they loaded cord wood. Strange it is that men whose eyes were trained to the possibilities in soil and its sub-strata failed to "corner" the Cove. But that is only one of the Magnet Cove mysteries which has not been solved.

New 'War Emergency' Mineral Found

8-29-38

Special to the Gazette.

Hot Springs, Aug. 28.—A new mineral known to geologists as heckomite, said to be of the sodalite family of rocks, is being studied by Miss Jewell J. Glass, Washington, said to be the only optical mineralogist in the country. The new find was located in the Magnet Cove area.

Miss Glass, studying "war emergency minerals," is conducting her investigations for the Department of the Interior. The heckomite came to her attention when a sample was sent to her office for testing. When subjected to violet ray treatment, the mineral was found to be highly phosphorescent and very valuable to collectors of that type of mineral. It is found in large quantities in Magnet Cove, she reported, but the other minerals have been found only in small veins.

Miss Glass will leave here the middle of the week to go into the Ouachita National forest to continue her survey.

Although a resident of Washington, she is a Southern woman, born and reared at Meridian, Miss. She is a cousin of Senator Carter Glass of Virginia.

Calls Attention to Errors In Article in the Gazette.

9-5-38

To the Editor of the Gazette:

I read with keen personal interest the article entitled, "New 'War Emergency' Mineral Found" in the Monday, August 29 issue of the Gazette (page 2). The article is well written and essentially correct, with the exception of the accidental omission of the word "woman" before "optical mineralogist." With due credit to the women and true justice to the men this phrase should read, "said to be the only woman optical mineralogist." The spelling of the mineral name should be h-a-c-k-m-a-n-i-t-e (hackmanite). This is another on the long list of unusual minerals found at Magnet Cove. It is not classed as a "war emergency" mineral and does not exist in what may be commonly regarded as "large" quantities. It is, however, present in marketable quantity.

The suggested revision in some of the statements in the article are meant simply to clear up those small points which are normally and frequently made by writers who are unfamiliar with mineralogical terms.

Being an employe of the Department of the Interior, I feel impelled to defend the accuracy of statements pertaining to my work.

With grateful appreciation, I am,
(Miss) Jewell J. Glass.
Washington, D. C.

Geological Survey Helps Develop Mineral Resources

Good Government

By GEORGE C. BRANNER
State Geologist

(This is the first of two articles on the work of the State Geological Survey.) 9-10-38

Although Arkansas is known as an agricultural state, the value of the mineral products in 1925 was 32 per cent of the value of the agricultural products for the year. This was in the days when the production of the Smackover oil field was at its peak. During the year 1936 the value of the mineral products was $19,438,448 or approximately 11 per cent of the value of the agricultural products of $208,241,000. During 1936 the mineral industry employed about 8,000 persons, met payrolls aggregating $8,250,000 and paid state taxes estimated to be in excess of $1,500,000.

In view of the importance of mineral production, the legislatures of 43 states have believed it to be good public policy for the state to assist in the development of mineral resources and to this end have created and maintained state geological surveys.

In Arkansas the creation of the Office of State Geologist is authorized by the Constitution of 1874. The present state survey was created by an act of the legislature of 1923 and has functioned continuously ever since. Prior to that year independent surveys had functioned intermittently from 1857 to 1860, 1871 to 1875 and from 1887 to 1893.

A state geological survey should perhaps better be called a "Bureau of Mineral Resources, Mapping and Stream Measurement," as it is primarily interested in the development of mineral resources and secondarily in mapping and the measurement of streams for the development of water power and other uses.

The work of the geological survey is usually carried on by the prosecution of field studies of mineral occurrences, detailed information on which is lacking and concerning which there seem to be reasonable chance for commercial development. To undertake a study of any mineral resource usually requires the investigation of an entire region in which it occurs and to do this often requires the work of a crew of men for months at a time. Private corporations will very seldom undertake a regional, or even a county, study and it is therefore essential that, if such studies are made that either the state or federal government agencies undertake them. For example, in 1929, the Arkansas Geological Survey undertook a study of the oil and gas formations of western Arkansas and published a 368 page report on the subject. This covered an area of approximately 10,000 square miles and included maps showing the position of 168 structures and many cross sections of the area. The basic information set forth in this study has served as a groundwork for the detailed investigation of many small areas by private groups.

In 1935 the Survey published a report of 538 pages on the oil and gas possibilities of the Gulf Coastal Plain, or lowland portion, of southern and eastern Arkansas. This report contained 117 maps and figures and county by county descriptions of the formations to be expected. This report has proved so valuable that the edition of 1,250 copies has been exhausted.

Other surveys undertaken during the past few years have had to do with:

(1) The glass sands of northern Arkansas. This investigation covered some 12 counties and indicated the presence of large reserves there of high grade silica sand.

(2) The quicksilver region of southwestern Arkansas. This report covered the entire area of occurrences through Pike, Clark and Howard counties.

(3) The black marbles of northern Arkansas. This study covered five counties of the eastern Ozarks.

(4) Barite in Hot Spring County.

(5) Bauxite deposits in central Arkansas. These have been discussed in two reports. One of these, "A Geomagnetic Survey of the Bauxite Region in Central Arkansas," sets forth the results of a magnetic survey of Pulaski and Saline counties. The second report was published from a manuscript supplied by the U. S. Geological Survey and contains drill hole records of 55 test holes drilled in two counties.

Federal Agencies Co-Operate In State Geological Survey

Good Government

By GEORGE C. BRANNER
State Geologist

PART II

(This is the second and final article on the work of the State Geological Survey.)

9-17-38

It is estimated that during the last 10 years 20,000 publications, reports and maps have been distributed by the Arkansas Geological Survey in response to requests for geological and mineralogical data on Arkansas. These requests have come in from all points of the world.

Since 1933 much of the money expended by the Survey has gone into state-federal cooperative projects. Under the C. W. A., the F. E. R. A. and the W. P. A., both statistical and field projects were set up. Under these, mineral data from all sources have been compiled and five volumes published. These include a report on mineral production statistics, a report on mineral producers for 1935, a list of oil and gas wells, a list of water wells, and a list of elevations. The data for these reports were compiled and the master sheets were typed for reproduction by relief personnel.

Files Completed

In addition, oil and gas well and water well log files have been completed which have brought together the largest collection of Arkansas well logs in existence. A map reference library project has also been set up and is in operation.

Under the C. W. A. and W. P. A. four important field projects have been approved with the Survey acting as sponsor. These are (1) a state leveling and traverse survey; (2) the state mineral survey; (3) a limestone drilling project and (4) a mapping project.

Under the C. W. A. program a U. S. Coast and Geodetic Survey mapping program in 1933-1934 employed 420 men in Arkansas for a period of several months. This project ran 557.4 miles of leveling, 199.4 miles of traverse, established 550 level stations and 322 traverse stations and erected 228 monuments. This work was continued on a reduced scale under the F. E. R. A. in Pulaski and Jefferson counties after the close of the C. W. A.

This field work was done in order to provide the preliminary information for the making of accurate topographic maps by providing the necessary vertical and horizontal control points.

County Groups

The State Mineral Survey was initiated to make a study of the easily recognizable and easily accessible minerals and mineral waters of the state. To accomplish this, county groups were established in 32 counties, each functioning under a county supervisor. Up to June 29 a total of 5,192 square miles of the state had been surveyed in these counties. This is 14 per cent of the total area of 35,515 square miles which has been selected for surveying. A total of 562 persons were employed on this project on August 14.

In making this investigation, every square mile of each county being surveyed is walked over by field parties. Each section of land is mapped as to roads, houses and streams and the locations of all rock outcrops and mineral deposits and water wells are shown. Specimens are systematically collected and sent in to the state office for identification and analysis. To date a total of more than 2900 specimens have been submitted. These include lead, zinc, manganese, iron, quicksilver, copper, clay, chalk, limestone, dolomite, tripoli, glass sand, sand and gravel and building and road construction materials.

Information on caves, springs, and other items of interest to tourists is also collected.

Crews Prospecting

A crew of 15 persons including one foreman has been prospecting for limestone in Pulaski and Saline counties since January of this year. Up to the present time 50 holes have been drilled and beds of limestone which cover several square miles in the vicinity of Alexander, Collegeville and Mablevale have been located.

At the present time a topographic mapping project is being carried on in eastern Arkansas. About 400 square miles in Lonoke and Prairie counties have been mapped and one quadrangle, the England quadrangle, containing 250 square miles, has been completed and is now being prepared for publication. A second quadrangle of similar size, the Lonoke quadrangle, is about 2/3 completed.

It is interesting to note that no systematic program for the completion of the topographic mapping of the unmapped area in Arkansas now exists due to lack of funds for that purpose. It is estimated that of the total area 18,328 square miles or 34.3 per cent is adequately mapped; 20,689 square miles or 38.7 per cent is inadequately mapped and 14,318 square miles or 27 per cent is totally unmapped.

In addition to sponsoring the W. P. A. projects described above, the Arkansas Geological Survey is cooperating with the U. S. Geological Survey in its stream measurement program in the state.

Future Studies

Future studies on the following minerals are much in demand: Clays, manganese carbonate ores, petroleum in the deep producing horizons, lignite, oil shales, building stones, mineral waters, tripoli, phosphate-bearing rocks, brines, sand and gravel, fullers earth and bentonite, limestone suitable for rock wool manufacture, greensand, cinnabar, rutile, antimony ore, iron ore.

In view of the fact that only 27 per cent of the state is not mapped, it seems highly advisable that a systematic program for the mapping of the unmapped areas cooperatively with the U. S. Geological Survey on a 50-50 basis be followed. An appropriation of $15,000 per year would permit the cooperative mapping of all unmapped areas in about 17 years. Funds are also needed to the increase in contributions to the cooperative stream measurement program.

NEWS About PEOPLE

Gazette 9-18-38

Oil Specialist.

Dr. W. T. Thom Jr., Blair professor of geology at Princeton University, where he is in charge of structural geology and coal and oil geology in that department, has been in Little Rock the past few days gathering available recent information that sheds light on the depth and contours of the basement complex of south Arkansas. Which means that he is studying the pre-Cambrian granite that was the world's surface between 700,000,000 and 1,000,000,000 years ago. On that basement, as it is known geologically, was deposited in much later years the accumulation of sediments which are now producing oil. Dr. Thom compiles his figures from data secured from state offices and from the actual drilling experiences and findings of oil companies. Each bit adds to the general nation-wide report which Dr. Thom and his associates will present at the 1939 meeting of the International Geophysical Union. He is chairman of a committee of the American Geophysical Union which will offer the meeting an improved and more comprehensive model of the basement surface, based on a similar model which Dr. Thom took to the last meeting of the Union at Edinburgh, Scotland, in 1936.

Dr. Thom, who prior to joining the faculty of Princeton University had several years as head of the Oil, Gas and Coal Division of the United States Geological Surcey, is the guest here of McCombs Hardy, 2400 Broadway, who came home from Tennessee for the duration of Dr. Thom's visit. Mr. Hardy, who graduated last June at Princeton, where he had several courses under the professor, accompanied him earlier in the summer on a tour of Wyoming, Kansas, Texas and Oklahoma, when they did the same sort of work that Dr. Thom is doing here. Dr. Thom commended Dr. George C. Branner, state geologist, for the general efficiency of his office and his assistance in this study. Dr. Branner is a member of Dr. Thom's committee.

This internationally known oil specialist said that the world's supply of that product has only been tapped. He said that although the more obvious discoveries have probably been found, the supply will increase under more elaborate geological and geophysical methods and improved drilling, and will be stretched because of less wasteful refining.

Ore in Bald Knob Area As Yet Unclassified

9-25-38
Ark. Democrat

Bald Knob—J. H. Sheldon, in draining an old pond on his farm near Bald Knob, dug up a quantity of a strange looking rock which neither he nor any of his friends could classify, but which persons who claim to know, declared was radium-bearing ore. The ore is of a light gray color, heavily impregnated with a bright, silvery metal. It is extremely hard and all attempts to melt it have failed. The lode seems to be located in a comparatively small area, but extends deeply into the ground. Samples will be sent to the state geologist for an authoritative test. Meanwhile there is much speculation as to what the rock really is.

COUNTY HAS SIXTH PLACE IN VALUE OF MINERALS PRODUCED

Gazette- Feb. 5-39

(One of a series of articles on information contained in the preliminary report of the Pulaski County Planning Board.)

MINERAL RESOURCES.

The presence in Pulaski county of three distinct rock groups is unusual for a single county and is responsible for the variety of minerals found in the county. The three rock groups are:

1. Unconsolidated, relatively young sedimentary rocks.
2. Consolidated, relatively ancient sedimentary rocks, and
3. Igneous rocks, or those formed by action of heat within the earth.

Pulaski county is divided into a lowland portion and a highland portion, the latter occupying the northwestern section. The surface formations in the lowland section are flat-lying, unconsolidated sands and clays and a few thin beds of limestone.

The exposed rock in the highland area consists of sandstones, quartzites, shales, slates and novaculites and are consistently folded. Igneous rock are exposed in the Fourche mounta.. area.

Sixth in Mineral Value.

The county ranked sixth in the value of all minerals produced from 1923 through 1935, being exceeded only by the oil, coal or bauxite producing counties of Union, Ouachita, Sebastian, Saline and Johnson. In that period, the minerals produced in the county were non-metallic except a portion of the bauxite.

Value of the minerals produced during the 15-year period was $11,361,-618.74, of which the bauxite produced amounted to $5,018,935.76, or 44 per cent of the total value. More than 800,-000 long tons of bauxite were produced.

Other minerals produced and their value in the same period: Sandstone, 3,-158,031 short tons, $3,484,425; clay (brick), 173,426 thousand, $2,022,396; sand, 1,046,500 cubic yards, $834,172; gravel, 1,346 cubic yards, $1,043; Fuller's earth, 61 short tons, $645.

Arkansas in 1937 supplied 95.7 per cent of the total production of bauxite in the United States. Pulaski county produced an estimated 23.4 per cent of the state supply. The deposits in the county are located southeast of Little Rock and northeast, south and southwest of Fourche or Granite mountain.

The reserves in Pulaski county have been estimated at 1,600,000 long tons.

Bedded sandstone, the harder variety of which is known as quartzite, is found throughout the highland section of the county. Some of the beds are undeveloped for commercial purposes. The same is true of several other mineral deposits.

Huge Clay Supply.

The reserves of clay for commercial purposes are "practically unlimited." From 1923 through 1930, the Arkansas Brick and Tile Company and the Acme Brick Company produced 438,565 short tons of clay for the manufacture of brick.

Although sand beds occur in the lowland section of the county, the Arkansas river has been the principal source. The chief source of gravel has been the Arkansas river, although there occur deposits in the lowland section. Some of the latter deposits are undeveloped.

Fuller's Earth.

The first discovery of Fuller's earth in the United States was made in 1891 near Alexander in southeastern Pulaski county by John Olsen, the United States Geological Survey records show. Many of the Wilcos and Midway clays can be used successfully for bleaching oils, fats, waxes and soaps. No attempt has been made to test the clays systematically.

A 1934 test showed the Fuller's earth found in the county to be the equal of standard English production for clarification of cottonseed oil. There is a large deposit 10 miles south of Little Rock on the Arch street pike at the home of T. P. Brooks.

Minerals which exist in Pulaski county, but have been economically produced to a very small degree or not at all are copper, iron, manganese, zinc, lead, bentonite, limestone, slate, nephelite eyenite, novaculite and peat.

Copper, Silver, Lead.

Copper ores found near Ferndale have been mined but the venture proved unprofitable. Iron and manganese deposits also have been investigated, but the ores were either in too small quantity or of too poor quality to be of value.

The Kellogg mine north of Little Rock off Highway 5 has been worked intermittently since about 1840 and has produced lead and silver concentrates and zinc concentrates valued at about $7,000. An estimated $225,000 has been spent on the mine. In 1927 there were 8,000 feet of shafts, tunnels and raises in the mine. The main shaft had a depth of 1,125 feet.

North Little Rock was named Argenta because it was believed silver might be in the area and silver was found in some of the lead sulphide of the county.

Other minerals which occur in Pulaski county but not in sufficient quantity or of such quality to make their development profitable include red ocher and moulding sand.

Would Repeal or Enforce Law On Mineral Rights.

2-19-39

To the Editor of The Gazette:

We have a statute requiring that minerals separated from the fee title are subject to taxation. This law should be repealed or complied with. In its present form it only serves to work a hardship on the honest owner of mineral rights.

If it is repealed, I suggest that the revenue formerly derived from it be replaced by a slight increase in our severance tax. A mineral right has no actual value, but only a potential value. Producing oil properties have a value and a severance tax is an equitable tax.

However, if the law is not repealed, the state tax commissioner should be empowered to employ attorneys or abstractors in each county to examine the county records and assess such minerals to the owners at a nominal value. At present I do not believe that there is as much as five per cent of such minerals on our tax books. In order that we may all have equal rights, or equal punishment, as the case may be, the law should be enforced or repealed. As it is practiced at this time, it operates against the honest owner and in favor of the land shark operator.

Here's hoping that this letter will be reprinted in some of our county papers and read by our legislators, public spirited citizens and property owners who have the influence to bring about the corrections as set forth herein.

John R. Riley.

Little Rock

STATE SOIL VALUES TRACED TO WEATHER OF MANY EONS AGO

Gazette 2-12-39

(One of a series of articles on information contained in the preliminary report of the Pulaski County Planning Board.)

PULASKI COUNTY SOILS.

Although there are 59 different kinds of soil in Pulaski county, they can be classed in five groups having common geological origins. The groups are:

1. Arkansas river valley soils, including all those derived wholly or partially from materials collected and deposited by the Arkansas river.
2. The Coastal Plains soils, derived from materials transported and deposited beneath the sea and subsequently exposed.
3. The Fourche mountain soils, developed by the weathering of sandstone and shale rocks in place.
4. The Ouachita hills soils, developed by the weathering of slates, shales and sandstones in place.
5. The Granite mountain soils, developed by the weathering of igneous rocks in place.

Soils Are Rated.

Many individual soils differ widely even though all of them originated from the same geological materials. The difference has been caused by changes that occurred very slowly over many thousands of years, so that color, texture of size of particles, acidity and relative fertility vary greatly. Local variations in the rate of change are caused by differences in temperature, rainfall, sunshine and steepness of slope.

Tentative productivity ratings, based on three investigations by different groups on average cotton and corn crop yields have been assigned. The ratings for cotton show the average number of pounds of lint per acre grown on Arkansas river valley soils is 350 to 450 while the maximum is more than 500. Average of the Coastal Plains soils is 150 pounds while the maximum is 300; the Fourche mountain soils average is 200 with a maximum of 350; the Ouachita hills soils average is 200, the maximum 325; the Granite mountains soils average is 200 while no maximum was assigned.

The ratings indicate that only the best upland fields produce crops equal to the average yield of the river valley soils. As a general rule, they may be expected to produce from one-half to two-thirds as much cotton per acre as the valley soils.

Corn Ratings Estimated.

The corn yields, based on statements made by farmers, show average bushels per acre for the river valley soils to be 25 while the maximum is 50 bushels. Average yield for the Coastal Plains soils is 10 bushels and the Ouachita hills and Granite mountain soils 15 bushels. The corn productivity ratings are tentative, especially since the yields are limited to a single season and based on estimates.

In addition to nitrogen and phosphorous content and acidity reaction, which cause the difference in fertility, two other factors must be considered. They are steepness of slope on each field and the extent to which individual soil types are found distributed in large consolidated areas or scattered in small isolated areas.

Types Located.

Slightly more than one-third (34.2 per cent) of the rural area is located within the Arkansas river valley soils group classification, and since 95 per cent of these soils have slopes ranging only up to three per cent, 57 per cent of the level area also is in that classification.

Eleven per cent of the rural area is in the Coastal Plains classification, where slopes range up to eight per cent. Most of the remainder is in the Fourche mountain and Ouachita hills classifications where the slopes are steeper. With proper erosion control, however, slope conditions probably would be suitable for agricultural purposes on about 50 per cent of the area of the two classifications.

Variety Creates Problem.

The Planning Board has compiled data on slopes, soil types, acreage distribution and location of each, acreage of cleared crop and non-crop land which should prove useful in allocating funds for specific soil conservation programs based a little more definitely on soil and slope characteristics.

It is the great variety of soil conditions found within the county that makes the problem of proper agricultural utilization difficult to solve. Land utilization will be discussed in another chapter.

"Perhaps, when we finally work our way through the many complications of our land utilization problems, we shall find that separate programs of land use for each of these diverse conditions of soil and slope will provide a master key that will open the way to a better development of other county resources in addition to those inseparable from the proper use of land."

ARKANSAS'S ECONOMIC DEVELOPMENT IN 1938 ANALYZED BY MILAM

2-19-39

By P. W. Milam.

(University of Arkansas School of Business Administration.)

The recession in business activity in Arkansas in 1938 was remarkably mild. Total income declined from $429,000,-000 in 1937 to $393,000,000 in 1938, a decrease of only eight per cent. Total income in 1938 was the third highest during the last eight years, being exceeded only in 1936 and 1937. Cash receipts of farmers from crops and government payments amounted to $144,-000,000 compared with $150,000,000 in 1937, a decline of four per cent.

Cash receipts were at the highest level during the last 10 years with the exception of 1929 and 1937. However, they were 25 per cent below the 1929 level despite government payments much in excess of prospective payments in 1939. Labor income was maintained at high levels in 1938. Manufacturing wages are estimated at $30,000,000 compared with $31,000,000 in 1937. Most of the decline in income in 1938 was due to the decline in business profits and professional incomes.

Total spending, measured by bank debits of reporting banks, declined from $891,000,000 to $823,000,000, or about eight per cent. The decrease in total spending corresponded closely with the decline in income, but there was much shifting in spending for various purposes. The United States Department of Commerce reports that total dollar retail sales declined slightly over six per cent. Changes in spending in various lines from 1937 to 1938 are as follows: Residential buildings, 12 per cent; total buildings, 10 per cent; hardware sales 10 per cent; building materials, one per cent; food, three per cent; filling stations, four per cent; furniture, five per cent; jewelry, seven per cent; apparel, 10 per cent; motor vehicle dealers, 21 per cent.

Sales measured in physical units instead of dollars also varied greatly. Increases occurred in sales of goods, gasoline, telephones and electric power. The following declines were recorded: Cigarettes, three per cent; Hot Spring baths, six per cent; life insurance, 13 per cent; new passengers automobiles, 38 per cent; electric refrigerators at wholesale, 54 per cent.

Spending Ability at High Level.

The ability to spend, measured by bank deposits, continued at a high level. Bank deposits at mid-year were $143,-000,000 compared with $145,000,000 the previous year and were only 27 per cent lower than before the almost complete collapse of the banking system in 1930, 1931, 1932 and 1933.

Despite considerable recession in profits in 1938, failures remained at a relatively low level. Liabilities of bankrupt concerns while increasing from $500,000 in 1937 to $1,000,000 in 1938 were only 10 per cent of the peak in 1930.

Appreciable declines occurred in production in most non-manufacturing lines, the conspicuous exception being petroleum production which increased from 12,000,000 to 18,000,000 barrels. Lumber production declined 25 per cent, coal production 19 per cent, electric power production 26 per cent. However, the value of all mineral production, including petroleum, increased from $23,-500,000 in 1937 to $26,700,000 in 1938, a 13 per cent increase. Crop production generally declined. Cotton production decrease from a record production of 1,904,000 bales in 1937 to 1,340,000 bales in 1938, but exceeded the 10-year average of 1,275,000 bales. Corn production declined from 40,600,000 bushels to 36,200,000 bushels, but remained well above the 10-year average of 29,100,000 bushels.

Livestock Increasing.

Livestock on the farms in Arkansas is increasing and seems likely to continue to increase for a number of years. This is especially probable if we are entering a long period of gradually increasing rainfall. The extremely dry and hot temperatures of the last 14 years has had a disastrous effect on feed production and consequently has been an important factor retarding the increase in the number of livestock.

The number of cattle on farms on January 1, 1938 was 1,075,000 compared with a low of 1,033,000 in 1936 and a 10-year average of 1,036,000. Undoubtedly there has been an increase in the number of cattle during the last 12 months in view of the abundance and low cost of feed. The number of hogs on farms at the beginning of 1938 was 20 per cent above the low point in 1936 and with the exception of 1928, 1933 and 1934 was at an all time record high.

New Oil Fields.

The outstanding development in natural resources was the discoveries of new oil fields in Union and Columbia counties in south Arkansas. The Schuler field monthly production increased from 246,000 barrels in January to a peak of 728,000 barrels in September but declined to 550,000 barrels in December as the result of proration. The Buckner field increased from a production of 13,000 barrels in January to 40,000 barrels in December. The Magnolia and Village field which were opened during the year were producing at the rate of 39,000 barrels in the month of December. A total of 207 producing wells were completed in 1938 compared with 104 in 1937. It is estimated in the Oil and Gas Journal that the known petroleum reserves of Arkansas were increased from 80,000,000 to 139,000,000 barrels during the past year. Total production of petroleum in Arkansas in 1938 was 18,400,000 barrels compared with 12,-200,000 barrels in 1937 and a 10-year average of 14,500,000 barrels.

Several developments occurred in the political field that were of interest to business concerns in Arkansas. Constitutional amendments were adopted providing for a special tax inducement for business expansion and for a workmen's compensation act. The federal wage-hour law became effective. The initial disturbances from the law were relatively mild. However, more serious disturbances may arise if the step-up provisions regarding hourly wages are strictly applied in future years. It is contended by many that it will slow down the rate of expansion of manufacturing in Arkansas and thus retard the transfer of the low-paid agricultural population to the relatively high-paid manufacturing jobs. Others claim that an increase in wages of those that are able to secure jobs in manufacturing will enable these workers to increase their efficiency and thus raise their standard of living. However, the wage-hour bill secured most support from those sections of the country that are most opposed to reducing the differential between Northern and Southern relief wage rates to not more than 25 per cent and that are most active in preventing the South from securing equality in railroad freight rates.

The recession which began in the first part of 1937 reached bottom in the early spring of 1938. By the end of year business in Arkansas had regained most of the lost ground. During the last three months business in practically all lines has materially exceeded the corresponding three months of a year ago. Business in January was especially favorable compared to a year ago. Sales of new passenger cars were 50 per cent higher. Good gains were made in retail sales, employment, pay rolls and the tourist business at Hot Springs.

The most serious unfavorable situation at the present time is the high level of cotton stocks. Government loan policies by maintaing American cotton price at a relatively high level caused exports from August 1 to February 1 to drop to 2,198,285 bales from 3,832,247 bales during the corresponding period last season. With the exception of the war period in 1917, this is the lowest level since 1885. However, the increased consumption of foreign cotton at the expense of American cotton by reducing the foreign surplus to a low point will soon result in an increase in cotton exports. It seems unlikely, however, that there will be a sufficient improvement in the demand situation to more than offset the prospective decline in government payments.

Reorganization Battle Is Over: Was It Sham?

Christian Science Monitor

Senate action paves way for speedy agreement; efficiency, not economy is major aim.

March 24, 1939

By a Staff Correspondent of The Christian Science Monitor

WASHINGTON, March 24 — Passed by the Senate 63 to 23, the Federal reorganization bill now goes to its final stage of conference with the House after more than two years of political controversy. Action practically completes one of the most extraordinary chapters of the New Deal. The measure has already passed the House and quick settlement of minor differences in conference is anticipated.

As now passed it finally gives President Roosevelt for the remainder of his second term, the following authority:

1. To transfer, consolidate and abolish boards, bureaus, commissions, and other agencies of the Government, apart from 21 such agencies which have been specifically exempted.
2. To name six administrative assistants, who are supposed to have "a passion for anonymity" and who are popularly referred to as the "little secretaries."

Powers of President

At the last minute the Administration accepted the O'Mahoney amendment which specifies that the President may not abolish "functions" of agencies though he may end the agencies. In other words, the function may be transferred but must be preserved.

With all its concessions, the modified bill just squeaked through the Senate in what is felt to be a practical form. The restrictive Wheeler amendment was finally defeated by only a two-vote majority. The amendment would have blocked any presidential program not affirmatively approved by both Houses of Congress. It gave either chamber a pocket veto. As the bill now stands Congress still has a veto, but both Houses must agree to pass a resolution of disapproval within 60 days to use it.

The last scene on the Senate floor was concinatory. Spectators [illegible] how the earlier measure kept the ether waves tingling with passionate oratory.

Slapped on Back

Senator Burton K. Wheeler (D) of Montana, who had warned the bill might tend to "dictatorship" without his amendment, jocosely slapped the rival leader, Alben W. Barkley (D) of Kentucky, on the back. Writers who had interpreted the fight as largely a sham battle felt vindicated by the good-natured exchange. Looking back over two years of bitter controversy observers wondered if a good deal of the sound and fury had not been synthetic from the start. They remembered the Rev. Charles E. Coughlin's (Roman Catholic radio priest) fiery phillipics and the floods of telegrams reaching Congress, the religious issues strangely injected and the test case of Roosevelt prestige which resulted in an initial New Deal defeat followed now by partial victory. Peace and calm has followed those tempestuous days, and the bill has been greatly modified.

Roosevelt forces look on the plan as an efficiency rather than economy measure. New Deal leaders say they do not expect much saving

Segment of Meteorite Found In Independence County.

3-4-39

Special to the Gazette.

Batesville, March 3.—William Rinehart, who has charge of the state mineral survey in Independence county, said that among interesting discoveries is a specimen of a metallic meteorite, weighing 20 pounds, found on Clyde Lesley's farm, eight miles north of Batesville. It was sent to the Field museum which commented: "It is a very beautiful specimen." It is composed of iron, nickel and other elements, and is so hard that a piece cannot be chipped from it with a cold chisel.

Mr. Rinehart traced the source of the specimen, and from the best information he can get, it is a piece of a meteorite which fell on the Joe Wright mountain, six miles south of Batesville, in 1884.

Recent reports from the Department of Chemistry, University of Wisconsin, show that Arkansas has a new metal known as rhenium. It is an element discovered in Germany about 10 years ago, and is very rare. It seems to occur with manganese and iron. Several months ago, Mr. Rinehart sent specimens of manganese, maganiferous ore, iron ore and clay to the University of Wisconsin for analysis. He recently received its report. One sample carried one part rhenium in twenty millions; another one part rhenium in ten millions, and a sample sent from Cushman, one part rhenium in four millions. It is said that the richest ore carrying this mineral has been found in Norway. It carries two parts rhenium to one million. No general use has been found for it. Germany produces about 100 pounds a year, which is sold to laboratories. It belongs to the iron family, and melts at 6,000 degrees F. If found in sufficient quantities it might be utilized as a filament for light bulbs.

Mineral Production in Southern States Has Doubled.

3-19-39

Production of minerals in 16 Southern states has doubled since 1905, Dr. George C. Branner, state gelologist, said yesterday.

The Arkansas authority discovered the significant increase while compiling data for use in a survey of Southern minerals requested by the Manufacturers' Record, industrial magazine.

The South was producing 16.7 per cent of the nation's minerals in 1905. Largely through the discovery of vast oil and natural gas fields, the percentage had soared to 32.4 in 1926, Dr. Branner said.

The value of pertoleum sold in the 21-year period was placed at $5,968,239,000; coal, $3,170,000, and natural gas, $2,217,639,300. Texas and Oklahoma, with their oil, and West Virginia, with its great coal mines, led the states in production. Although 99.9 per cent of the nation's bauxite (from which aluminum is processed) was mined in Arkansas, the state placed tenth in value of total minerals produced.

Production Of State Industry On Increase

4-13-39

Arkansas's 1,048 industrial establishments with annual production valued at more than $5,000 each, produced $164,673,277 in manufactured products in 1937 as compared with 1,066 plants producing $119,340,868 in 1935, a report of the Bureau of Census released here yesterday disclosed.

The report said wages paid by the industries totaled $24,734,112 and went to 37,280 employes in 1937, compared to $17,327,951 paid to 29,076 employes in 1935.

The lumber industry led in the number of plants, employes and total wages. The industry manufactured $35,963,098 worth of products in 1937 in 290 establishments employing 17,322 workers with a payroll of $10,630,562.

Next came the furniture industry, which employed 1,962 workers with a payroll of $1,434,842. Its products were valued at $6,827,435. The cottonseed, oil, cake and meal industry employed 1,318 workers, had a payroll of $771,744 and produced $16,643,725 worth of goods.

Leading Counties Listed.

Seven Arkansas counties had manufacturers in 1937 producing more than $5,000,000, including:

Pulaski, 139 establishments producing $29,720,980 compared with $24,272,573 in 1935.

Sebastian, 77 producing $18,744,903 compared with 78 and $12,446,077 in 1935.

Union, 37 producing $17,942,868 compared with 39 and $13,408,678 in 1935.

Ouachita, 25 producing $10,053,516 compared with 30 and $8,564,764 in 1935.

Phillips, 22 producing $7,765,922 compared with 25 and $7,107,806 in 1935.

Jefferson, 42 producing $6,746,831 compared with 50 and $5,963,756.

Arkansas, 19 producing $5,873,465 compared with 22 and $5,097,279.

City Production.

The leading cites were:

Little Rock, 112 producing $19,757,909.

Fort Smith, 68 producing $15,210,610.

Pine Bluff, 32 producing $4,077,131.

El Dorado was third in the list, but its figures were withheld to avoid giving data on individual establishments the survey announced.

Geologists On Study Tour Of Arkansas

6-3-39

Special to the Gazette.

Hot Springs, June 2. — Interesting facts are being developed by Dr. L. W. Stephenson, Washington, D. C., member of the United States Geologic Survey, in his study of outcropping of the upper and lower cretaceous period and its relation to the oil and gas fields of Louisiana, it was said here tonight after 165 geologists, guests of the Shreveport Geological Society, arrived for a night's stop. Dr. Stephenson is assisted by Dr. W. H. Monroe, a member of the survey.

Also with the party are Henry A. Ley, San Antonio, president of the American Petroleum Institute, and Dr. E. Floyd Miller, Tulsa, secretary-treasurer of the organization.

Accompanying the geologists is Leo D. Martin, oil editor of the Times, Shreveport, formerly connected with the Hot Springs New Era.

160 Geologists Visit Glenwood On Tour of State.

6-3-39

Special to the Gazette.

Glenwood, June 2.—One hundred sixty members of the Shreveport Geological Survey, composed of geologists from Texas, Oklahoma, Kansas, Louisiana and Washington, D. C., stopped here late this afternoon on a tour of Arkansas. The party was traveling in five buses. They planned to spend the night in Hot Springs and to continue to Mena and De Queen tomorrow. Henry A. Lay of San Antonio, Tex., said the party is 100 per cent for "Jack" Garner for president.

Research Called Aid To Agriculture

5-3-39

Permanent solution for agricultural ills lies in the test tubes of research workers, Dr. Harry E. Barnard, research director of the National Farm Chemurgic Council, told Arkansas farmers, agricultural workers and business men at the opening of a two-day chemurgic conference at the Hotel Marion yesterday.

"When the research workers begin looking for new uses for agricultural products, they find them," Dr. Barnard said. "To the man intent on making discoveries, nothing is impossible."

Grover T. Owens, Little Rock lawyer, representing the Arkansas State Chamber of Commerce, which arranged the program, welcomed the visitors. Carl H. Wortz Jr. of Fort Smith, chairman of the Arkansas Council of Agriculture, Science and Industry, presided at the opening session.

Sees Hope for Agriculture.

Because of a growing recognition of agricultural products as a "source of chemical raw materials," agriculture "is on its way out of its difficulties," Dr. Barnard said.

He cited the four regional research laboratories to be established by the United States Department of Agriculture as evidence that the chemurgic movement is gaining momentum.

Agricultural Work Described.

Dr. Barnard was introduced by Mr. Thatcher, who presided at the afternoon session.

Livestock Improvement Told.

Disease control and better breeding programs during the past 10 years have eliminated largely the "hit and miss" in production of livestock, M. W. Muldrow, animal husbandman, Agricultural Extension Service, said at the luncheon presided over by C. C. Randall, assistant director of the Extension Service.

An annual income to Arkansas farmers of from $30,000,000 to $35,000,000 from poultry is possible by improved breeding and expansion of the poultry industry by about 30 per cent or 2,500,000 hens, S. A. Moore, extension poultryman, University of Arkansas College of Agriculture said.

The "pure line and hybridization method" of cotton breeding, adopted three years ago by the University of Arkansas College of Agriculture, has produced three varieties best suited for Arkansas, Dr. L. M. Humphrey, associate agronomist, said. Some of the better lines are ready for seed multiplication preparatory for release to farmers.

High Taxes Denounced.

High federal and state taxes on cotton seed products were denounced by T. H. Gregory of Memphis, executive vice president of the National Cottonseed Products Association. "Ordinary common sense tells us that we do not need a tax equal to 50 to 75 per cent of the value of an article in order to regulate it," he said.

Mineral Industry Described.

Development of the mineral industry, which in 1929 paid 7,391 workers wages totaling $7,563,000, is dependent on economic elements determining the extent to which mineral products can be produced in the South, such as supply, demand, transportation costs, competition, credit, insurance rates, taxes and restrictive laws, it was said by Dr George C. Branner, state geologist.

Tax income to Arkansas governmental units from 1922 to 1931 was about $19,000,000, of which the oil industry paid about 90 per cent, "a remarkable record for an agricultural state," Dr. Branner said.

Fruit Possibilities Discussed.

Two large California canning companies have indicated intentions of coming to Arkansas, Glenn Wallace, Nashville orchardist, said. He denounced the "itinerant merchant," or truckman using the "cash on the barrel head" method and none too particular about quality because he can sell to several markets, as a threat to the Arkansas grower's reputation for quality products.

Proposed legislation requiring growers to stamp fruit shipments with their names and preventing movement of "culls," was rejected by the last legislature.

Other Speakers.

E. H. Sayle of Little Rock described quick-freezing plants. William Johnson, Little Rock newspaperman spoke on dairying and Melvin Rose, past president of the Arkansas Junior Farm Chemurgic Council, on "Peanut Butter." Harry P. Newton, technical assistant to the director of the proposed Southern Regional Laboratory of the United States Department of Agriculture, described probable lines of research for the laboratory.

Today's Program.

Louis J. Tabor, national master of the Grange, and R. W. Blackburn, national secretary of the Farm Bureau Federation, will make addresses today. Mr. Tabor will speak at 11:20 a. m., Mr. Blackburn at 2 p. m.

Today's program will include addresses by Henry Bull of the National Forestry Research Laboratory, New Orleans, La.; H. K. Thatcher, executive director of the Arkansas Agricultural and Industrial Commission; W. L. Lear, assistant state forester; George Pecaro of Memphis, Tenn., official of the National Gypsum Company; G. H. Banks of Osceola, Jacob Hartz of Stuttgart, E. F. Johnson of St. Louis, Mo., and W. C. Lassiter of Memphis, Tenn., of the Progressive Farmer.

State Departments' Progress Told

Gazette

7-16-39

Progress of state departments under legislation adopted by the Arkansas legislature in 1937 and 1939 was provided in the form of thumb-nail sketches and presented to legislators who convened in special session Friday.

Each department head prepared a statement of his accomplishments. The pamphlet, was arranged and distributed by the Publicity Commission.

The statements in brief:

Agricultural-Industrial Commission

H. K. Thatcher, executive director.

Secured passage of constitutional amendment for exemption of state taxes on new industries or expansion of old ones.

Gave material assistance to passage of the workmen's compensation amendment and the amendment which gave the Supreme Court the right to regulate practice of lawyers.

Co-operated with prospective new industries.

Aided the governor's co-ordinating plan and attempted to eliminate state trade barriers.

State Plant Board.

Paul H. Millar, chief inspector — Fraud in the sale of sorghum seed has been checked; pest control operators now are forced to obtain state licenses.

State Bank Department.

Grover S. Jernigan, commissioner.

Relieved banks of assessments of $30,000.

Adopted rules to control pyramiding of bad assets, frozen loans, excessive dividends.

Gave supervision to certain institutions under Act 287 of 1937.

Assumed more rigid authority over "loan sharks" under Act 135 of 1937.

Ready to assume charge of any bank if Federal Deposit Insurance Corporation withdraws insurance on its deposits under Act 10 of 1939.

Corporation Commission.

John F. Wells, commissioner.

Proceeded under Act 97 of 1939 to bring about equalization of tax assessments.

Reassessed public utilities, producing an additional $300,000 in taxes this year.

Led the way in fighting for elimination of discriminatory freight rates in the Southwest.

Improved conditions under which buses and trucks operate, with aid of State Police.

State Employment Service.

Dr. Palmer Patterson, director.

Maintained offices in all districts of the state with $45,000 of state funds and federal aid.

Twenty-two thousand jobs filled in last six months.

Forestry Commission.

Fred H. Lang, state forester.

Appropriations of $20,000 a year from the state, $38,720 from the federal government and $48,520 from private contributions in January, 1937, have increased under this administration to $100,000 from the state, $51,500 from the federal government and $60,120 from private contributions.

Fifty-five lookout towers and 2,500 miles of forest telephone lines have increased to 84 towers and 3,600 miles of telephone lines.

Five million acres of forest land have been added to the fire-protected area.

Game and Fish Commission.

D. N. Graves, secretary.

An adequate staff of protectors has been employed for the first time.

The state has become eligible for federal aid for wildlife restoration.

Lonoke and Benton county hatchery and rearing ponds improved.

Eleven game refuges are being operated and two or three others will be established; no tax funds were used; the department is operated with the proceeds of licenses.

Arkansas Geological Survey.

Dr. George C. Branner, state geologist.

Has been far more active than ever during the last year.

Six hundred eighty-two WPA workers given continuous employment.

Twelve thousand four hundred square miles in 43 counties surveyed for mineral deposits.

Laboratory for testing minerals, water and clays erected.

Deposit of 300,000 or more tons of limestone found during tests in Pulaski and Saline counties.

Topographic mapping of England and Lonoke quadrangles, 250 square miles each, completed.

Oil, antimony studies under way.

State Board of Health.

Dr. W. B. Grayson, state health office.

$100,000 added by the 1937 legislature for matching federal funds.

Public health service in all 75 counties.

Syphilis control program inaugurated.

Mobile X-ray for tuberculosis control work added.

Malarial control service given in rural areas.

Laboratory services extended.

Insurance Department.

M. J. Harrison, commissioner.

Ordered the only two fire rate reductions in state's history in 1938 and 1939.

Secured $1,000,000 in values on policies of old Home Life Insurance Company.

Convicted 30 persons for arson.

Labor Department.

Ed I. McKinley, commissioner.

More labor legislation than at any time in state's history.

Averted 10 strikes in last two months.

Military Department.

Daniel B. Byrd, adjutant general.

Funds provided to complete necessary armories.

Aided 155,000 flood refugees in 1937.

Improved Camp Joseph T. Robinson.

New hangar completed for latest observation ships.

142nd Field Artillery organized.

Parks Commission.

Sam G. Davies, director.

Six thousand and four acres added to nine parks, bringing total to 14,939 acres.

Parks revenue doubled.

Attendance increased from 112,000 to 212,000 a year.

State Planning Board.

L. A. Henry, engineer-director.

Co-ordinated public works projects sponsored by state agencies.

Completed study of water resources (published elsewhere in today's Gazette).

Prepared relief plan in event of floods.

Planned state's exhibit at New York World's Fair.

State Police Department.

A. G. Albright, superintendent.

Increased personnel from 13 to 65; supervises parolees.

Established radio station, training school, crime detection laboratory, first aid and safety instruction.

Publicity Advisory Commission.

M. C. Blackman, director.

Started official publicity program for first time.

With aid of Centennial Commission, installed and is operating state exhibit at New York World's Fair.

Distributed 50 pieces advertising literature a week.

National advertising campaign scheduled for next year.

Department of Public Utilities.

Thomas Fitzhugh, chairman.

Utility rates reduced more than $800,000 in last two years.

Aided in multiple-use development of White river.

Brought into reality leading rural electrification program, including lowest wholesale rate from a private utility in the nation.

Increased investment in rural lines from $493,185 before 1937 to $6,500,000 for 6,770 miles of electric lines.

Unemployment Compensation Division.

Eli Collins, director.

Act 155 of 1937 caused federal government to return $750,000 in pay roll taxes collected in 1936.

Administrative costs of $464,671.04 paid by federal Social Security Board.

Since January 25, 1939, the division has paid $1,049,680.91 in unemployment compensation benefits.

Has lowest per document administrative cost in nation.

Vocational Education Division.

Fred A. Smith, director.

An acute shortage of funds was noted.

Majors Act, levying an additional tax on liquor, "probably will not bring in any money for vocational education," although $125,000 annually was appropriated.

Waiting list for home economics and agricultural training has doubled.

State Welfare Department.

John R. Thompson, commissioner. —Clients increased from 17,000 to 27,000.

Payments increased from $3.98 in July, 1936, to $6.50 a month; Crippled Children's Division added; 4,502 persons hospitalized.

Division of Research and Statistics added; received $500 for each $1 spent for supervision.

This Mountain Feud Put Up To Geologist

7-24-39 Gazette

They'll be coming 'round the mountain this summer, bearing tripods or whatever geologists use to measure elevations, in a patriotic endeavor to uphold Mount Magazine's claim as the highest point between the Appalachians and the Rockies.

Folks near Paris in western Arkansas who have boasted the title for years, simply because no one thought to contradict them, were startled yesterday when somebody took a squint at Rich mountain in LeFlore county, Oklahoma, and intimated Mount Magazine was litte more than a hilllock after all.

So they laid the matter before Dr. George C. Branner, Arkansas state geologist, and asked for an official ruling. Dr. Branner didn't help the Mount Magazine cause any when he decided he'd have to check up on a third mountain before getting himself out on a limb.

Dr. Branner said there is some doubt as to whether either is higher than Blue mountain in Scott and Polk counties. He said he would "re-run" the Magazine and Blue mountain elevations and possibly Rich mountain's for an official decision this summer.

"From information now available," he said, "it would appear the highest point is the west end of Rich mountain in Oklahoma."

7-28-39 Gazette

COURSE TO BE ARRANGED.

Selection of a course in Arkansas's natural resources, in compliance with a 1939 legislative act, will be discussed by the Curriculum Committee of the state Department of Education at Fayetteville today. M. R. Owens, committee chairman, indicated material provided by state departments which regulate the state's resources will be utilized. Nature study probably will be offered in lower grades. A course in conservation may be included in grades seven to 12. Dr. George C. Branner, state geologist, anl L. A. Henry, engineer-director of the state Planning Board, will attend the conference.

Group to Draft Textbook Will Meet Friday.

8-6-39

A committee of state officials and educators will meet Friday to begin preparation of a textbook on Arkansas's natural resources for introduction in the public schools in 1940. Addition of the course was authorized by the 1939 legislature.

Left in the hands of the state Planning Board by a curriculum, seminar at the University of Arkansas two weeks ago, actual work of writing the manuscript will be in charge of the committee appointed yesterday by L. A. Henry, engineer-director of the board. Its personnel is:

Dr. H. M. Blalock, member of the state Utilities Commission, chairman; M. R. Owens, state supervisor of high schools of the Department of Education, vice chairman; Mr. Henry, secretary; S. C. Dellinger of the University of Arkansas and member of the state Game and Fish commission; H. E. Thompson, assistant director in charge of the state Agricultural Extension Service; Dr. George C. Branner, state geologist; A. M. Crowell of El Dorado, representing the state Board of Conservation; Mrs. H. H. Tucker, Parent-Teacher Associations, Little Rock; S. G. Davies, director of the state Parks Commission; Fred H. Lang, state forester; M. C. Blackman, director of the state Publicity Advisory Commission; A. L. Minton, Arkansas State Teachers College of Conway; J. E. Bishop, superintendent of Mena schools; S. C. Hastings, superintendent of Crossett schools; W. F. Hall, state supervisor of elementary schools, and Dr. H. G. Hotz, dean of the University of Arkansas College of Education.

The conference will be held at the Albert Pike hotel at 2 p. m.

Mr. Henry said the manuscript will be completed by January and will be published before the 1940 curriculum seminar is held at Fayetteville in June. The book will be at source volume for the preparation of courses in conservation.

Text on Resources Will Be Published

8-12-39

A textbook on natural resources of Arkansas for use in the public schools will be published by a state Planning Board committee early next year, it was announced by L. A. Henry, engineer-director of the Planning Board, following a subcommittee meeting in charge of compiling the data at the Albert Pike hotel yesterday.

The sub-committee, composed of state officials and educators, have taken seven subjects for inclusion in the book. Each of the subjects has been assigned to smaller committees. The sub-committee will meet early next month to plan the narrative for each subject.

Textbook of Natural Resources Approved by Committee.

9-27-39 Gazette

An outline of a textbook on Arkansas's natural resources, required for study in public schools under provisions of a 1939 legislative act, was approved by the state Resources Book Committee yesterday. The text will be written and published in time for study after July 1, 1940.

Dr. H. W. Blalock, member of the state Utilities Commission and chairman of the committee, said chapters and their authors will be:

Soils—H. E. Thompson, assistant director of the state Agricultural Extension Service, and Dr. H. G. Hotz, dean of the College of Education, University of Arkansas.

Forests—Fred H. Lang, state forester, and D. C. Hastings of Crossett.

Wild Life—Dr. S. C. Dellinger, archaeologist of the University of Arkansas and curator of the university museum, and W. F. Hall, state supervisor of elementary schools.

Minerals — Dr. George C. Branner, state geologist, Alec Crowell and M. R. Owens, state supervisor of high schools.

Water Resources—L. A. Henry, engineer-director of the state Planning Board, and Dr. H. L. Minton of the Arkansas State Teachers College, Conway.

Parks and Recreation — Sam G. Davies, director of the state Park Commission, and J. E. Bishop.

Flora—Dr. Dwight M. Moore of the University of Arkansas and Mrs. H. H. Tucker of Little Rock.

Co-Ordination

Administrative heads of 10 state departments and agencies met with Governor Bailey yesterday and formed the Arkansas Natural Resources Council. Purpose is to co-ordinate activities of the governmental units to increase their efficiency and to eliminate possible overlapping effort.

The council is composed of the Forestry Department, Arkansas Geological Survey, Department of Public Utilities, Publicity Advisory Commission, Planning Board, Arkansas Corporation Commission, Parks Commission, Game and Fish Commission, Agricultural and Industrial Commission and Flood Control Commission.

Thomas Fitzhugh, chairman of the state Utilities Commission, was elected council chairman. H. K. Thatcher, executive director of the Agricultural and Industrial Commission was chosen vice chairman and L. A. Henry, Planning Board engineer-director, secretary.

Department Heads To Meet.

Heads of the departments and agencies will hold monthly meetings. The first will be in the Utilities Commission's conference room at 2 p. m. tomorrow.

Discussion of possible expansion of the state's recreational facilities will occupy most of tomorrow's meeting. Industrial expansion of the state problems of taxation, need for certain types of basic research and other subjects will be discussed later.

Consolidation In Other States.

Officials of the council said Michigan is the only state in which agencies dealing with state forests, minerals, lands, waters, wildlife and parks have been consolidated.

ARKANSAS GETS PART IN PLAN TO SPEED INDUSTRY

Gazette 9-2-39

17 Plants Would Aid In War Program.

Washington, Sept. 1 (AP).—War Department experts have enlisted the services of 156 key industrial plants in Tennessee, Arkansas and Mississippi for the 24-hour-a-day manufacture of supplies for military forces in the event of any war involving this country.

The plants, together with their wartime quotas, are listed in secret files, and are signed up for the beginning of immediate production whenever the assistant secretary of war, Louis Johnson, should find it necessary to call for the mobilization of industry.

Officials declined today to reveal the names of the plants having wartime orders but they said 115 industrial concerns in Tennessee, 24 in Mississippi and 17 in Arkansas would go into production of wartime supplies on any scheduled "mobilization day."

Arkansas Plants Would Make Variety of Products.

Six of the 17 plants in Arkansas are located in Little Rock. Of the 115 enlisted in Tennessee, 15 are at Nashville, 10 at Memphis, 17 at Chattanooga and 10 at Knoxville.

The Tennessee plants would supply the armed forces with tentage, lumber products, uniforms, pontoon equipment, field ranges, shoes, photographic equipment, flags, chemicals, ammunition components and ship valves, metal containers, iron and steel products, shelter tents and even gas-proof clothing. One plant would convert part of its equipment for the manufacture of duck decoys to the making of shelter tents for the soldiers.

Arkansas plants would manufacture surgical instruments, hospital furniture, tentage, rubber and lumber products, uniforms and cotton duck and webbing for the armed forces.

Mississippi plants would produce wood products, textile, combat wagons, tentage and uniforms.

Production Contracts Already Drawn.

The War Department and the enlisted plants have copies of "schedule of production" contracts which would become effective in the event of mobilization. Under this program, developed as the aftermath of the World war, War Department officials would notify the plants to proceed with the program outlined.

The schedules said in part:

"In planning for the mobilization of industry in a national emergency, the War Department has surveyed the manufacturing capacities of your facilities and estimates that in such an emergency your company, in addition to any other War Department schedules already accepted, could deliver the following items at the rates indicated.

"The purpose of the communication is to inform you that an emergency production schedule as indicated is proposed for your company and to provide the War Department with assurance that industrial resources adequate to its probable war-time needs are available."

Effective Functioning Goal of Program.

Maj. Ray M. Hare of the Q. M. C. Allocation Division said that the job of this division was to "appraise the industrial forces of the nation and measure the war load they are able to carry."

He and others in the division visited plants in every state of the union to formulate a plan for industry's assumption of its wartime load.

Assistant Secretary Johnson's explanation of the government's industrial mobilization program is "the provision of an adequate, co-ordinated and integrated program of war-time procurement adapted to the American system of government and industry which will function effectively in case of war."

Officials Not Worried About Food Supplies.

No food plants have received allocations and officials apparently have no worry over any prospective shortage of food products in the country.

In many cases, plants now performing certain commercial functions will convert to other uses to supply government needs.

The case was cited of a plant now manufacturing women's underwear. It would convert part of its equipment to the manufacture of mosquito netting as part of the army's necessary camp equipment.

STATE TO OPEN STOREHOUSE OF WAR MATERIALS

Gazette 9-5-39

Cinnabar Mines Plan Mass Production.

Mining engineers predicted yesterday speedy development of the cinnabar (quicksilver) mining industry in South Arkansas as an aftermath of the outbreak of war in Europe.

Cinnabar, found in Pike and Clark counties in 1931, has been mined since on a prospecting basis. It is a vital substance in the manufacture of high explosives.

"Installment of larger production equipment and openings of new properties are assured," said Dr. W. E. Thorn, who for the last two years has been a consultant engineer for prospecting companies near Murfreesboro.

M. J. Unison, mine superintendent for the recently organized Caddo Quicksilver Company at Murfreesboro, said mass production there could get under way in 60 days.

"Major companies in this field already have received orders for all the mercury they can produce and the price jumped from $82.50 during the latter part of August to $110 per 70-pound flask," Unison said.

Many Other War Materials Available in Arkansas.

The hills and valleys of Arkansas are a storehouse for vast supplies of other war materials. Records of Dr. George C. Branner, state geologist, showed the state has deposits of 17 war minerals.

Manganese, bauxite and cinnabar were considered the most important from a military-use standpoint.

Dr. Branner estimated that Independence, Stone and Izard counties had deposits of about 420,000 tons of manganese, used in the manufacture of steel. Most of American bauxite, used in making aluminum, is produced in Saline county.

Antimony, used for hardening lead, is found in Sevier county. Quartz crystal, found in the Ouachita mountain area, is used in the manufacture of binoculars and glass lenses of all kinds.

State Offers Minerals In Event of an Emergency.

Other minerals which might be put to war uses and the areas where found include:

Cadmium, used to make paints and dyes, in Marion, Boone, Searcy and Newton counties.

Copper, in unknown quantities in the Ozark mountains of northwest Arkansas.

Helium, for dirigibles, in minor ratio in western Arkansas gases.

Iron ore, probably in minor quantities, in the Ozarks.

Lead, in Newton county.

Petroleum, in Union, Columbia, Miller, Nevada, Ouachita and Lafayette counties.

Phosphates, for fertilizers, in the eastern Ozarks.

Potash sands, for fertilizer purposes, Hempstead county.

Refractories, for fire brick, near Malvern in Hot Spring county.

Pyrites, used to make sulphuric acid, Hot Spring county.

Titanium, used for processing molten steel, Hot Spring county.

Zinc, in Marion, Searcy, Boone and Newton counties.

New Manganese Deposits In Independence County.

Some of the manganese fields in the north part of the state have been worked more or less regularly for the last half-century. Manganese absorbs the bases in molten masses of iron and other ores. It gives steel ductibility, permitting it to be shaped.

Discovery of new manganese deposits covering several square miles recently was made at the Batesville-Cushman field in Independence county. Discovered in 1886, Eastern capitalists opened the field originally but now most of the owners are Arkansans.

Major Rails To Aid Drive For Industry

9-27-39 Gzette

Aid of six major railroads operating in the state was pledged by their representatives yesterday to the state Agricultural and Industrial Commission's efforts to bring new industries to Arkansas.

The railroad representatives, meeting with H. K. Thatcher, executive director, and several members of the commission to discuss a program under which each railroad company will furnish the commission services of one industrial agent on a part-time basis, agreed lack of workmen's compensation law and venue fixing laws was the greatest drawback to attracting new industries.

Such laws were enacted by the 1939 legislature, but were made inoperative by the filing of referendum petitions, pending their approval at the 1940 general election.

Spokesmen for the railroads agreed to send members of their industrial staffs anywhere in the United States to contact definite prospects interested in locating new industrias in Arkansas.

Mr. Thatcher said his commission could supply detailed information desired by any industrial concern dealing with the state's natural resources. It was agreed best results could be obtained by concentrating efforts of the state and the railroads on definite prospects, rather than by a general campaign.

Railroad Viewpoints.

W. E. Bolton of Chicago, industrial commissioner for the Rock Island Lines, suggested an advertising campaign conducted through the state commission would have beneficial effects. He said the Rock Island is "concentrating on Arkansas."

E. D. Wilson of Kansas City, Mo., general development agent for the Kansas City Southern Lines, said officials of his company felt that "the natural resources of Arkansas are beginning to receive national attention." He said emphasis should be placed on increasing the state's per capita wealth through the location of industrial plants here.

Mining Will Benefit.

Dr. George C. Branner, state geologist said one of the effects of the European war would be to stimulate mining activity in Arkansas. He said sharp upturns in the price of quicksilved and zinc already had been reflected in increased activity in mining areas of the state.

Agencies Represented.

Those attending the meeting included: J. L. Moss, industrial agent for the Cotton Belt Lines; C. E. Palmer of Texarkana, newspaper publisher and chairman of the state Publicity Advisory Commission and the state Centennial Commission; Nathanie' Dyke Jr., Little Rock and Fort Smith industrialist and former chairman of the Agricultural and Industrial Commission; M. L. Austin, industrial agent for the Frisco Lines; J. L. Carlisle, industrial agent for the Missouri Pacific Lines; H. D. Sweeten, general agent for the Frisco Lines; George C. Stohlman, general freight and passenger agent for the the Missouri Pacific, and L. A. Watkins, general agent of the Missouri and Arkansas Lines.

Treasury Adds Tin to List Of Strategic War Materials.

10-5-39 Gazette

Washington, Oct. 4 (AP).—The Treasury added tin today to the list of strategic war materials under Congress' $100,000,000 authorization for storing defense essentials. It will receive bids November 6 for 200,00 pounds of grade A and 200,000 grade B pig tin to be delivered at Columbus, O., Baltimore, Md., or New York.

Gazette 10-20-39

WHERE "CO-ORDINATION" IS NEEDED MOST OF ALL.

The purpose of forming an Arkansas Natural Resources Council is "to "increase efficiency and eliminate "possible overlapping effort" by co-ordinating the activities of 10 state departments and agencies dealing with such matters as forests, minerals, lands, waters, wild life, parks, taxation and industrial and agricultural expansion. As Governor Bailey points out, these governmental units have problems and functions that are frequently interwoven. This plan to call their administrative heads together periodically for discussion and exchange of information and views seems a practical way to unify the work of all for the benefit of the state and the people.

But there is a co-ordination of a broader character—as broad as the entire state government — which is needed to increase efficiency, minimize waste and do away with costly overlapping. This is the co-ordination of the state pay roll. For a year and a half Arkansas had the machinery for it set up and in increasingly active operation. Then the 1939 legislature junked it by repealing the state civil service law which the 1937 legislature had enacted.

Every year the state lays out more of the taxpayers' money for personal services than for any other single item. Last year, out of total expenditures of slightly more than $38,000,000 for all purposes, only a little less than $8,000,000 was spent for salaries and wages. More than $1 out of every $5 that left the treasury was a pay roll dollar.

There are more than 5,000 names on that pay roll. Without personnel management — that is, without the systematic oversight and control of state employment which civil service would provide—nobody can say with any show of certainty how many of those more than 5,000 employes are indispensable. Nobody can know how many cases of "overlapping" there may be where two employes are drawing two salaries for work which one well qualified and industrious employe might perform as well or better. There is the grossest disparity between salaries paid different employes for similar work. Worst of all, there is and can be no stability among state personnel. Any election may throw hundreds or thousands of more or less trained and experienced employes out, with ruinous effects on the efficiency of the state's business organization, in order that these state jobs may be redistributed on a political or personal basis. The Institute of Public Administration declared the tremendous turnover in state personnel under the patronage system to be "one of the chief sources of waste in "the Arkansas government."

A state that is spending $8,000,000 of the people's money annually in so unbusinesslike way has some basic co-ordinating to do.

Resources Council Will Sponsor Series of Movies

Gazette 10-31-39

Seeking to acquaint residents of the state with its recreational facilities and its agricultural and industrial opportunities, the Arkansas Natural Resources Council decided yesterday to sponsor a series of showings of several state-produced movie films.

Foremost of these films is "Life in Arkansas," which has been shown at the Arkansas exhibit at the New York World's Fair.

The council is considering publishing a quarterly pamphlet listing attractions and general events in the state during the ensuing three months. These probably would include such events as county fairs, reports on hunting and fishing conditions, sporting events and meetings of general public interest.

Dr. George C. Branner, state geologist, was named chairman. Thomas Fitzhugh, Publicity Director M. C. Blackman and Planning Board Engineer-director L. A. Henry were named members of a committee to draw up a statement of the council's policy for consideration at a meeting November 6 at the capitol. Meetings will be held the first Monday of each month.

HOPE FOR ARMY POST HINGES ON TWO ESSENTIALS

Gazette 11-1-39

More Acreage And Water Necessary.

Whether a regular army post will be established at Camp Joseph T. Robinson will be determined within the next two weeks, Raymond Rebsamen, president of the Little Rock Chamber of Commerce, told members of the Army Mess, meeting at the Woman's City Club last night.

Ability of Little Rock civic groups to lease 25,000 additional acres for the camp and to guarantee an adequate water supply for the number of troops which might be assigned to the camp will be determining factors, he said.

His statement followed a series of conferences during the day by state and city officials, Chamber of Commerce and Real Estate Board members with officers of the Seventh Corps Area.

The move to obtain a permanent army post was renewed on the eve of the arrival today of the first of a detachment of approximately 2,500 infantry regulars to be sent here for 90 days of winter training. They will come from throughout the Midwest.

Mr. Rebsamen said that Brig. Gen. Percy P. Bishop, commander of the Seventh Corps Area, telegraphed him yesterday that 1,000 cavalrymen would be sent to the camp immediately and 2,000 more would be sent in January if the facilities required for that number of men could be guaranteed. A tank company from Fort Snelling, Minn., may be sent also.

Realtors to Attempt Lease of 25,000 Acres.

At earlier conferences at the Chamber of Commerce, Col. George F. N Dailey, Camp Robinson commander, and Col. Frederick W. Herman, corps area engineer, estimated the additional minimum acreage needed at 25,000. Members of the Real Estate Board, working with ownership data and assessed valuation statistics possessed by the state and county planning boards, agreed to attempt to lease the required acreage.

The 25,000 acres sought is in a sparsely settled area north of Camp Robinson. Its acquisition would enlarge Camp Robinson to 30,000 acres, or double the size of Camp Pike during the World war.

Colonel Herman suggested that 15 cents per acre would be considered a fair rental for the tract. The War Department would be interested in obtaining a one-year lease on the area, with the option of renewal for from one to 10 years, he said. Purchase of the land would require an act of Congress, he added.

Lease of the land would allow training and movement of troops over the area. Under the lease, residents of the area would not have to move out. Fences or property would not be moved and certain sections of farms could be omitted from individual leases if the owner desired, army officers said.

Governor Bailey And Citizens Act Promptly.

Immediate action followed the officers' announcement that the army was interested in obtaining sufficient acreage and water facilities to care for perhaps a division of 8,000 regulars.

Governor Bailey issued a proclamation transferring all state-owned land in the proposed bloc to the state Forestry Commission with the suggestion that it be leased to the War Department. The action was designed to prevent possible speculation in tax-title lands.

Other officials said the Missouri Pacific Lines, owners of about 2,200 acres in the area, had agreed to lease the acreage at "nominal" prices.

Amount of land owned by the state was not determinable yesterday. L. A. Henry, state Planning Board engineer-director, said that many scattered tracts were affected. Data possessed by the board will be given to the Little Rock Real Estate Board members.

Mr. Rebsamen told the Army Mess that services of 50 men in obtaining the leases might be required and that the Army Mess and other civic groups might be asked for volunteers. Progress reports and maps will be compiled daily after realtors actually begin work.

Floyd Barry, president of the Real Estate Board, said his board would meet in special session today with representatives of other agencies.

Plenty of Water Available If Pipeline Can Be Financed.

One objection recently raised by army officers to a large army concentration at the camp was that the water supply is inadequate.

All the water necessary is available if a pipeline can be built to carry it to the camp, Mr. Rebsamen said, referring to the Little Rock water supply. He and other Chamber officials, and Commissioner Dan M. Boone and Engineer Marion L. Crist of the Municipal Water Department said water facilities need not stand in the way of a permanent army post.

Colonel Herman said a survey showed the present water supply is inadequate for the 3,000 troops expected soon.

An official of the Little Rock Municipal Water Works said that while the Board of Water Works Commissioners had no way of financing the building of a pipeline to Camp Joseph T. Robinson arrangements probably could be made to obtain funds for building a pipeline to south boundaries of the camp if the government would guarantee a certain consumption for a sufficient number of years to justify the expenditure.

The waterworks official suggested that persons interested in extending a pipe line from Little Rock to the camp might take advantage of the waterworks' regular pipe line extension plan in financing the project.

He said the Municipal Water Works would agree to refund to persons or groups making extensions half of the revenue received from sale of water to consumers on the extended lines. These refunds would continue for a limit of 15 years or to any time during this 15 years when costs of the extensions have been paid.

Figures compiled by Marion L. Crist, waterworks engineer, estimated cost of an eight-inch pipe line from Little Rock under the Arkansas river to south boundaries of the camp at $71,000. He said a 12-inch pipe line would cost $115,000 and a 16-inch pipe line would cost $180,000.

Mr. Crist said an eight-inch line would carry 400,000 gallons of water a day, while a 12-inch line would carry 1,600,000 gallons daily and a 16-inch line 3,700,000 gallons a day.

Colonel Dailey Hopes Problems Can Be Solved.

Colonel Dailey estimated the soldiers already assigned to the camp for winter training would spend approximately $90,000 per month in Greater Little Rock. Another $30,000 will be spent by the government for rations and supplies.

There would be a large increase in the mail service because soldiers are "letter writing men," he said.

The colonel said he was well pleased with the camp site and the climate and expressed hope that the problems would be solved.

Port
rley W.

Funds to Buy Strategic War Materials Asked.

7-11-39

Washington, July 10 (AP).—President Roosevelt asked Congress today to mak $25,000,000 available immediately f acquisition of strategic national defens materials.

Congress at this session authorized the expenditure of $100,000,000 over a four-year period to build up reserves of such materials but did not appropriate funds.

The president also asked for $150,000 to enable the Geological Survey to study the development of strate minerals and $350,000 for the Bure of Mines for investigations and experiments with strategic minerals for defense and industrial uses.

CAMP ASSURED OF SUFFICIENT WATER SUPPLY

Gazette 11-3-39

Business Men Give Guarantee.

An adequate water supply will be furnished for Camp Robinson should the War Department decide to establish a permanent army post there, Little Rock civic and business leaders notified War Department officials yeterday.

Meeting at the Chamber of Commerce buildin[illegible] a group of about 35 business leade[illegible] nanimously to notify the federal government that a 16-inch pipeline to cost $180,000 supplying 3,700,000 gallons of water daily would be constructed if the World war training site were designated as a permanent army post.

The action was a major step in plans to have the site selected as a permanent army concentration point. Army officers have pronounced the present water supply inadequate. The decision was preparatory to conferences scheduled for today with Brig. Gen. Percy Bishop, commanding officer of the Seventh Corps Area. General Bishop will arrive this morning, will inspect the Camp Robinson area in the afternoon, and then confer with Governor Bailey and the group of business men.

Mayor Tells of Indication Camp Will Be Permanent.

The group of business leaders adopted a resolution directing Mayor Satterfield and Raymond Rebsamen, Chamber of Commerce president, to notify the War Department the pipeline would be built upon request. The mayor and Mr. Rebsamen were instructed to notify the department that action to provide a temporary water supply already had been taken.

Mayor Satterfield said he learned while in Washington recently that Congress changed the designation of the camp to fort and that he was told that this indicated the army considered this an indication that the camp would be permanent.

The resolution also included provisions for setting up a Quota Committee to solicit funds to finance construction of the pipeline. That committee may be appointed this afternoon after conferences with General Bishop. Chamber of Commerce officials also will notify federal officials of the appointment of such a committee immediately.

Officials attending the meeting said assurance of an adequate water supply would meet one of the requirements fixed by army officers before the camp may be designated as a permanent training post. Much depends on conferences with General Bishop today, they said.

Much Depends on Today's Visit of General Bishop.

Accompanying General Bishop here will be Col. Louis Farrell, his operations officer. They will confer first with Col. George F. N. Dailey, camp commander. Colonel Dailey and his aides were completing yesterday a survey of the old deep water wells on or near the reservation which were used during the World war. The survey will not be completed until this afternoon but reports thus far have been "most favorable," Colonel Dailey said.

5,500 Regulars to Be In Camp by January.

At the conference, Mr. Rebsamen said requests for accommodations at the camp for the winter training program of the army would assure that 5,500 regulars will be stationed at the camp in January.

Under the present assignments, the pay roll will be approximately $1,980,000 annually, he said. Should the camp be selected as a permanent division post, with as many as four divisions assigned there, the pay roll would amount to about $12,600,000, he added.

It also was announced at the meeting that Justin Matthews, realtor, had offered 1,000 acres adjoining the camp for use by the trainees without charge for one year, for half the taxes the second year and for all the taxes as rent for the third year.

Real Estate Board members and officials of the state and county Planning Boards continued arrangements for leasing about 25,000 acres north of the present camp property. Seventh Corps officers have opened negotiations for lease of approximately that amount of acreage for training purposes.

Three Infantry Companies Arrive During the Day.

Three companies of the Seventeenth Infantry from Fort Crook, Neb., including 286 men and eight officers, reported at the camp early yesterday. Two companies of the Sixteenth Infantry are expected late today.

The men at the camp were housed in tents yesterday. Advance detachments are preparing camp for troops who will arrive as rapidly as facilities are provided. National Guard equipment will be replaced with regular army equipment.

Identical Leases Will Be Offered Property Owners.

Identical leases will be drawn up by the state and county Planning Boards for use by members of the Little Rock Real Etate Board in contacting property owners in the Camp Robinson area, L. A. Henry, chairman of the state Planning Board, told members of the Real Estate group at the Woman's City Club yesterday.

Mr. Henry said the identical leases would be drawn up following the suggestion of realtors that property owners should be assured that all leases were on the same terms.

Leasing of land in the camp area will not interfere with normal use of the land, Mr. Henry said.

"If a property owner leases 100 acres to the government and 40 acres is filled with crops, troop movements will not come in contact with the cultivated land. Any actual damage caused by movement of troops through crop-filled acreage will be adjusted by an official adjustment committee of the camp.

"Leasing of the lands will not require that any family move out of the area. The owner will not be handicapped in any way. If a farmer wishes to expand his cultivation next year or the year after, he may do so as the troop maneuvers will not trespass on ground used for the cultivation of crops," he said.

V. B. Buckley, engineer-director of the Pulaski County Planning Board, said the county organiaztion is spending all its available time in acquiring names of owners of property adjoining the

Hope for Army Post Hinges on Camp Success

Gazette 11-3-39

Gen. Bishop, Corps Commander, Here to Survey Training Site.

Success or failure of Camp Robinson as a winter training camp for the United States army as shown during the three-month training period being started now may determine whether a permanent army post is to be established here, Maj. Gen. Percy Bishop, Seventh Corps area commander, said today, on his arrival here for a two-day survey of the camp and its facilities.

In discussing the camp at a press conference this morning at the Albert Pike hotel shortly after arriving by train from Omaha, General Bishop said, "We have received orders from the War Department to carry out intensive winter training for three months.

"Soldiers from eight states west of the Mississippi river included in the Seventh Corps area are affected by the order. The states are Minnesota, Iowa, Missouri, Arkansas, Kansas, Nebraska, North and South Dakota.

"Men in several of these states will, by necessity, because of climatic conditions, have to be moved from their present locations for this field training.

"My survey here today and tomorrow will give me information as to how many of these troops can be trained at Camp Robinson."

Other than to point out that the three-month temporary camp here might serve as a recommendation for the establishment of a permanent camp, General Bishop declined to speculate on permanent post possibilities.

He expressed appreciation to the citizens of Little Rock for the cooperation shown in acquiring the the additional 30,000 acres of land and the decision of a group of business men yesterday to underwrite a $180,000 water line to the camp.

May Await Funds.

General Bishop said the order for winter field training will keep 5,000 troops of the infantry on the move, thus reaffirming statements made here during the past several days that it is possible 5,000 men will be sent here within the next two or three months.

The corps area commander also voiced the opinion during several conferences that the establishment of a permanent post here is contingent on congressional appropriations.

"We are short of money to carry out the three-months' training already ordered and are wearing out our trucks because we are required to shuttle them back and forth between the several posts and Camp Robinson in the transportation of soldiers and equipment."

General Bishop was accompanied here by Col. Louis Farrell, also of Omaha.

The general was met at the Missouri Pacific station by Col. George F. N. Dailey, commander of the 17th Infantry, Fort Crook, Neb.; Lieut. Col. Frederick Herman, corps area engineer, and Col. William H. Smith of the medical corps.

Immediately after the press conference this morning, General Bishop and the staff officers here launched into a study of the information compiled during the past four days. Colonel Dailey and his aides were notified with aerial maps of the camp acreage, state and county planning board statistics, and various other data.

General Bishop would give no opinion on the possibilty of cavalry troops being sent here, "until I have had an opportunity to digest this material and inspect the camp."

He was to continue his conference with the officers through lunch and inspect Camp Robinson before meeting Governor Bailey at 4 p. m. Officials of the Chamber of Commerce were to meet with him following the conference with Governor Bailey.

Leasing Begins.

Planning Board officials and members of the Little Rock Real Estate Board launched nto the actual leasing of approximately 30,000 acres of land adjoining Camp Robinson this afternoon. Model contracts from the War Department were received here yesterday and copies were made here this morning.

Real Estate Board members hope to complete the leasing of two-thirds of the acreage within the next two weeks.

Colonel Herman has stated that the entire area should be leased and ready for maneuvers by December 1.

General Bishop will leave for Omaha tomorrow, following completion of his survey of Camp Robinson and its facilities.

3,000 Men Assured For Camp Here

Gazette 11-4-39

Intensive winter training of at least 1,000 cavalrymen at Camp Joseph T. Robinson in addition to approximately 2,000 infantrymen was assured last night when Little Rock business and civic leaders announced a temporary pipeline would be constructed to Remount station to guarantee an adequate water supply.

Maj. Gen. Percy Bishop, commander of the Seventh Corps Area with headquarters at Omaha, Neb., said, "I am not promising anything," but Greater Little Rock officials went ahead with plans to guarantee an adequate water supply not for 1,000 cavalrymen but for 3,000 men.

General Bishop, who arrived yesterday for a two-day inspection of Camp Robinson to determine the number of troops which it will accommodate, said last night he was "very well pleased with what I have found. If the rest can be as well taken care of I will be more than satisfied."

Water Supply Will Be Determining Factor.

General Bishop said the number of troops to be sent here will be determined by the water supply, and at present only 2,000 can be accommodated. He said, "I hope to bring 1,000 cavalrymen here from Fort Meade, S. D., but that movement depends entirely on the water supply."

Chamber of Commerce officials immediately promised General Bishop an adequate water supply would be available within the next three wecks. Crews of the Arkansas Highway Department will run a survey from Sylvan Hills to Remount Station today and construction of a 6 1-2 inch temporary pipe line will be rushed.

Present plans call for the construction of a line from Sylvan Hills to Remount, a distance of 1.6 miles. There the line will connect with concrete water troughs constructed during the World war. The line will connect with the main line of the Sylvan Hills-Park Hill Water Improvement District, which buys water from the North Little Rock Water Company.

J. H. Montgomery, manager of the North Little Rock Water Company, and commissioners of the Sylvan Hills-Park Hill Water District, pledged their cooperation in seeing that Camp Robinson will receive an adequate supply of water.

The temporary line will serve the Remount cavalry station until a permanent 16-inch pipe line is constructed from Little Rock. Camp Robinson at present is supplied with water from two deep artesian wells, capable of pumping 250,000 gallons per day.

Co-Operation Pleases Little Rock Leaders.

Little Rock civic leaders who met briefly with General Bishop at the Albert Pike hotel last night were generous in their praise of the "fine co-operation of the North Little Rock Water Company and Mayor Neely of North Little Rock.

"They, along with the Sylvan Hills-Park Hill district, have made it possible for the sending of 1,000 additional troops here," one of the leaders who declined use of his name said. "I have never seen a group of business leaders so enthusiastic over a major project. With such fine co-operation there is no reason why we shouldn't obtain a permanent post at Camp Robinson."

General Well Pleased With Set-Up Here.

Little Rock officals received no encouragement from General Bishop about the establishment of a permanent army post at Camp Robinson.

"Once the troops are sent here they will remain" was the consensus. They already had pledged they would underwrite the cost of a 16-inch pipe line from Little Rock to the camp, estimated at $180,000. They went so fare in their offers that General Bishop repeated time and again "I can't promise anything."

General Bishop, who is no stranger to Camp Robinson, said he was well pleased with the set-up here. He said the only purpose of his visit to be sure of safety and health of his troops.

The general said he was carrying out War Department orders for three-months of intensive winter training for troops, and had no idea what orders would be thereafter. He asserted he was forced to conduct the maneuvers "on a shoe-string basis," but would send as many troops here as could be accommodated.

General Bishop said his conference with public and civic officials had been "very amicable," and expressed his appreciation for their co-operation in making the camp a success.

General Bishop was accompanied here by Col. Louis Farrell, operations ofifcer, who assisted in surveying the camp.

Two Companies Added To Population of Camp.

Col. George F. N. Dailey, commander of the camp, went ahead with plans to care for 2,000 infantrymen. Two companies of approximately 200 men arrived late yesterday by truck from Jefferson Barrack, Mo., along with the 14th Brigade Headquarters Company from Fort Snelling, Minn.

Members of the 6th Infantry from Jefferson Barracks and of the 17th Infantry from Fort Crook, Neb., will arrive November 9 or 10. A truck convoy which brought in three companies from Fort Crook Wednesday left early yesterday morning for Fort Crook to bring another contingent here. The convoy from Jefferson Barracks will rest for a day before beginning the return trip.

First Troops Due at Camp Wednesday

Gazette 11-5-39

Two companies of the Fourth Infantry Brigade will arrive at Camp Joseph T. Robinson late Wednesday or Thursday, Col. George F. N. Dailey, commander of the 17th Infantry at Fort Crook, Neb., who will be commander of the camp, said here yesterday.

The two companies will be the vanguard of nearly 2,000 men to be concentrated here for at least 90 days of intensive training in the War Department's defense preparations.

Announcement last week by Maj. Gen. Percy Bishop, Seventh Corps Area commander, that 3,200 men would be concentrated at Camp Robinson will not be realized because of inadequate water supply at the camp, Colonel Dailey said. The supply will be adequate for nearly 2,000 men, he said.

Warrant Officer Harry Hartley said two wells were in operation at the camp. He said one well will pump 150,000 gallons daily and the second will pump 100,000 gallons. This supply, he said, was more than sufficient for C. M. T. C. and National Guard encampments held at Camp Robinson last summer, but there never were more than 1,200 men there at one time.

Troops will be moved to the camp in trucks, Colonel Dailey said, and all should be in camp by November 15. The encampment will be composed of the 17th Infantry from Fort Crook, the Sixth Infantry from Jefferson Barracks, Mo., the Seventh Tank Company from Fort Snelling, Minn., and the 14th Infantry Brigade Headquarters Company from Fort Snelling.

Tents for Soldiers.

All men will be housed in tents and regular army routine practiced. Colonel Dailey refused quarters in town as he wants to be on the grounds with officers and men. Lieut. Col. Frederick W. Hermann, corps area engineer; Lieut. Col. Benjamin Morris, Medical Corps, and Maj. Frank C. Peters, quartermaster corps, will report for duty today. Their first task will be to survey the reservation and lay out the camp.

The training will cover the whole range of army training because so many new recruits are being received. Scouting and patroling will be taken up first with the training progressing to company, battalion, regiment and then brigade maneuvers.

The training ordered by the War Department is designed to give the higher command and the troops experience in high-speed maneuvers and co-operation, Colonel Dailey said.

Work Begun On Pipeline To Camp

Gazette 11-8-39

Floodlights guided a trenching machine over the hills from Sylvan Hill last night as Little Rock business men laid a temporary water main to Remount station in their campaign for permanent army post at Camp Robinson.

Worth James of the James Construction Company said:

"We contracted to turn the water on within two weeks. That means we'll do it some way."

The machine was trucked here from Paris. It arrived in Sylvan Hills at 8:30 p. m. A lighting plant was set up. The trench was begun near Kieh avenue and Highway 5. It will be continued one and three-quarter miles to Remount station at a cost of about $10,000.

It will be the first long step toward securing a post of infantry and cavalry troops, the vanguard of which has arrived ostensibly for three months of training.

The temporary water supply to Remount station will provide for the first contingent of cavalry which Chamber of Commerce officials believe will be increased to 3,000 men and 4,000 horses if army requirements are met.

24 Business Men Subscribe $10,400.

Twenty-four business men subscribed $10,400 of the preliminary working fund promised Monday at a meeting yesterday. The remainder is expected to be obtain at Chamber of Commerce office today, Secretary-Manager D. Hodson Lewis said.

Fifteen men pledged $500 each, seven promised $300 and two $400.

The first carload of six-inch pipe is expected to arrive from Waukegan, Ill., tomorrow. Two additional cars are scheduled to be unloaded by Sunday.

Mr. James will provide skilled workers. Prisoners from the Pulaski county farm are expected to do the common labor.

Marion L. Crist, engineer of the Little Rock Municipal Waterworks, has been loaned to aid in engineering work. He said the company probably will be called on to furnish water without charge until the end of the War Department's fiscal year June 30.

The steadily increasing personnel at the camp will be joined by seven more companies, comprising 800 enlisted men and officers, today. They left Jefferson Barracks, Mo., by truck yesterday and stopped overnight at Poplar Bluff, Mo. Two Jefferson Barracks companies already have been billeted.

5,000 Acres Leased Of 35,000 Needed.

Other Little Rock business men were concentrating their efforts in another field. Representatives of the Little Rock Real Estate Board, accompanied by notaries public with prepared lease contracts, continued their attempts to lease 35,000 acres in northern Pulaski and southern Faulkner county for use of a huge camp.

More than 5,000 acres had been obtained last night, including 2,000 from the Missouri Pacific Lines, 1,200 of state reverted lands, 1,000 from a private company and 1,000 from owners of small tracts.

Henry H. Tucker, chairman of the chamber's Quota Committee, prepared to seek $180,000 with which to construct a permanent water line to the camp. Solicitation may not begin until next week.

Approximately 600 troops were in camp yesterday. Many officers have engaged rooms and apartments in Greater Little Rock. All non-commissioned officers have been given the privilege of bringing their families and living with them in town.

Work on Army Post Credited To Planners

Gazette 11-3-39

COUNTY PLANNING.

County planning proved its practical usefulness in a striking way when the War Department needed definite information on the 25,000 acres necessary to make Camp Joseph T. Robinson suitable for use as a permanent regular army post. Army officers sent to Little Rock found that the basic data they required had already been assembled by the Pulaski county Planning Board. A map showing every tract of land in the 25,000-acre area, with its ownership and valuation, was ready to lay before them, as were other maps dealing with land use, population distribution, details of topography and the location of all roads and streams. Still further information was available in the inventory of all property throughout the county, which has not yet been published.

Most cities now have planning boards. The nation's counties have been less progressive in this matter, and among those now carrying on county planning programs Pulaski county stands distinguished for what its Planning Board has accomplished with relatively small appropriations as it worked in co-operation with the Arkansas state Planning Board.

Suppose no question of enlarging Camp Robinson had arisen, it might be asked, what practical value would there have been in the county Planning Board's work? The answer is that only in this way can information and data essential to many types of development, public and private, be systematically and thoroughly collected, and kept up to date and immediately available when occasion arises. This time it happened to be the ownership, character and value of thousands of acres of sparsely populated land north of the Camp Robinson reservation that needed to be determined as quickly as possible. Next time it might be that a woodworking concern needed to know where stands of suitable timber were located, who owned them, and what highway or railroad facilities would be available for transportation. Or the question might be one of relative land capabilities for certain types of agriculture; or of locating a new schoolhouse; or of adjusting county roads to changing population needs. The purpose of county planning might be summed as preparation in advance for any contingency either in the field of public matters or in the county's economic development and progress.

Concentrating Mill Planned Near Everton

Gazette 11-19-39

Special to the Gazette.

Everton, Nov. 18.—M. L. Birch, who with Little Rock associates is operating the Marguerite zinc mine near here, announced this week the company plans to build a 50-ton concentrating plant on the property in the spring. The property consists of 30 acres lying on Clear creek, which is owned by John Potts of Everton. It is being operated under a lease.

Property Productive.

The property has been operated spasmodically for free ore for more than 20 years, and a good production of ore has been made during periods when the price for ore justified the operations. The present operators except to mine it for both free and mill ore. Since they took over the lease several months ago, most of the work they have done

consists of cleaning out and retimbering the old tunnels and putting the property in shape for steady operations.

In past years Mr. Birch was active in gold mining in the West. He thinks north Arkansas zinc mining has a bright future.

Western Type Mill Planned.

The mill, or concentrating plant which they expect to build, will be fashioned somewhat after the Western types. The primary crushing of the mill ore will be done with a jaw crusher. The material then will be passed into a ball mill for fine grinding, and the concentrating will be done on concentrating tables instead of jigs. By this method, Mr. Birch expects to make a closer saving of ore than can be made on a jig type plant. Mr. Birch and associates also will probably take other leases in this section and have several mines under operation next year.

Textbooks May Include Data On Natural Resources.

Gazette 11-26-39

A digest of Arkansas laws pertaining to natural resources may be included in a textbook on resources which will be made available to public schools next year under an act of the 1939 legislature.

The proposal was discussed at a meeting of the Natural Resources Council subcommittee, which has been designated to co-ordinate the material of affected state departments, at the capitol yesterday. If the digest is published in the book, it will be prepared by Dr. R. A. Leflar, professor of law at the University of Arkansas.

Committee members present were: Dr. H. W. Blalock, state Utilities Commission member, chairman; Dr. Roy W. Roberts, professor of agricultural education at the university, editor of the text; Dr. George C. Branner, state geologist, and M. R. Owens, state supervisor of high schools, assistant editors, and L. A. Henry, engineer-director of the state Planning Board.

Blakeley Dam Hearing To Be Held Dec. 18

Gazette 11-21-39

Washington, Nov. 20 (AP).—The Federal Power Commission ordered today a hearing to be held December 18 on application of the Arkansas Power and Light Company for indefinite postponement of the completion date of the Blakeley dam on the Ouachita river in Arkansas. The commission said it might not "be compatible with public interest to delay further construction of Blakeley dam."

The company under its present license must compete construction by December 31, 1939. At the hearing the company will be required to submit evidence upon actual construction ... which has been accomplished, ... of foundation condi... method of operation ... power company, and other data.

The commissions' order permits interested parties to present appropriate evidence upon the desirability of constructing a multiple-purpose development at the Blakeley site to serve for flood control, power development and navigation. It also permits evidence to be presented showing desirability of the construction by the United States or a public agency of a multiple-purpose reservoir at the Blakeley site, the desirability of submitting a report to Congress upon development of the site for public purposes, and desirability of revocation of that part of the license which authorizes construction, operation and maintenance of the Blakeley development.

TVA Now Supplying Extra Power Needed.

The commission said the application of the Arkansas Power and Light Company for indefinite postponement of the completion date alleged the Blakeley dam was one of a series of three, two of which had been completed, was not needed at this time and the application for extension should be granted. The company said that Carpenter and Remmel dams had been completed and would operate largely as peak load plants. It said the load requirement of the system had not been built up to where additional peak capacity was needed.

The company alleged that the market which would be supplied by the additional power was being supplied throuhg energy bought from the TVA at low rates and the additional power that would come from Blakeley dam was not needed.

The Blakeley development was authorized in the flood control act of 1928 to prevent or control floods and facilitate navigation on the Ouachita river. Government participation was authorized, but not to exceed $2,000,000.

STATE FUTURE FOR LUMBER

Gazette 11-26-39

The outlook for lumber in Arkansas and the Southwest is the best in several years, A. J. Corley Jr., vice president and treasurer of the Corley Manufacturing Company of Chattanooga, Tenn., which does a large nation-wide business, reported on a visit to the company's new Southwest distribution headquarters here this week.

Lumber Shipments Exceed Production.

Mr. Corley cited that lumber production in the South was considerably greater during the first half of November than during the same period last year. He said he was informed by his division manager here, C. F. Brooks, that this production increase was shared by Arkansas, and that here, as in other Southern states, the shipments of lumber during the half-month period exceeded the output of mills.

He reported his company's barometer of the lumber industry's welfare —sale of equipment—was at its highest peak since 1937, the company's record year. This lumber business has come, he said, in the wake of a sustained building program which is general throughout the nation. The period has been marked by entry of many new mills and expansion of present ones.

Wage Law Increases Use of Machinery.

While handicapping many of the smaller mill operators, the wage and hour law has resulted in increased mechanization throughout the entire industry, Mr. Corley declared. In turn, this mechanization partially has accounted for the increased production of the year, he said.

Lumbermen from many sections of the Southwest who formerly made Natchez, Miss., and Shreveport, La., their buying centers now are coming to Little Rock, Mr. Corley revealed.

The division headquarters were established at 319 East Markham street here about April 1. The division, which includes Arkansas, East Texas, Oklahoma and south Missouri, formerly was served by the Natchez office. Four field men work out of the office here, and three are on the office personnel.

Mr. Brooks has been with the company since 1934, being stationed at Texarkana before his transfer here January 1.

Mr. Corley literally "grew up" with the company. His father, A. J. Corley Sr., is general manager of the company, which does business in all 48 states.

Colonel Jones Heads Reserve Officers

5-14-39

Col. Daniel W. Jones, Little Rock, was elected president of the Arkansas Department, Reserve Officers Association, at the annual two-day meeting closed at the Hotel Marion yesterday.

Lieut. Col. John W. Lee, El Dorado, was elected vice president; Lieut. J. T. West, Little Rock, secretary; Lieut. Rudolph Hahn, Fort Smith, treasurer; Capt. John W. Kilburn, Little Rock, chaplain; Capt. Clyde H. Brown, Hot Springs, historian, and Capt. Harry F. Wolfe, Fort Smith, judge advocate.

Signal Corps motion pictures were shown yesterday morning at the Pulaski theater. Col. Joseph A. Day, Arkadelphia, is the retiring president.

Gazette 7-18-39

Reserve Corps Put Under U. S. Employes Compensation Act.

Washington, July 17 (AP).—President Roosevelt signed today a bill extending the benefits of the United States Employes Compensation Act to members of the Officers' Reserve Corps and the enlisted Reserve Corps of the army who are injured while performing active duty or engaged in authorized training.

THE SMILODON

Summer School 1939

Oil Trip

was made, followed by a field investigation of the Great East Texas field.

Continuing northeast the trip passed through the oil fields in the vicinity of Shreveport, Homer, and Haynesville, La., as well as the Shuler, Eldorado and Smackover fields of Arkansas, accompanied by the state geologist, Dr. G. C. Branner. Passing on to Illinois, the party was given the opportunity to see the more recent operations in the Centralia, Salem, Sandoval and Louden fields of the Illinois Basin, followed by an instructive summary of the geology, structure and stratigraphy of the region at the Shell offices at Marshall. Continuing to Pennsylvania, the trip viewed the old fields of Oil City, visited the site of witnessed an interesting demonstration of the five-point

South's Minerals

Dallas Morn. 11-16-39 News

The value of all minerals produced in the South since 1924 has been greater than the value of all minerals produced in this region prior to 1924, according to George C. Branner, State Geologist of Arkansas, writing in Manufacturers Record for November. Mr. Branner sees great significance in this development in a region that has always been considered one with an agricultural economy. His logic would be even stronger if applied to Texas alone. This state has produced greater mineral value since 1929 than in all preceding history. Texas is also considered a region with an agricultural economy, but the total value of its mineral production in 1938 was greater than the total value of all crop and livestock products. Texas has during the last few years dropped from first to second rank among the states in the matter of annual value of crops. At the same time it has forged to No. 1 position in annual value of minerals.

The development of this great mineral wealth in Texas and the South has a significance that has not yet been fully appreciated in the popular mind. This is partly due to the fact that the popular mind continues by momentum to give preponderant consideration to agriculture. It is partly due to the fact that in the matter of the number employed, agriculture still outranks the mineral industries. In this respect popular conception is soundly based; gross value of production is not the sole measure of the value of an industry to the community or region in which it is situated. Nevertheless, the entire South must give greater and more sympathetic consideration to its mineral industries and to the development of these industries and the industries which will logically grow out of them. In view of the international situation and the declining market for agricultural products, the development of the South's mineral industries is doubly significant.

There is also significance in the variety of minerals produced. Texas is top-heavy in fuels with its petroleum, gas, coal and lignite, but its present commercial production numbers about twenty-five metallic and nonmetallic minerals of the nonfuel class. Probably the greatest potentiality for industrial development in Texas lies in its great supplies of fuels, salt, limestone and other low-value-per-unit minerals. The development of these is not attended by the glamour surrounding gold fields, but it is this type of mineral that stands in the line of march of the great chemical industries, and the large volume in which such minerals must be handled lends to their economic value because of the greater employment of labor that will be required. Texans should give greater consideration to their mineral future.

12-3-39 Gazette

LABORATORY SOUGHT.

Arkansas will bid for a United States Bureau of Mines testing laboratory tomorrow. The request will be made by Dr. George C. Branner, state geologist, at a conference with a bureau official. Dr. Branner said the bureau will be asked to co-operate with the state Geological Survey in testing non-metallic minerals, especially clay and shale. The work would be accomplished in conjunction with the state's laboratory at the old penitentiary. The state Geological Survey would furnish technical assistants and research men to study the quality and utility of clay and shale.

RESOURCES GROUP MEETS.

The Arkansas Natural Resources Council announced at a meeting at the capitol yesterday it would sponsor showings of the film "Life in Arkansas" at district meetings of the Arkansas Bankers Association at Wynne in January and at Fort Smith in February. The picture was shown daily at the Arkansas exhibit at the New York World's Fair. State Forester Fred H. Lang gave a report on activities of the Forestry Department as part of yesterday's program.

12-12-39

MINERAL STUDY OF SCENIC HEMMED-IN HOLLOW PLANNED

12-3-39 1

By CLYDE GREENHAW.

Special to the Gazette.

Harrison, Dec. 2.—Soon the miners' pick and shovel will reverberate in perhaps the most scenic spot of the Arkansas Ozarks, with announcement by L. A. Watkins, executive vice president of the Missouri and Arkansas railway, that a study of ores from Hemmed-In Hollow, near Compton in Newton county, and 22 miles south of Harrison will be made.

Determination of Ores In Section Sought.

Geological structure indicates that every type of mineral ore native to this country, both metallic and nonmetallic, is found in Hemmed-In Hollow. Study of the geological structure is to acquaint geologists with that section and to give some lead as to what might be found nearby, Mr. Watkins said.

Mining activities will not mar the beauty of the section unless ores are found in sufficient quantities to operate mining on a big scale.

Most of the study will be conducted in the lower rim of the second basin, which is 1,300 feet from where an automobile can be parked. Within the walls of the canyon there are approximately 60 acres. Hemmed-In Hollow gets its name from its shape which is that of a double horse shoe. The walls are an overhanging ledge for the greater part and are at a height of 300 feet, forming a double hourseshoe in the north end of the canyon with several waterfalls ranging from 35 to 280 feet each. The southern end, or mouth of the canyon, is crossed by Buffalo river, and except at the river, the only two places where the canyon can be entered are goat trails down the ledge. Cedar Fissure is the only place to descend or ascend in the upper rim to the lower section of the canyon. Here a weathered cedar tree stands nearly perpendicular in a narrow gorge made by rock walls not more than six feet apart. Down the tree one must slide to go to the lower basin, while the tree has to be scaled on the return trip.

Inaccessibility would not hinder mining activities, however, if rich veins of ore are uncovered, Mr. Watins said. Ores could be ferried across the Buffalo river, or other ways could be provided.

Even in the first basin, rock walls rise majestically, and look as though they almost touch the blue sky. A tiny stream of crystal blue water flows on its downyard journey, forming smaller waterfalls and then catapulating down the 300-foot bluff into one grand waterfall, which swings through the air like a huge pendulum.

Hollow Once Retreat Of Famous Illustrator.

Of the many celebrities who have visited the canyon, the one most closely identified with it is Rose O'Neill, creator of the Kewpie Doll and internationally famous illustrator. Her father, Colonel O'Neill, homesteaded several acres in this romantic spot and lived three years on the lower rim of the basin. The O'Neills lived at Bonniebrook Farm in the Shepherd of the Hills country of the Missouri Ozarks. Bonniebrook was not "wild" enough for her father, so he came to Arkansas and bought a chasm, when tourists began to rob them of the privacy they sought, Miss O'Neill told the writer while on a visit here about two years ago. She dubbed her father, "Wild Irishman," and Hemmed-In Hollow furnished the ideal spot for solitude. Colonel O'Neill died in California in 1936 at the age of 95. The O'Neill cabin in Hemmed-In Hollow burned a few years ago during a forest fire, but the land is owned by the nurse who cared for the colonel, and to whom Colonel O'Neill willed the property, Miss O'Neill said.

Survey Of War Minerals Under Way

12-?*39

Federal authorities have made the first move toward surveying Arkansas's supply of minerals which have been designated as materials of war, Dr. George C. Branner announced yesterday. The state geologist returned from Washington with an invitation from the United States Bureau of Mines to co-operate in a geological survey.

Of the 10 minerals now being investigated by the bureau, Arkansas has four in considerable quantities, Dr. Branner said. They are bauxite (aluminum), antimony, manganese and quicksilver.

The geologist asserted $500,000 has been appropriated to the bureau and United States Geological Survey to determine location of the strategic minerals and whether the quantities are sufficient to justify test drilling. Dr. Branner said the bureau will be ready to enter Arkansas when the extent of the state's deposits has been ascertained.

Test Agreement Signed.

The bureau also signed an agreement with Arkansas, the geologist said, under which federal laboratories at Tuscaloosa, Ala., Norris, Tenn., and College Park, Md., will test all the state's clay and shale samples except those used in the manufacture of heavy clay products. The latter will be tested by the Arkansas Geological Survey's new laboratory at the old penitentiary walls.

"It is not improbable that a federal field office will be established at our laboratory," he said. "That would lead to construction of a mining experiment station."

The federal laboratories will test Arkansas clays for use as paper fillers, treatment for oils and drilling muds. A technical supervisor will come here to select the samples.

Testing Agreement Will Be Executed Next Month.

12-22-39 Gazette

Hewitt Wilson, supervising engineer of the United States Bureau of Mines, will come here in January to complete details of an agreement under which the bureau will test Arkansas clay samples without charge. The agreement was reached at Washington recently at a conference with Dr. George C. Branner, state geologist.

Dr. Branner said Mr. Wilson's visit will be the first step in the ultimate establishment of a federal field office in Arkansas. All samples except those used in the manufacture of burnt clay products will be tested at the bureau's stations at Tuscaloosa, Ala., Norris, Tenn., and College Park, Md.

Zinc and Bauxite Mines to Be Inspected.

1-5-40 Gazette

Federal and state representatives will inspect operations of Arkansas zinc and bauxite mines to "advise operators and owners on safety measures," state Labor Commisisoner E. I. McKinley Sr., said yesterday.

The inspection will be made, beginning this week, by W. H. Tomlinson of Washington, associate mining engineer of the United States Bureau of Mines; J. W. Fitzgerald, state mine inspector, and Wilson Runton, state safety engineer.

No effort will be made to enforce any statute, Mr. McKinley said. The inspectors will call attention of operators to factors which might cause accidents in the mines.

Ban On Export Of Tin, Rubber Hinted.

1-20-40

Washington, Jan. 19 (AP).—The War and Navy Departments jointly criticized export of pig tin and crude rubber today and hinted at use of "other means" than appeals for cooperation to curb shipments to Europe. Secretary Edison of the navy and Louis Johnson, assistant secretary of war, dropped the hint in a joint statement on the export of "strategic" materials.

The statement contained no mention of the countries to which the exports were destined. A similar joint statement on October 11 merely appealed for voluntary co-operation.

Many Hazards Found At Metal Mines

2-2-40 Gazette

Safety Engineer Wilson E. Runton of the state Labor Department reported yesterday there were unnecessary hazards connected with the operation of many metal mines in Arkansas. The report, filed with Labor Commissioner E. I. McKinley, was based on an inspection of cinnabar, lead, zinc, manganese and bauxite mines just completed by Mr. Runton and W. H. Tomlinson, associate mining engineer for the United States Bureau of Mines.

Dynamite Use Criticized.

Improper use of dynamite is one of the most common hazards, some of the mine operators assembling "shots" for blasting several hours before they are used. Mr. Runton said the best practice was to "keep caps and dynamite in separate places until ready for use."

Failure to equip ore cars with brakes creates hazards in some of the state's bauxite mines, the report said. The cars are pulled up inclines by cables, miners or mules.

"Most cars hold a ton of ore," the engineer said. "Should the cables break or car connections become unfastened, then the cars would race back down the incline."

Hats Protect Heads.

Mr. Runton said all the mines visited, other than those operated by the Republic Mining Company at Bauxite, "seem to give but little attention to size of cables used for loads or to the proper fastening of cables. He said workers in all of the mines visited used "hard hats to protect the head from falling objects but few, if any, were found wearing hard-toed shoes as a protection from foot injuries."

Commissioner McKinley said object of the survey was to bring dangerous practices to the attention of mine owners so remedial action could be taken.

Conservation Textbook Group To Meet Saturday.

3-10-40

Named to prepare a course of study in conservation and natural resources under a legislative act, a Source Book Committee will meet at 8:30 a. m. Saturday in the hearing room of the state Utilities Commission. The committee will discuss the printing of the textbook for use in the University of Arkansas Curriculum Laboratory this summer.

The state Department of Education, the University of Arkansas and state departments concerned with conservation and natural resources are represented on the committee.

Act 312 of 1939 provided that all schools of the state should offer courses in conservation of natural resources and that all students would be required to take the course. The course was made a requirement for promotion in at least two elementary grades.

Three of seven chapters of the textbooks, which probably will be used in schools of the state next year, have been completed and rough drafts have been made of four chapters, L. A. Henry, engineer-director of the state Planning Board and a member of the committee, said.

3-12-40

A Geologist's Paradise.

A group of 30 geology students and five faculty members from Iowa State College, headed by Dr. J. T. Lonsdale, who has a national reputation as a geologist, will leave Ames next week on a six-day field trip through Missouri, Arkansas and Oklahoma. The party will enter Arkansas from Hollister, Mo., and arrive in Conway the second night through Harrison, Marshall and Clinton. Leaving Conway, they will study the structural Arkansas river valley en route to Little Rock, inspect the syenite quarries here and drive to Hot Springs by way of Bauxite, where they will have a look at the bauxite mines. The fourth day will take them through Magnet Cove, where more than 40 minerals can be found, and to Murfreesboro to study the mercury and diamond mines there.

Curriculum for Conservation To Be Prepared.

3-23-40 GAZETTE

A "workshop" to prepare a curriculum for studies in conservation and natural resources in Arkansas schools will be financed by the General Education Board of the Rockefeller Foundation, T. H. Alford, state commissioner of education said yesterday. The foundation has granted the state $1,750.

The "work shop" will be conducted by the state Department of Education, the state Planning Board and the University of Arkansas. It will be attended by 30 persons representing the public schools and state agencies responsible for conservation of natural resources.

A Source Book Committee, of which Dr. H. W. Blalock, utilities commissioner, is chairman, is preparing a volume of reference material for the course in conservation. An act of the 1939 legislature provided for teaching conservation in public schools.

Mr. Alford said the General Education Board had allotted $750 to the state to pay two additional instructors of the course in rural economics and social problems at the University of Arkansas. The course will be attended by county agents, teachers of vocational agriculture and other technical instructors.

Mr. Alford said a study of school district reports on equalizing aid allotments should be completed within two weeks. The state Board of Education authorized Mr. Alford to continue the investigations which revealed that some districts had padded records on which the equalizing aid is based.

Importance Attached To Mine Survey

3-24-40

Special to the Gazette.

Mountain Home, March 23.—One of the most important geological surveys, designed to bring new industries into north Arkansas, will be started soon by the Arkansas Power and Light Company. The data gained by this survey will be assembled in concise but comprehensive form so that it can be placed before concerns interested in the minerals covered. Size of deposits, mineral values in the ore, and power and transportation available will be catalogued.

Harvey C. Couch, president of the company, announced the proposed survey January 1. George M. Fowler of Joplin, Mo., one of the outstanding geologists of the Middle West, since has been employed to conduct the survey, assisted by his own staff.

Mr. Couch announced that "it will be the objective of Mr. Fowler and his staff to study all of the various geological reports that have already been made of Arkansas minerals, make additional field surveys, and co-ordinate all the various reports and details into one comprehensive survey of the state's mineral resources. This will put the facts about Arkansas minerals into shape where they can be brought to the attention of companies interested. We hope to be of all the assistance possible in bringing additional industries into the state, to take advantage of our many opportunities."

Mr. Fowler has been a consulting geologist in Joplin since 1926. He employs regularly a staff of assistants. Mr. Fowler spent 12 years as mining geologist in charge of investigations for the Anaconda Mining Company, one of the largest copper concerns in the West. Although he has made many geological investigations in various parts of Arkansas, he prefers to do much more additional work before expressing an opinion regarding Arkansas's mineral possibilities.

The survey will cover many counties in north Arkansas, and many metallic and non-metallic minerals. Independence county, for manganese, iron, manganiferous ores, clays, marble, rock wool material, phosphate, limestone. Izard county for manganese, glass sand, phosphate, rock wool material, marble, iron. Stone county for manganese, marble, iron, phosphate. Baxter for zinc, lead, iron, phosphate, dolomite, limestone. Marion for zinc, lead, iron, marble. Boone for zinc, lead, marble. Searcy for zinc, lead, marble and phosphate. Newton for zinc, lead, marble, iron pyrites. Carroll for strontium, zinc, lead, iron pyrites. Minerals in all other counties also will be surveyed.

Electricity Seen As Ultimate Power Source.

The survey is of particular importance to the northern part of the state, especially those counties in the manganese and zinc and lead fields. There is no commercial fuel in this section except electricity. Wood is present in abundance, but it is not adaptable for industrial uses except for burning lime. Electricity is the only industrial power the territory can look forward to in large volume.

If the large deposits of manganese, lead and zinc, are to be smelted in the fields in which they are produced, electricity will have to be used. Much of the zinc in the United States is recovered from the ores by the electrolytic process. With a large volume of electricity available, this same process could be applied to the zinc ores of north Arkansas. Recent experiments by government agencies also have disclosed that this process can be applied to the recovery of manganese. The location of electro-lytic plants in north Arkansas would reduce greatly the cost of mining, and give a good local market for the ores.

Zinc Oxide Plant Sought for Arkansas.

John Durst, who buys ore for the Manda Corporation of Harrison, is desirous of obtaining a zinc oxide plant in the zinc field. Zinc oxide is used in the manufacture of paint, automobile tires and for many other things. The zinc carbonates of this section are especially adaptable for this purpose.

"One of the most important plants that could be established in this section at this time is an oxide plant," Mr. Durst said.

Zinc oxide is made by a heat process, the heat agent in most of the plants being coke. The zinc content of the ore in the charge comes from the furnace through a large pipe as gas, and condenses into a fine white powder, which is oxide of zinc.

Coke is not available in this section at a price at which it could be used for industrial furnace purposes. The survey by the Arkansas Power and Light Company will determine whether an electric train could be used successfully.

Ore Deposits To Be Studied

3-24-40 Democrat

Plan Launched in North Arkansas Looks to New Industries.

Harrison—The Arkansas Power and Light Company, in a program of assisting industrial development in north Arkansas, has employed George M. Fowler, consulting geologist of Joplin, Mo., to direct a survey and compile information as to the ore deposits of the section, their accessibility to power and transportation lines and the mineral value anl extent of the deposits.

In discussing this new program, Mr. Couch said: "It will be the objective of Mr. Fowler and his staff to study the various geological reports that have been made of Arkansas minerals, make additional field surveys, and co-ordinate the reports into one comprehensive survey. This will put the facts about Arkansas minerals into shape where they can be brought to the attention of the companies interested. We hope to be of all the assistance possible in bringing additional industries into the state."

Many Counties Included.

The survey will cover most of the counties of north Arkansas and especially those which have been outstanding in their mineral production as Baxter, Izard, Independence, Stone, Searcy, Boone, Newton and Carroll. Among the minerals which have been produced on a large scale from the mines of these counties are zinc, lead, manganese and iron pyrites. Silica sands for glass manufacture have alreay been developed, sustaining the operation of large plants of Everton in Boone and Guion in Izard counties.

With the prospect of mine development it has already been proved that zinc, lead and manganese can be smelted most profitably in the field where they are produced by the use of electricty, and so this survey will link with the future development of electric power to satisfy smelting and other demands.

L. A. Watkins, president of the Missouri & Arkansas railroad, explained that a better price than the ordinary market has been received for zinc shipments from ths section, where the zinc was used for paint products. John Durst, buyer for the Manda Industrial Corporation, which has been buying ore for shipment over the road, emphasizes the necessity of a zinc oxide plant.

Bailey Says Mining Laws Adequate

4-4-40 Gazette

Governor Bailey expressed opposition yesterday to a bill pending in Congress which would give the secretary of the interior control of mine inspections and investigations in the states.

The measure, the governor wrote in a letter to Representative Andrew L. Somers of New York, is "simply a step toward federal monopoly in the coal business just as the Cole bill is a move to give the secretary of the interior monopolistic control of the production of oil and gas." Congressman Somers is a member of the House Committee on Mines and Mining.

Governor Bailey said Arkansas has adequate laws covering mine inspections and added:

"I do not consider there are any deficiencies in the state law covering the problem of enforcement that could be aided by federal inspection without costing the state a penalty out of proportion to the benefits which might be derived."

He said that Arkansas coal producers must compete with other states in the home market and found it impossible to compete in any markets outside the state because of freight rates which are "one of the glaring fundamental faults in national policy."

Gazette 4-22-40

Division Engineer.

Capt. C. L. Sadler, former Arkansan and son of Mrs. R. B. Sadler, 916 Marshall street, has been notified of his appointment by Secretary of the Interior Harold L. Ickes as division engineer of the Central division of the United States Geological Survey. Captain Sadler, who has made his headquarters at Rolla, Mo., since 1938 as section chief of the Central division, will succeed Col. Glenn Smith of Washington, D. C., who retired May 1. The Central division is one of three in the United States and comprises the territory from Michigan to Colorado and from North Dakota to Texas.

Captain Sadler is a brother of Dr. W. L. Sadler and Mrs. F. S. Hezekiah, both of this city. He is a graduate of the University of Arkansas. Captain and Mrs. Sadler have one son, Carl L. Sadler Jr. of Dayton, O. Captain Sadler will leave for Washington, D. C., to take up his new duties next week.

Chilean Ore Goes To Utah Smelters

DEMOCRAT 6-4-40

Salt Lake City, Utah — Utah mining interests are reaping indirect benefits from the European war through the shipment to smelters here for processing thousands of tons of crude ore and concentrates from Chile that normally would have gone to Germany.

The Utah plant of the United States Smelting, Refining and Mining Company in Midvale recently received the first of a $250,000 shipment of lead ore and concentrates. The ore traveled by burro to the ocean, by ship to Los Angeles and thence by rail to Utah.

Year Contract Drawn.

Five hundred tons of ore are shipped monthly for a year under terms of a contract drawn up between the smelting company and Dr. Mauricio Hochschild of La Paz, Bolivia, multimillionnaire ore magnate of South America.

Hochschild, who is one of the world's largest individual mining operators, employs 15,000 miners at his properties in Bolivia, Peru and Chile.

The crude ore is valued at approximately $86 a ton with a content per ton of 40 ounces of silver, 43 per cent of lead, 15 to 35 per cent of antimony and .5 ounce of gold. The lead concentrate in the shipment has a value of about $151 ton.

U. S. Buys Antimony.

The Utah plant was able to bid for the contract for processing of the South American ore because the United States pays for antimony in ores. The ore contains a high percentage of that metal.

The presence of six per cent of antimony in bullion facilitates the refining process. For this reason it makes recovery of silver easier. The Chilean ore will be rationed over a long period and added in small quantities to local ores in smelting to make the bullion easier to refine.

The ore is shipped in the same burlap bags in which it is placed in Chile after it is mined. It is carried in paper lined railroad cars from the coast.

All South American ore exports previously went to Germany, Belgium, or to the Pacific coast plant for treatment. The war has cut off the European market.

Brazil Railroad Would Place Large Steel Order in U. S.

GAZETTE 6-25-40

Chicago, June 24 (AP).—Inland Steel Company officials disclosed today they had been tendered an order for 22,500 tons of rails and the necessary accessories by the Rio Grande de Sul railway in Brazil. Final execution of the contract, officials said, was contingent on the settlement of the detailed conditions. These matters will be discussed with Brazilian officials by one of the company's vice presidents who is en route to Rio de Janeiro.

The sale, if consummated, will be financed in part by the United States Export-Import bank, the company said.

60 NEWCOMERS WIN NOMINATION TO LEGISLATURE

Gazette 8-15-40

Primaries Caused Many Changes.

Sixty members of the 1939 legislature will be absent when the next session convenes in January.

Unofficial returns from the Democratic primaries showed 52 new candidates for representative and 10 new aspirants for senator were nominated. Most of them will be elected without opposition at the November general election.

Not all of the new nominees are strangers to the General Assembly. Former office holders in many counties regained positions they had lost or relinquished.

10 New Nominees And Predecessors Listed.

Of the 10 new Senate nominees, one formerly was a member of that body and three moved up from the House. An eleventh member will be elected in November from Phillips county to succeed Luther J. Wilkes, a holdover member who resigned this summer to accept appointment as postmaster at Helena.

The 10 nominated at the primaries were:

Lyman L. Mikel, Fort Smith, succeeding Paul Gutensohn, Fort Smith.

J. A. Middleton, Mena, succeeding Luke Arnett, Paris.

Joe D. Shepherd, Russellville, succeeding Fletcher D. Majors, Dardanelle.

G. W. Lookadoo, Arkadelphia, succeeding Joe Kimzey, Magnet.

L. L. Mitchell, Prescott, succeeding Winston Hudnall, Magnolia.

S. L. Richardson, Walnut Ridge, succeeding Gene Higginbotham, Hardy.

C. B. Ragsdale, Stuttgart, succeeding Hal P. Smith, Clarendon.

T. S. Lovett, Star City, succeeding I. N. Moore, Dumas.

Jim Gooch, Wynne, succeeding Lucien Coleman, Lepanto.

W. L. Ward, Marianna, succeeding Dennis Horton, Forrest City.

Eight senators were re-elected. Sixteen are holdovers, completing their four-year terms.

Democrats now hold 98 of the 100 House seats and 99 candidates were nominated by the party for the November election. Democrats in Newton county, now represented by a Republican, held no primary. Searcy county Democrats nominated James R. Tudor of Marshall. The post now is held by Orville J. McInturff of Marshall, a Republican.

House Roll Call With New Members Designated.

Results of the primaries, by counties, with new members so designated were as follows:

Arkansas—Fred W. Mahle, Stuttgart, new.

Ashley—H. H. Pickering, Hamburg, new.

Baxter—Jack Hornbuckle, Mountain Home, new.

Benton—E. S. Graham, Bentonville and Eli Leflar, Rogers.

Boone—Jim Carter, Lead Hill, new.

Bradley—Carroll Hollensworth, Warren.

Calhoun—G. H. Gresham, Hampton, new.

Carroll—Lloyd C. Gibson, Green Forest.

Chicot—Lee Baker, Lake Village.

Clark—R. L. Wright, Arkadelphia, new.

Clay—E. G. Ward, Piggott.

Cleburne—Hubert Taylor, Heber Springs.

Cleveland—O. E. Gates, Rison, new.

Columbia—Jack Machin, Magnolia.

Conway—Edward Gordon, Morrilton, new.

Craighead—Ivie C. Spencer, new, and Julian James, both of Jonesboro.

Crawford—Dave Partain, Van Buren, new.

Crittenden—James C. Hale, Marion; and John M. Smith, West Memphis.

Cross—Bert Rongey, Fair Oaks.

Dallas—Ike Murry, Fordyce.

Desha—J. L. Irwin, McGehee.

Drew—Walter Massey Jr., Monticello.

Faulkner—Dr. H. B. Hardy, Greenbrier, new.

Franklin—Herbert Strickland, Denning, new.

Fulton—H. A. Northcutt, Salem, new.

Garland—Ernest Maner and Jim Campbell, both of Hot Springs.

Grant—Frank Posey, Sheridan, new.

Greene—R. E. McMillon, Paragould.

Hempstead—Royce Weisenberger and Talbot Field Jr., (new) both of Hope.

Hot Spring—Bascom Parker, Malvern, new.

Howard—J. M. Jackson, Nashville, new.

Independence—S. E. Wells, Sulphur Rock, new.

Izard—Guy Gaston, Melbourne, new.

Jackson—Sam Bains, Newport.

Jefferson—H. Kemp Toney, T. M. Hooker and Merle B. Smith (new) all of Pine Bluff.

Johnson—Edward H. Patterson, Clarksville, new.

Lafayette—Pat Robinson, Lewisville.

Lawrence—Farris Madison, Alicia, new.

Lee—Eugene Hampton, Marianna, new.

Lincoln—Allen Tarver, Star City, new.

Little River—Sam Seligson, Foreman.

Logan—Thomas Blakemore, Paris, new.

Lonoke—Jim Lee Howell, Lonoke, and Joe Foster, England, both new.

Madison—Carl V. Stewart, Huntsville, new.

Marion—Henry V. Young, Yellville.

Miller—Ted Goldman and Paul J. McDonald (new), both of Texarkana.

Mississippi—Frank Williams, Osceola; L. H. Autry, Burdette; and J. Lee Bearden, Leachville.

Monroe—Ted McCastlain, Brinkley, new.

Montgomery—Paul Hulsey, Norman, new.

Nevada—L. W. Buchanan, Prescott, new.

Newton—Post now held by Republican, Democrats held no primary election.

Ouachita—Nelson Cox, Liberty, new.

Perry—Paul Van Dalsem, Perryville, new.

Phillips—Douglas Heslep and Henry Rightor Jr., both of Helena and both new.

Pike—D. Thompson, Glenwood, new.

Poinsett—Nabors Shaw, Marked Tree.

Polk—Roy L. Riales, Mena.

Pope—Leroy Hickman, Russellville, new.

Prairie—H. B. Eddins, Des Arc, new.

Pulaski—Ben D. Brickhouse, John R. Fordyce, Robert W. Griffith Jr., J. Forrest Rozzell, Ernest F. Harper, Edwin Dunaway (new) and John L. Sullivan (new), all of Little Rock.

Randolph—Rufus K. Baker, Pocahontas, new.

St. Francis—E. J. Butler and Fred L. Hedges (new), both of Forrest City.

Saline—M. M. Little, Benton, new.

Scott—Dr. L. D. Duncan, Waldron.

Searcy—James R. Tudor, Marshall, new. (Post now held by Republican.)

Sebastian—Means Wilkinson, Greenwood; Floyd E. Barham and Lem C. Bryan, both of Fort Smith and both new.

Sevier—Byron Goodson, De Queen, new.

Sharp—Dr. W. O. Tibbels, Evening Shade.

Stone—Jack Williamson, Mountain View, new.

Union—Anthony Kassos (new), Tom McKinnon and Frank Hudson, all of El Dorado.

Van Buren—Archie Tipton, Clinton.

Washington—John Cloer, Fayetteville, and J. Frank Holmes (new), Prairie Grove.

White—Roland Lindsey and Elbert Leisure, both of Searcy.

Woodruff—B. A. "Fletcher" Long, Augusta, new.

Yell—Eric Caviness, Danville.

Bailey Calls Resources Conference

Democrat 10-6-40

A conference on the possibilities of developing and processing raw materials in Arkansas will be held in the conference room of the State Department of Public Utilities Friday, October 11, at 10 a. m.

Special attention will be given the use and extension of electric power for that purpose. To the conference, called by the utilities commission, have been invited representatives of electric co-operatives and private power companies, University of Arkansas extension service and farm organizations. The Rural Electrification Administration, the state geologist, state planning board and the Agricultural and Industrial Commission also will be represented.

In letters inviting representatives of the various groups to be present, Thomas Fitzhugh, chairman, said "the purpose of this conference is to inventory raw materials available in all sections of the state and to discuss the possibility of developing these raw materials. It is our hope and belief that the national defense program will stimulate mineral development and small industries throughout the state.

"The recent success in extending electric services to the cinnabar mining district of southwest Arkansas, leads us to belief that there are other possibilities for developing the state * * * we are hopeful that each electric co-operative in the state will have at least one mining or industrial project developed."

Seven Wonders of Arkansas

Each Loyal Arkansan Has His Own List of the State's Remarkable Features, But Here Is An Arresting Description of One Group Worthy of Pride.

By Irene Carlisle.

Photographs by State Publicity Department.

Gazette 10-13-40

Arkansas officially became "The Wonder State" by resolution of the General Assembly in 1923. We forgot about that when we set out to determine "the seven wonders of Arkansas." One might as well attempt to select the seven pretty girls of Hollywood.

In this state whose terrain ranges from ancient mountains to broad alluvial plains, from whose natural wealth kings' castles might be built and equipped to the last marble hall, diamond coronet and haunch of venison, there are a few natural phenomena more impressive than the rest. Highest among these, as named by three of the most impartial and best-informed Arkansans we could find—Dr. George C. Branner, Little Rock, state geologist; Charles J. Finger of Gayeta lodge, near Fayetteville, internationally noted writer who for many years has been a resident of Arkansas, and L. A. Henry, Little Rock, chairman of the state Planning Board—rank the following seven:

Magnet Cave, Diamond Cave, Hot Springs, the diamond field near Murfreesboro, Mammoth Spring, Mount Magazine and the bauxite mines of Saline county.

The selections were not unanimous. They ranked highest when the individual lists were compared; but to do so they had to crowd out other selections, notably the St. Francis Sunk Lands, reminders of the great earthquake of 1811; the breath-taking view from the Panorama drive at Monte Ne; the vast oil resources of southern Arkansas, which for the past 19 years have supplied the state's most valuable single mineral product; and Wonderland Cave at Bella Vista, where visitors dance deep underground. The scenic splendors of the upper White river valley, came in for enthusiastic mention, along with other wonders of the Wonder State.

Magnet Cove, the five-square-mile elliptical bowl which shelters more strange mineral formations than any other spot in the world of equal size, ought to be familiar to most Arkansans. They probably have driven through it unawares, for it lies on United States Highway 270, a few miles east of Hot Springs, just beyond the little town of Magnet. Here are more than 50 distinct mineral formations, and here garnets and opals have been picked up. Novaculite, sought here for centuries by Indians for use as whetstones; jasper, agate, flint, quartz, lodestone and pyrite—these are only a few of the minerals of the Cove. Here is found the steel-gray titanium used in paints, electrodes and other commercial products; the rare taeniolite, discovered here in 1938 by Lawton D. Kimzey and used in fine ceramics and enamels; and the thick black Arkansite crystals which have never been found anywhere else in the world. These last, while without known commercial value, are sought by mineral collectors because of their genuine rarity.

Magnet Cove has long attracted scientists because of the many phenomena it presents. Aside from its wealth of minerals it possesses strange characteristics. No static interference with radio waves exists within the area. The needle of your compass will spin aimlessly in the Cove, deflected by the magnetic iron ore, magnetite, which exists here to such an extent that parts of the area cannot be surveyed. If you suspend a bit of magnetite it will take a true north-south position, and this polarity will remain for a considerable time. The "boiling stone" which was familiar to the ancient Greeks occurs here in volcanic rock. Known as Ozarkite, this stone is found nowhere else in North America. Few mineral collections anywhere in the world are without a specimen or two from Magnet Cove.

While we are on United States Highway 270, we might as well stop off at Hot Springs—everybody else does. Hot Springs National Park is the oldest national park in the country, having been converted into a government reservation in 1832. It now has more than 21,000 population; but its claim to a place among Arkansas's seven wonders rests not on the city, the Army and Navy hospital and the twin lakes of the recreational area, but upon the healing waters of the hot springs which flow from the base of Hot Springs mountain, and which for countless centuries have been one of the greatest natural treasures of the continent.

Indian tribes battled for the hot springs long before the coming of the white men, and only after long struggle were the springs made the joint property of the sick of all tribes. De Soto and his band of explorers came to the spot in the fall of 1541, and from that time forward the spa has been the goal of many a pilgrimage, sought now by people from all over the world.

The Hot Springs National Park reservation includes Hot Springs, North, West and Sugar Loaf mountains, a total area of 900 acres. The 46 hot springs are grouped about the base of the mountain where their sources lie; but the area is full of cold springs as well, and these, too, have their curative properties.

Tasteless and colorless, the waters none the less contain over 20 chemical constituents. The flow from the largest spring has varied less than four degrees in temperature since it was first tested many years ago, and this temperature, ranging from 146 to 150 degrees, is typical of the hot springs.

What has maintained this constant temperature in waters flowing for countless ages from the deep underground fissures of the mountain? No one knows, though many theories have been advanced. Some release of energy some deep-lying magnetic body perhaps regulates the heat and the flow; whether these are juvenile waters, never before at the surface of the earth but discharged within its depths by cooling rock; or whether they seep from the surface to the cooling rock masses and rise again to emerge as springs, is not yet known. Perhaps they will some day run cold; but for the next few generations at least they are as reliable as sunrise.

Not only the sick come to Hot Springs now. It is one of the leading recreational spots of the nation and ranks as one of the world's great spas. The park lies in a setting of great natural beauty; the Ouachitas rise gently here to an elevation of some 1,200 feet, and their scenic attractions have been enhanced without being spoiled.

The cold springs, which lie outside the park area, are privately owned; but all the hot springs have been set at the disposal of the national government, in order that monopoly and exploitation may not deprive the people of their benefits. The bathhouses, however, are privately owned. These are the only government-owned and operated hot springs in the United States.

Mount Magazine, 2,883 feet above sea level, is the highest point between the Alleghenies and Rockies. It is particularly rich in legends of Indians, gold mines and other ingredients of fantastic lore; understandably, for the seven-mile length of the mountain, its tumbled peaks and its slopes laced with springs and waterfalls, make up one of the most picturesque localities in the entire region. From its summit, it is said, one can see one-fourth of the state. Locally known as Blue mountain because of its vague veil of color, the mountain has been made into a pleasure area, largely through the land-use program of the Resettlement Administration. Stone lodges, scenic roads and excellent accommodations for visitors have been added to Magazine's original attractions, and the two recreational lakes—Spring and Cove creek, covering more than 250 acres—add to its value as a playground. The area now is operated by the United States Forest Service.

Diamond Cave, near Jasper, is one of the largest and most beautiful caverns of this country. Electrically lighted and arranged for easy access, the cave presents a succession of rooms fantastically ornamented with stalagmites and stalactites of every conceivable shape and size. Translucent pillars of delicate color, curled or sulcate crystals which have been aeons in the making, overhang the streams and pools of the inner chambers.

The visitor enters by a steep stairway descent to the hallway lined by boulders and chasms. A stream flows the length of the cave as far as it has been explored, and the ceiling height ranges to 100 feet. The rooms have been given fanciful names, descriptive of their particular types of formation—Solomon's Temple, Fairyland, the Japanese Fish Pond. The cavern has been explored and lighted to a distance of about three miles, and walks have been built and passages widened.

The cave was discovered about the middle of the last century by Sam and Andy Hudson, while hunting. It is still largely unexplored, though lighting is being extended as rapidly as possible and the lower level no doubt eventually will be opened to visitors. Indians are believed to have used the cave as living quarters long before the advent of the white man; the front chambers present dark formations as if they had been discolored by smoke, while the inner rooms, past an opening which used to be too narrow for comfortable passage, have a great variety of light and bright-colored formations. Diamond Cave is best reached by State Highway No. 7, from Harrison or Russellville.

Mammoth Spring, whose effervescent waters flow from a 120-foot opening at the incredible rate of 200,000,000 gallons a day, lies a mile south of the Missouri border, and is best reached on United States Highway No. 63 from Hardy. This gigantic spring supplies an 18-acre lake with a maximum depth of 90 feet.

The waters of the spring are so charged with carbonic acid that they are in a continual state of effervescence. Silica, sodium, magnesium, calcium, vion, alum, sulphuric acid, axygen and chlorine are among the elements found in the waters here.

A United States government fish hatchery supplies bass and crappie to supplement the rainbow and speckled trout in the spring lake. Spring river has its birth at Mammoth Spring; it is one of the loveliest and most turbulent Arkansas streams.

John C. Branner, then Arkansas state geologist and father of the man who holds that position today, discovered the first of Arkansas's bauxite deposits near Benton in 1887. His discovery, announced in 1889, coincided roughly with the metallurgical discovery of the aluminum process in the North.

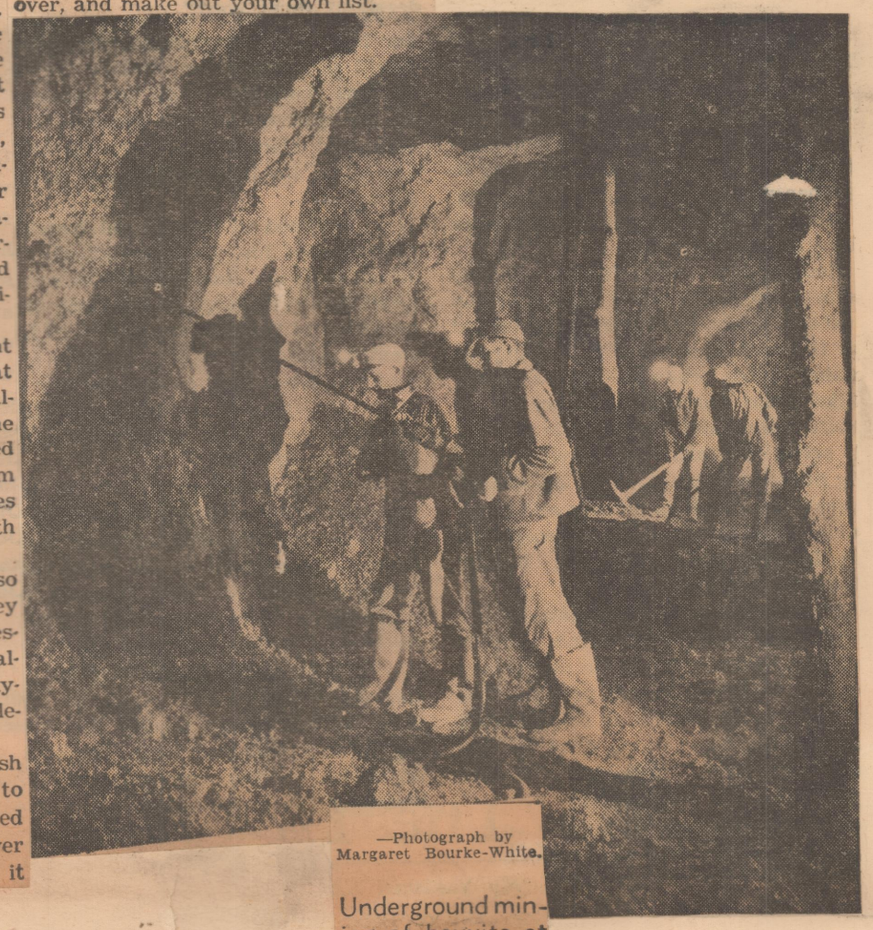
The bauxite mines near Benton today supply more than 90 per cent of the bauxite in the country. While the use of the material in aluminum is decreasing its use in chemicals, abrasives, etc., is on the increase, thus affording a better opportunity to the small independent producer to contribute his share to production. While only about 5,000 long tons were mined in the first year of Arkansas's commercial bauxite production, by 1936 bauxite ranked third in the state's mineral value, with 421,000 long tons mined for a value of nearly $3,000,000. The ore is stripped and excavated with steam shovels, and after being crushed and dried is shipped to reduction plants for manufacture.

Arkansas diamonds, those brilliant white diamonds which rival the world's finest, and the lesser stones of yellow, brown and black, were discovered by John Huddleston in Pike county in 1906. The three stones he picked up on August 8 of that year were the first discovered in the original matrix rock on the North American continent, and the Murfreesboro diamond field is the only place in North America where diamonds have been found in the original peridotite formation.

More than 20,000 stones ranging in size to more than 20 carats have been taken from the Murfreesboro mines. Three areas, comprising some 105 acres altogether, have produced the stones in this field.

Despite the fact that the Murfreesboro formation assays some 18 carats to every 100 carloads—a comfortable margin in diamond mining, and that the white Arkansas stones are exceptionally fine. Arkansas diamonds are largely off the market, due to a marketing situation which is too complicated for this article. The Arkansas diamonds are chiefly used in drills and like instruments, and few are cut for gem stones. The mines are not in operation often, and production figures are more or less unpublished. But the diamonds are there, deep in their bed of volcanic pipe. Arkansas grew them, anyway.

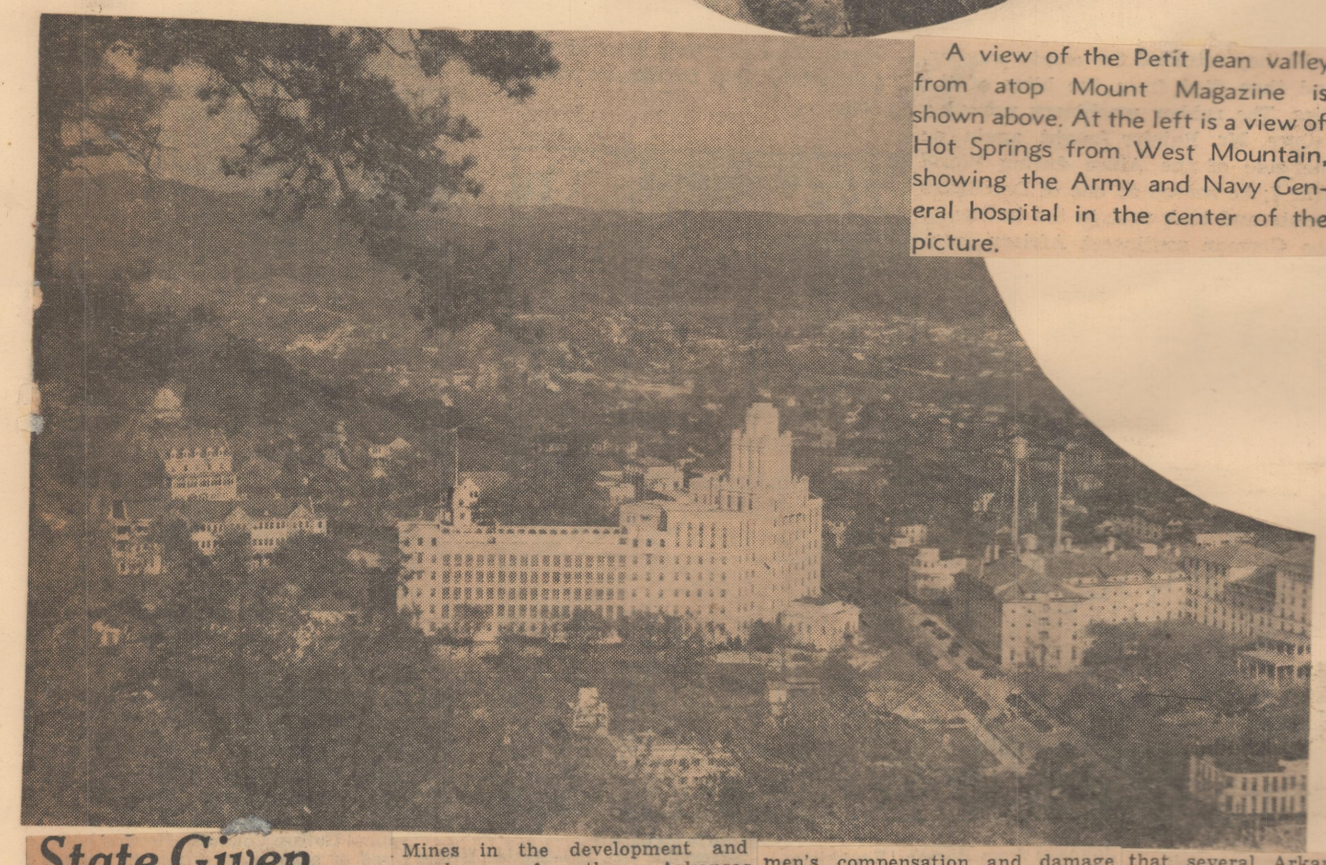
Seven wonders from the Wonder State! Seven here, and a thousand more within a day's drive. Look them over, and make out your own list.



—Photograph by Margaret Bourke-White.

Underground mining of bauxite at Bauxite is shown

At the left is the now rotting and dilapidated equipment with which earth was washed in the successful search for diamonds near Murfreesboro.



A view of the Petit Jean valley from atop Mount Magazine is shown above. At the left is a view of Hot Springs from West Mountain, showing the Army and Navy General hospital in the center of the picture.

State Given First Contract For Minerals

Gazette 10-20-40

Washington, Oct. 19 (AP).—Senator Hattie W. Caraway and Representative Fadjo Cravens, Arkansas Democrats, announced tonight that the first contract with an Arkansas firm for government purchase of strategic minerals had been negotiated.

In a joint statement, Mrs. Caraway and Mr. Cravens said the formal contract was expected to be signed soon for the government to purchase from Mercury Mines, Inc., an Arkansas corporation, a quantity of mercury produced from the Pike county, Arkansas cinnabar field.

Efforts also being made, it was said, to interest the national Defense Council and the Bureau of Mines in the development and purchase of other Arkansas strategic minerals, including manganese, quartz crystals, antimony and bauxite.

It was said that experts of the United States Geological Survey had been sent to study mercury and mangansese deposits in western Arkansas.

Will G. Akers of Little Rock, Mercury company lawyer, is in Washington. George J. Buchholz of Kansas City is president of the corporation, in which several Arkansas residents are stockholders.

Plants Said To Hinge On Labor Law

10-26-40

Location of "several extensive industries" in Arkansas may be affected by the general election vote on proposed laws regulating workmen's compensation and damage suits, Governor Bailey said yesterday.

He said no action will be taken to bring the industries here until after the election November 5. He emphasized that interests behind the industries prefer the "insurance plan" of workmen's compensation rather than the "state plan." He said they also favor adoption of Referred Act No. 314, which would fix the venue for damage actions.

"All factors are favorable for establishment of these industries in Arkansas, but if these two proposals are defeated the hope of getting any of them is very remote," the executive said.

The governor explained that industrial managements concerned would not consider the "state plan" for workmen's compensation as "any assurance whatever of protection."

Washington Office Credited.

Industrial interests have been attracted to Arkansas by the state's branch office maintained in Washington by H. K. Thatcher, executive director of the state Agricultural and Industrial Commission, Governor Bailey said. He added that several Arkansas firms, including the Ely Walker Dry Goods Company's garment manufacturing plant at Blytheville, have been aided in obtaining contracts under the national defense program by Mr. Thatcher's office.

Mr. Thatcher, preparing to return to Washington tomorrow night, said he has "high hopes" the state will receive two or three major industries in the next six months. They would be defense projects, he said, but would "be here long after the present emergency is over."

"I'm particularly interested in a cellulose plant, a manganese plant and a synthetic rubber plant," he said, but declined to say whether these types of industries might be expected.

Rare Ochre Deposit Reported

Special to the Gazette. 11-2-40

Russellville, Nov. 1.—A large supply of a pigment valuable in the manufacture of commercial paint, located by Joe T. Meek, mineralogist of the Smith Mining Company, Inc., of Russellville and Crystal Springs, will be mined for the market, starting next week, Dr. R. L. Smith of Russellville, president of the company, said today.

The pigment deposit is located in a cave, 280 feet from the surface, on Norristown mountain, two miles southwest of Russellville.

R. G. Fiser, representing a large Eastern pigment concern which supplies pigment to leading paint concerns, said the Norristown ore is an ochre. Tests made by Mr. Fiser indicated that the ochre is a rare and desirable Venetian red.

While several carloads of the pigment ore are known to be in the cave, work will be started next week to determine the extent of the deposit. A test will be made to determine the proper place to drive a slope to reach the main ore body. The work will be directed by Mr. Meek.

State Mining Inspector Would Improve Safety Laws.

Gazette 11-3-40

Fort Smith, Ark., Nov. 2 (AP).—State Inspector J. W. Fitzjarrell said tonight that he would make recommendations to the next General Assembly for improvement of state mining safety laws.

The Federal Bureau of Mines, commenting recently on the Bates mine explosion in which 10 miners were killed, recommended that fire fighting equipment be installed and that first-aid and mine rescue training should be inaugurated immediately at all Arkansas mines.

Washington Office Costs State $2,940

Gazette 11-3-40

Expenses of the office opened in Washington by the state June 15 to attract defense industries amounted, through last week, to $2,940.32, it was revealed in a check of vouchers at the state Auditorial Department. The figure included rent of an office and an apartment, personal expenses of the personnel and office expenses, such as telephone and telegraph. All expenditures were paid from the Agricultural and Industrial Commission's appropriation.

H. K. Thatcher, executive director of the commission, is in charge of the office. He has been in Washington almost continuously. Mrs. Helen Crawford, formerly with the state Department of Public Utilities, is secretary. The Utilities Department has continued to pay her salary.

Expenses Summarized.

Of the amount charged to the office, $534.70 was for railroad tickets to Washington. These included round-trip tickets for Mr. Thatcher, L. A. Henry, engineer-director of the state Planning Board, and Jack Pickens, Little Rock business man.

Expense accounts totaled $619.13. These included meals and taxi fares. This also included a "breakfast entertainment" for members of the Arkansas congressional delegates at the Mayflower hotel June 14. The bill was $20.55. Another item was for $32.50 for Mr. Pickens' expenses July 22-31.

Rent amounted to $976.77. The office is in the Munsey building and the rent is $65 monthly. Living quarters were secured at the Presidential apartments at rent of $110 monthly. Rent was paid from June 15 and to December 1 on apartment and office.

Office equipment represented $200 of the expenses. Telegraph and telephone bills, the latter on two numbers, averaged $75 a month each. Postage had cost $150.

To date the Agricultural and Industrial Commission has spent an unexpended balance of $9,960.08 of a $15,600 appropriation for the fiscal year, which ends June 30. The commission can spend only $1,160.08 more before January 1 and stay within its statutory limits, unless Governor Bailey issues a proclamation authorizing it to spend more than 50 per cent of the appropriation.

No Concrete Results As Yet.

In a statement prepared for the Gazette, Mr. Thatcher said: "As to accomplishments, it is hard to say just what has been done. The office has co-operated with congressmen and senators in presenting to the Defense Council and others what Arkansas has to offer. Special reports have been presented to every office and department that could be made to show the slightest interest in Arkansas.

"We feel that much has been accomplished and that our efforts will have had part in the millions of dollars which are bound to be expended in the state within the next six months. To say more would violate confidences.

"This office has managed to receive daily the bid invitations as they come out from the several departments and these are mailed promptly to Arkansas manufacturers and processors as the bids fit their products. Arrangements have been made with the Bureau of Mines to further investigate cinnabar, antimony, manganese and coal."

The total travel expense does not include several trips made to Washington by Dr. George C. Branner, state geologist. They were charged to the Geological Survey.

State Given First Contract For Minerals

Gazette 10-20-40

Washington, Oct. 19 (AP).—Senator Hattie W. Caraway and Representative Fadjo Cravens, Arkansas Democrats, announced tonight that the first contract with an Arkansas firm for government purchase of strategic minerals had been negotiated.

In a joint statement, Mrs. Caraway and Mr. Cravens said the formal contract was expected to be signed soon for the government to purchase from Mercury Mines, Inc., an Arkansas corporation, a quantity of mercury produced from the Pike county, Arkansas cinnabar field.

Efforts also being made, it was said, to interest the national Defense Council and the Bureau of Mines in the development and purchase of other Arkansas strategic minerals, including manganese, quartz crystals, antimony and bauxite.

It was said that experts of the United States Geological Survey had been sent to study mercury and mangansese deposits in western Arkansas.

Will G. Akers of Little Rock, Mercury company lawyer, is in Washington. George J. Buchholz of Kansas City is president of the corporation, in which several Arkansas residents are stockholders.

TOUR OF DAM SITES WAS FIRST MADE BY SCHOOLCRAFT IN 1818

By TOM SHIRAS.

Gazette 10-24-40

Mountain Home, Oct. 19.—When Maj. Gen. Julian Schley, chief of the United States Engineers, inspected the Northfork and Bull Shoals dam sites near here Wednesday he traversed a part of the country covered by Henry Rowe Schoolcraft in 1818-1819.

Schoolcraft was the first geologist and scientist to investigate the Ozarks, and was the first to call attention to the abundant undeveloped water power on White river and its tributaries. He made the trip from the head to the mouth of the Northfork river on foot and floated down White river from the mouth of Beaver creek, in Taney county, Missouri, to Batesville.

That Schoolcraft was impressed greatly with the resources, beauties and possibilities of north Arkansas can be seen from a letter he wrote to J. B. Thomas, a United States senator.

During an interview by this correspondent Wednesday, General Schley exhibited a copy of Schoolcraft's letter report, and read that part which dealt with the development of water power and industry in the Arkansas Ozarks:

"We found the ores of iron, lead, zinc and manganese in large quantities and caves that yielded saltpeter. The section is admirably adapted to agriculture and mining and abundant undeveloped water power gives it remarkable advantages for mills and other manufactures."

This was the first report on water power and minerals ever made of the Arkansas Ozark region. General Schley and party were standing at the Northfork dam site, probably not more than 100 feet from where Schoolcraft passed 122 years ago.

General Schley Approves Report.

General Schley smiled. "I can heartily approve Schoolcraft's report," he said.

Later in the afternoon, while the party was standing on a high bluff on the Clyde Bryant farm, overlooking the White river and the Bull Shoals dam site, Schoolcraft again figuratively joined the party for a few minutes.

Something of the power and energy now going to waste in White river can be seen from Schoolcraft's description of Bull Shoals, over which he floated in a boat on January 12, 1819. He said:

"Bull Shoals appear to plunge down 15 or 20 feet in a mile. The limestone bed of the river has been eroded into several channels and the river foams and roars. The bed of the river seemed to be a perfect shoot of foam, force and tumult. We headed our canoe into this rough water and it struck a sunken rock. We jumped out into the water and twisted it off the rock. Six hundred yards further down the shoals it grounded again and out we went to save it from capsizing. It struck for the third time at the foot of the shoals and we had to go out again. We were very wet and miserable, but we didn't lose anything."

From the high point on the bluff from which General Schley and party viewed the river, we could see the rough, white water on Bull Shoals, and an occasional breeze brought the roar of the rough water to our ears.

The need of the Northfork, Bull Shoals, Table Rock and Lone Rock dams as a part of the defense system was discussed by the party. The isolation of this tremendous power in the heart of the Ozarks, in the midst of large deposits of manganese, lead, zinc, phosphate and adjacent to the largest deposits of bauxite in the nation, and big deposits of cinnabar, seemed to make their construction not only feasible but necessary.

Dam to Be One Of World's Largest.

Recent investigations by engineers disclosed that the fact that the Northfork dam will be one of the 10 largest dams in the world, on a basis of the amount of concrete used in its construction.

The question of whether generating equipment will be installed in the Northfork dam is still in the hands of Congress. The engineers have the authority to construct a dam with all of the appendages for power except the generating machinery. The dam will be started with a broad base, 190 feet wide, which is necessary for power, when and if engineers get the authority to install it.

Mr. Ellis Confident Of Power for Dam.

In an interview with Congressman Clyde Ellis on the question of authority for power and authority for the construction of Bull Shoals and Table Rock dams in the White river, he said:

"I do not think that the authority for the construction of Bull Shoals and Table Rock dams will be granted by Congress until after the first of the year. I think it very probable, however, that authority for power installation on the Northfork dam will be granted after Congress gets down to business again in November.

"Washington authorities have been making a survey of the power situation in the Arkansas-Louisiana-Mississippi area, and find that more power will be needed each coming year. I recently received a letter from Leland Olds, chairman of the federal Power Commission, in which he stated, in part:

"'In a letter to the secretary of war, under date of August 10, 1940, the federal Power Commission stated its conclusion that the output of an initial installation of two units, having a combined capacity of 60,000 kilowatts, could be absorbed by the power market at the time when the power project could be completed. The commission also concluded that immediate construction of the Northfork project for flood control and for the production of hydroelectric power is desirable to meet the growing power demands.

"'The first monthly reports to the commission, in connection with the continuing defense power survey, which it is making at the direction of the president, indicate that in the Arkansas-Louisiana-Mississippi area the load this year will run considerably above the net assured capacity available to serve the area. This is a danger sign, indicating a possible power shortage in the event of extreme low water conditions.

"'The commission's preliminary comparison of net assured capacity with the probable loads which will result from the national defense program indicates that by the end of 1941, the Arkansas-Louisiana-Mississippi area will require 76,198 kilowatts of additional capacity; by the end of 1942, 101,198 kilowatts; by the end of 1943, 12,198 kilowatts, and by the end of 1945 adequate plans for national defense should provide for the construction of 156,198 kilowatts of capacity in addition to that now available.

"'There is no question as to the need for the proposed initial installation at the Northfork project in the White river basin by the time it can be completed, ready for service. In fact, the indicated growth of load suggests that within a very few years the market in the area will be ready to absorb still further development of the potential power of this basin.'

"There is no doubt but what there is going to be a power shortage in this area unless the Northfork and other dams in the White river basin are constructed as multiple dams," Congressman Ellis continued. "And I think that with all of this evidence of the need for new power, and the value of the power now running to waste in the White river valley that is now in the hands of Congress, that they will give the needed authority to include generating machinery in the Northfork dam in a short time. Also that they will authorize the construction of Lone Rock, Table Rock and Bull Shoals dams, as multiple dams."

State Must Industrialize, Ellis Says

Special to the Gazette. 11-17-40

Harrison, Nov. 6.—Arkansas must be industrialized if it expects to exist as a state, Congressman Clyde T. Ellis of Bentonville told a conference of government, state and private agencies meeting here today.

"Should we get our proportionate share of war industries, our per capita income would be increased only to $350, compared to the national average of $526," he said. "We cannot expect to go above that unless we get additional industries to add to our pay rolls and invested wealth."

Saying that he long had been an advocate of power development on the White river, Mr. Ellis said that power developed on the stream ought to be put into a system interconnected with steam generating plants, because much of the hydro power will be peak power.

Some of the "barriers" he cited to Arkansas' development are high freight rates and absence of sufficient laboratories to gather statistics and data needed for industries contemplating locating in the state. With but a few exceptions, he said, all of the research and studies have been made by private companies. He advocated establishment of a central laboratory for assembling all of the statistics that might be required.

Lack of initiative in the state also is a barrier, he said. He paid tribute to the progress made by the Arkansas Power and Light Company in industrializing the state. There are only a half-dozen leaders in industry in the state and only two of these are oustanding, he asserted, inferring one was Harvey C. Couch, president of the power company.

Mr. Ellis was introduced by Thomas Fitzhugh, Little Rock, chairman of the Arkansas Utilities Commission, who presided. Mr. Fitzhugh said that the conference was one of a series to determine the power requirements of the state. Dr. H. W. Blalock and Max Mehlburger, the other two utilities commissioners, attended.

Sees Possibilities in Zinc.

L. A. Watkins of Harrison, president of the Missouri and Arkansas railroad, expressed belief that the zinc industry might be the foundation for industrial development in North Arkansas. He said power would be needed for mining the ore, which could be sent to central mills. He said he believed an electrolytic processing plant was not needed now.

Establishment of woodworking plants was advocated by Mr. Watkins.

Other Speakers.

Dr. George C. Branner, state geologist, said that geological surveys have been made in this section, but some are not complete enough to draw any definite conclusions.

J. E. Simpson of Berryville, attorney for the Carroll Electric Co-Operative, said that his organization will co-operate in developing industries.

Utilities Commission Arbitrated Dispute.

Gazette 11-17-40

Without the services of the state Utilities Commission, which acted as an arbitration board, it is doubtful that the Rural Electrification Administration and cinnabar operators in southwest Arkansas could have gotten together on a contract for greatly needed power service. Operators charged that the REA changed a contract that was agreed upon in a conference here and the REA threatened to abandon the line unless the contracts were signed by 4 p. m. Thursday.

A conference was arranged at Murfreesboro, Pike county, with the operators by Chairman Thomas Fitzhugh and Dr. H. W. Blalock of the commission. Grievances of the operators were aired at length. Mr. Fitzhugh secured, by telephone, concessions from REA and the operators signed.

The commission had no authority in the matter. The only authority it has over co-operatives is to allot territory. But in this case, the commission believed the power line to the cinnabar area was too important to the development of the state to allow the line to be abandoned though a misunderstanding.

Operators at the conference said that if the commission had not interceded, the project probably would have been lost.

The line will make an adequate power supply available to the area. It will hasten development of what observers expect to be one of the "richest mine fields in the world."

COMMITTEES ON REFUNDING AND BUDGET NAMED

Gazette 11-27-40

Legislative Preparations Begin.

State Senator Willis B. Smith of Texarkana became chairman of the powerful Joint Budget Committee of the 1941 legislature yesterday. He was appointed head of the Senate Budget Committee by Lieut. Gov. Bob Bailey, a post that gives him chairmanship of the joint group.

Speaker-designate Means Wilkinson of Greenwood announced appointment of Representative Robbert W. Griffith Jr. of Little Rock as chairman of the House Budget Committee. He automatically will become vice chairman of the joint committee.

The lieutenant governor said the joint group will begin hearings here about December 15 to draft appropriation bills in advance of the 1941 session.

Other members of the Joint Budget Committee are:

Senate—Dr. W. H. Abington of Beebe, Maupin Cummings of Fayetteville, Joe Sheppard of Russellville, Jim Gooch of Wynne, Eugene Baker of Newport and Ivy W. Crawford of Blytheville. Mr. Cummings was chairman of the 1939 group. Mr. Gooch and Mr. Sheppard were elected to the Senate November 5.

House—Dr. H. B. Hardy of Greenbrier, a former legislator; Floyd Barham of Fort Smith, Fred Mahle of Stuttgart, Eugene Hampton of Marianna, J. Forrest Rozzell of Little Rock, J. H. Wright of Arkadelphia, Merle Smith of Pine Bluff and Lee Baker of Lake Village. Dr. Hardy, Mr. Barham, Mr. Mahle, Mr. Hampton, Mr. Wright and Mr. Smith were elected to the House November 5.

Joint Refunding Committee Appointed.

Lieut. Gov. Bob Bailey and Mr. Wilkinson announced appointments to a Joint Refunding Committee, which will consider legislation written to enact Gov.-elect Homer M. Adkins' plan to refund the state's $137,000,000 highway debt.

Senator R. L. Gordon of Dermott was named chairman and Representative Rowland H. Lindsey of Searcy vice chairman. Other members:

Senate—T. S. Lovett Jr. of Star City, Willis B. Smith, Jeff Bratton of Paragould, J. O. E. Beck Jr. of Hughes and Ed B. Dillon of Little Rock. Mr. Lovett was elected November 5.

House—Eli Leflar of Rogers, John Cloer of Springdale, Dave Partain of Van Buren, Eric Caviness of Danville, E. G. Ward of Piggott, Ed Gordon of Morrilton, John L. Sullivan of Little Rock and Byron Goodson of De Queen. Mr. Partain, Mr. Gordon, Mr. Sullivan and Mr. Goodson were elected to the House November 5.

Additional members will be appointed to the Refunding Committee.

Third Town Laid Out At Dam Site

Special to the Gazette 12-1-40

Mountain Home, Nov. 30.—Spencer, the third new townsite at the Norfork dam, is being subdivided and lots will be for sale as soon as the work is done.

The new townsite consists of 160 acres and will be divided into approximately 500 lots. It lies on the west side of the Norfork river, and joins the new town of Hutchesonville, which was the first townsite laid off at the dam. The Spencer townsite is being promoted by C. D. Armstrong, of Disney, Okla., who promoted the town of Disney, at the Grand River dam in Oklahoma.

Work on Dam Progresses.

All work in connection with the Norfork dam is progressing on schedule. It was retarded somewhat, however, by two days of rainy weather the first of the week, but the interruption was slight. Contractors are making good headway both on the railroad and the heavy duty highway, which are being constructed from points near Norfork. The government village under construction at Mountain Home to house the key men on the dam construction proper also is taking shape. Six of the modern houses have been raised and interior work is progressing on them. Work is in progress on the other 12. Eighteen will be built now and nine more later.

Book on Natural Resources Lacks Final Chapter.

Gazette 12-6-40

Five of six chapters of a proposed book on natural resources of Arkansas, which the 1939 legislature instructed be completed for use in schools, have been completed and the sixth will be written in time for publication January 1, Dr. H. W. Blalock, member of the state Utility Commission and chairman of the committee compiling the book, said after a meeting of the committee yesterday.

The legislature did not provide funds for the publication, he said.

Chapters of the book discuss soils, mineral resources, plant life, wildlife and a summary of laws governing resources.

Joint Budget Committee Will Hold First Meeting Dec. 16.

Gazette 12-6-40

The 1941 legislature's Joint Budget Committee will meet December 16 to begin studies of appropriation measures presented by state departments, Gov-elect Homer M. Adkins announced yesterday.

The date was fixed at a conference of Mr. Adkins, Lt. Gov. Bob Bailey and Means Wilkinson of Greenwood, speaker-designate. The committee will meet in the lieutenant governor's office.

The state comptroller usually is called to confer with the Budget Committee. Mr. Adkins has not indicated his choice for this post.

Statehouse circles heard that Charles E. Moyer, Little Rock's nextmayor, may be named secretary of the joint committee.

Mr. Thatcher Sees Possibility In Synthetic Rubber Production

Gazette 12-7-40

Arkansas has a possibility of benefiting from efforts of defense officials to increase production of synthetic rubber to make the United States independent of foreign supplies, H. K. Thatcher, director of the Arkansas Agricultural and Industrial Commission, said yesterday. The state is negotiating with a large company for the location of a plant to produce synthetic rubber, he said following his return from Washington where he has headed an office working for acquisition of defense industries.

Mr. Thatcher said the state has a "superabundance" of the three basis materials needed in the manufacture of synthetic rubber—coke, coal and lime. He said the Washington office was assembling data on raw materials and transportation and power costs.

Several new synthetic rubber plants have been opened recently and additional units will be opened soon. When these reach full production, the output will only be six per cent of the annual consumption.

Mr. Thatcher said the state's chances of sharing immediately in defense contracts lie more in obtaining sub-contracts for work which can be done by the smaller industrial plants than in getting large awards which would acquire large capital outlays for building new plants. Most of the Eastern manufacturers are "loaded with contracts" and the tendency is to give sub-contracts to smaller firms, he said.

Mr. Thatcher said he is trying to induce small firms throughout the state to "pool" their resources.

A compilation by L. A. Henry, engineer-director of the state Planning Board, showed Arkansas had received $5,361,452 worth of defense contracts to November 15. This represented $2.75 per capita for each Arkansas resident and compared with a national per capita of $66.80 This figure includes expenditures at Camp Robinson and Adams Field.

Mr. Thatcher will leave Monday to attend a convention of state secretaries and agriculturists at New Orleans and to visit industrial plants in Louisiana. He probably will return to Washington later.

Refunding Committee Will Meet Friday.

Gazette 12-8-40

The legislature's Joint Refunding Committee and Gov.-elect Homer M. Adkins' 22-member Advisory Refunding Committee will meet here Friday to whip into final shape the bill under provisions of which Mr. Adkins plans to refund the state's $137,000,000 highway debt.

Mr. Adkins, Lt. Gov. Bailey and Means Wilkerson, speaker-designate of the House, will meet with the two groups.

The governor-elect announced after his return from Washington last week that several alterations will be made in the tentative bill which was made public November 26. He did not indicate the nature of the changes.

The legislature's Joint Budget Committee will meet December 16 to study proposed appropriation bills in advance of the legislative session.

The General Assembly will convene January 13. Mr. Adkins can be inaugurated legally any day during the first week of the session. If precedent is followed, the ceremony will be held January 14.

A committee composed of William Yarborough, Tom Poe and Guy Slaim of Little Rock conferred with Secretary of State C. G. Hall yesterday on plans for the inaugural.

State Plans Board To Meet Thursday

Democrat 12-8-40

The State Planning Board will meet Thursday at 10 a. m. for a business session which will include final planning of 1941-42 proposals for improvements to state-owned institutions under federal aid projects. Such plans must be approved by the general assembly before granted by the WPA or other federal agencies.

The group will also hear a report on the recent conference of the Southern Defense Council, attended by Dr. George C. Branner, state geologist, and Thomas Fitzhugh, chairman of the state Utilities Commission. Dr. Branner will make the report.

Planners to Discuss Works Program Tomorrow.

Gazette 12-11-40

The State Planning Board will meet at 10 a. m. tomorrow. Major matters to be discussed will be:

1. Presentation to the governor and legislature of a public works program, including necessary capital expenditures by state agencies and institutions for the next biennium.
2. Function of the Planning Board in connection with the national defense pro-

Steel And Oil Supplies Held Sufficient

Gazette 12-12-40

New York, Dec. 11 (AP).—Outstanding industrial leaders gave assurance today that the United States was prepared sufficiently in steel and oil production and resources against all likely eventualities.

They advocated modification of the 40-hour work week under certain defense circumstances and opposed compulsory arbitration of wage and hour disputes with labor, saying labor has the right to strike.

They were speakers in a round table discussion at the convention of the National Association of Manufacturers.

In answer to the question, "Should any change be made in the normal hour and overtime provisions in present legislation?" Charles R. Hook, president of American Rolling Mill Company, said:

"Under normal conditions, I would answer this question very promptly in the negative. However, we are not dealing with normal conditions but with an emergency. It seems to me clearly evident that in the interest of the people as a whole, every effort should be made and must be made to prevent unnecessary increases in the costs of our defense and domestic goods during this period."

Gazette 12-12-40

PLANNING BOARD TO MEET.

A proposed public works program for state agencies and institutions for the next biennium will be discussed by the state Planning Board at a meeting at 10 a. m. today.

Joint Budget Committee To Meet Tomorrow.

Gazette 12-15-40

The legislature's Joint Budget Committee will meet at the capitol tomorrow to begin a pre-session study of proposed appropriation measures. The first meeting, with Governor-elect Adkins in attendance, will be held in Lt. Gov. Bob