

# ARKANSAS HAS BIG MARBLE OUTCROP

*Gazette 11-25*  
Stone Extends for 3,500 Miles Along South Flank of Ozark Uplift.

Practically undeveloped at present, the outcrop of marble of commercial value in Arkansas extends over 3,500 miles along the southern flank of the Ozark uplift, running northwest-southeast across northern Arkansas and extending into Missouri. The outcrop is in more than 10 counties.

The marble is of two principle types the St. Clair and St. Joe, although the St. Joe is by far the most common. Both types have a high crushing strength and are very valuable for building stone. Arkansas marble, if developed, could supply the entire United States, according to state authorities.

**Valuable for Building.**  
In addition to the high crushing strength of Arkansas marble, they possess a high purity, low absorption and fill about all the physical requirements for the highest grade of building stone. Principal outcrops are in Benton, Carroll, Madison, Boone, Newton, Marion, Searcy, Stone, Independence, Izard and Baxter counties. The St. Clair marble lies in the extreme southern and southeastern part of the marble zone and is quarried on a small scale near Batesville in Independence county.

The St. Clair marble derives its name from the St. Clair spring northeast from Batesville. It lies near the base of the rocks of Silurian age and varies in thickness from a feather edge to 155 feet, with the maximum thickness at Penters' Bluff on the White river. The color of the stone runs from a light gray to a chocolate brown although the prevailing color is a light gray with a tinge of pink.

The St. Joe marble lies near the base of the carboniferous rocks and is considerably younger than the St. Clair type. The thickness varies from 25 to 40 feet and the colors from light pink to dark chocolate. The crushing strength of the St. Joe marble is about 12,000 pounds per square inch and that of the St. Clair about 9,400 pounds per square inch, both very high as compared with other marbles.

**Railroads Afford Outlets.**  
The marble area of Arkansas is traversed by two railroads which afford an easy outlet from quarries. The Missouri Pacific and the Missouri and North Arkansas railroads cross the heart of the marble zone and lead to large markets and railroad centers. If this marble was quarried in quantity, imported marble and that from distant states would be compelled to meet prices which would be subject to small freight charges here.

The marble quarries at present is used both as solid stone or exterior building purposes and for interior decoration. The dark chocolate St. Joe and a light shade of the gray known as the "White River Golden Grain," makes a very beautiful interior marble. Arkansas marble was used in building the present Arkansas state capitol although the interior work is from marble imported from Alabama.

**May Be Other Colors.**  
Other colors of marble might be discovered in the state if assays were made, according to Dr. George C. Branner, state geologist. There is a particular need for green and black marbles and both would have a marketable value at present. Light brown and blacks are not shown in the present Arkansas marbles, although very little prospecting has been done.

Marbles are crystalline limestones, a sedimentary rock laid down by the sea and are largely of organic origin. Countless years are required for the association with the rocks of the Silurian and Carboniferous periods.

Most of the exterior and monumental marble used in the United States is domestic. Foreign marbles, with a few exceptions, will not stand the exposure of the climate. About 40 per cent of interior and decorative marbles imported, principally from

## HIGHWAY IS BLASTED THROUGH FINE MARBLE

Special to the Gazette. *12/22/28*  
Western Grove, Dec. 21.—North Arkansas is so lavish with its resources that workmen on the highways shoot through ledges of fine marble and toss it aside like flint or shale. There is an illustration between this place and Valley Springs on Federal Highway No. 65, which is under construction. For about 200 yards the grade runs across the top of a bed of light gray marble. This was shot out to a depth of several feet and several hundred tons of this material is piled up along the dump. Anyone of the larger pieces would cost \$150, worked into a tombstone.

## BATESVILLE NOTED AS MARBLE CENTER

*Gazette Nov. 18 '25*  
Arkansas One of Few States to Supply Stone for Its Capitol.

### LIME INDUSTRY CLOSE BY

One of Softest of Rock Formations Is Converted Into Merchantable Wares.

**By Fletcher Chenault.**  
(Staff Correspondent of the Gazette.)  
Batesville, Nov. 17.—People of Arkansas seem interested in a way in a building situated on an eminence in Little Rock which is substantially built and contains all modern conveniences and equipment, including a bunch of pretty stenographers. The people are interested from a selfish motive because they own and operate this building.

There are other reasons why they should take pride in their state capitol. For one thing, George W. Donaghey, a native son, alleged to be of Irish lineage, had something to say about its construction, and for another thing the building is walled with Arkansas marble. Of the states of the Union numbering 48, according to the latest census figures, how many can supply the marble to build their state capitols?

**Marble for Capitol.**  
The Pfeifer quarry near Batesville from which this marble came, still is shipping out its products for use in other public buildings, for ornamental purposes, and for markers and monuments. It is a valuable product and greatly in demand in an age which imitates the early period of stately architecture.

Joseph Pfeifer of St. Joseph Mo. opened the Batesville marble quarry, more than 20 years ago, and since then many great slabs of marble have gone out on flat cars to be chiseled by stonemasons into various surfaces and designs. Other quarries are being developed here.

**Much Lime Mined.**  
Only a few miles, as the crow flies, from where this hard material is excavated one of the softest rock formations is being converted into merchantable wares. Limestone rock goes through the burners of the Batesville White Lime Company at a temperature of 2,100 degrees, and comes out in hydrated form to be shipped to all parts of the United States to serve many varied purposes.

The lime plant is equipped with a maze of machinery from the three great burners where the rock goes first to the machine which trips when it packs 180 pounds of lime in a barrel. These barrels, are manufactured at the plant from ash staves

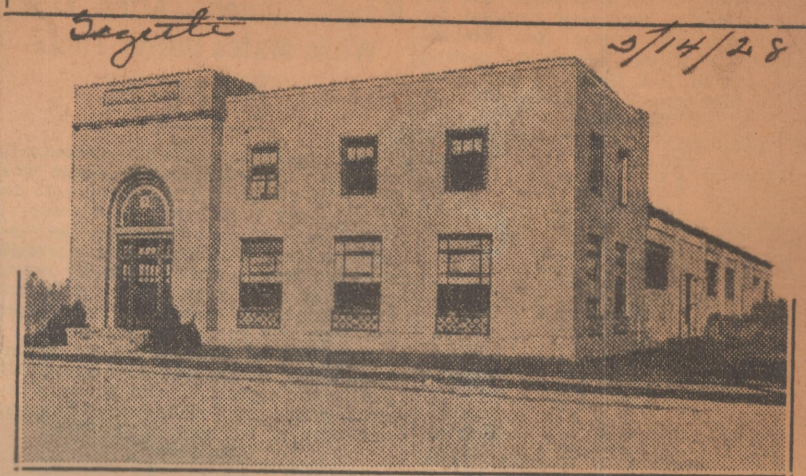
are shipped in, and extensive machinery is required. The product that goes into them is as white and soft as flour. It is the famous Polar Bear brand and is in demand everywhere. Its uses vary from the base for talcum powder to the base for plaster. The limestone is burned from 36 to 48 hours and slaked in large drums, and various designs of machinery are brought into play to remove every particle of dirt and sand from the lime.

**Two Plants Near Batesville.**  
George T. Weigalt is superintendent of the plant, which is about five miles from Batesville on a spur track of the Missouri Pacific. There is another plant at Ruddels.

Not all the output of these two plants is in hydrated form. Bulk lime is shipped out to many dealers and is used for many purposes, not the least important of which is liming of soils.

Thus we find on the well-known Missouri Pacific's freight trains outbound from Batesville one of the hardest materials the earth yields in large quantities, and also one of the softest. They go to many centers of trade and commerce and advertise Arkansas to the world. Both are products of a state within the boundary lines of which, by some inexplicable freak of nature, occur more resources of the earth and the air than is to be found in any other state or country in what is popularly referred to as the whole world.

## Southwestern Marble & Tile Co.



The business which the Southwestern Marble and Tile Company has enjoyed during the past several years is not alone traceable to its materials, but to the service the firm renders, plus its workmanship. "We have enjoyed a wonderful business, and have handled more business from other states than usual," said R. E. Overman, president of the firm.

The firm was founded 22 years ago by R. E. Overman, then located in Little Rock, and today it has the finest home of its kind in the South. The salesroom and plant at 433 West Washington avenue, North Little Rock, is shown above.

The firm specializes in large marble and tile contract work, although it deals in smaller jobs as well. The plant is located on a Missouri Pacific spur, which enables it to speed up its work when transportation plays the most important part. All materials for jobs contracted for are cut in its own plant, and with the aid of a 60-foot hoist, workmen can handle the large jobs as fast as the smaller ones.

In addition to its regular line, the firm carries large stock of Terrazzo floors. This line is very popular. Complete banking fixtures is another line that it is pushing. The Southwestern Marble and Tile Company has furnished and installed materials for the largest buildings of Arkansas and other states such as the Donaghey building, the new Little Rock High School, Albert Pike Memorial Temple and the Hotel LaFayette, all of Little Rock, while other jobs are the Arlington hotel, Hot Springs; the Washington hotel, Shreveport, La.; Grimm hotel, Texarkana; Virginia hotel, Monroe, La.; Jung hotel, New Orleans; two large courthouses, one at Greenwell and the other at Henderson, Tex. It is furnishing materials for three more courthouses at Poplar Bluff, Lonoke and El Dorado.

"Many builders have had it proven to them that we furnish the highest grade materials the market affords plus service and workmanship," Mr. Overman said. "We invite contractors as well as home builders to visit our salesrooms and plant and see our stock of merchandise and equipment."

### Marble Quarry Ready 8-7-28

*Gazette*  
Gulon, Aug. 6.—The Missouri Pacific railroad has completed installation of a switch at the Wolford marble quarry, three miles south. Shipments of marble will start from the quarry as soon as cars can be placed. The deposit was located several months ago by H. F. Wolford of Cartney. Development work disclosed three distinct kinds of marble, gray, pink and a golden vein. A channeling saw and a large derrick will be installed at the quarry in the next few weeks.

### Quarry Company Will Install New Plant Soon.

*Gazette*  
Special to the Gazette. *11/13/28*  
Pfeifer, Nov. 12.—The Batesville Marble Quarries Company, which is operating a quarry and cutting plant here, and another quarry near here, will install a new plant soon. The new plant will be equipped with modern marble cutting machinery. John Cargill, manager, and one of the owners said today. A new vein of marble opened up at Quarry B is proving to be one of the finest and prettiest ever found in this section.

### Arkansas Marble and Tile Co. Is Growing Concern.

*Gazette*  
The Arkansas Marble and Tile Company, with offices and salesrooms at 217 West Seventh street, is the state's youngest marble and tile firm. It caters to the large and small builders of Little Rock and Arkansas. The firm handles the highest grade marble and tile the market affords. It is composed of H. B. Crumbaugh and C. E. Heizman. Both Mr. Crumbaugh and Mr. Heizman are experienced in the marble and tile business. Mr. Crumbaugh was for many years superintendent of the marble department of the Southwestern Marble and Tile Company, while Mr. Heizman was with the same firm in the capacity of superintendent of the tile department.

Mr. Crumbaugh and Mr. Heizman are well known to the contractors and architects of Little Rock and Arkansas,

both having served as superintendent on some of the largest buildings in the state, such as the Hotel LaFayette, the General hospital, the American Southern Trust Company building, the Arlington hotel, at Hot Springs, the Slattery building at Shreveport, La., the Hudlesberg hotel, Baton Rouge, La., and many other buildings over Arkansas and Louisiana.

The firm has in its showrooms all the latest styles and designs of marble and tile. This stock is carried to enable the builder to select the trimmings and also he gets an idea of how it will appear after his building is completed.

The firm invites customers to come in and look over its display, and get figures of the cost of the marble and tile. These figures will gladly be given.

H. B. Crumbaugh

## Large Marble Contract Let

*Gazette*  
Tulsa University Buys 1,500 Tons of Arkansas Stone.

*Gazette*  
Yellville, May 22.—(Special.)—The University of Tulsa, Oklahoma, has closed a deal with Ernest Young of Pyatt, for the marble on a tract of land near Pyatt, in the eastern part of Marion county. It also has arranged with J. L. Downum, a local marble cutter, to quarry and ship to Tulsa 1,500 tons of marble.

The stone will be used in Tulsa to construct a university building. This is one of the many excellent marble quarries to be found in Marion and adjoining counties. It is reported that this is a very high grade marble, being about 99.6 per cent pure. Quarrying and shipping of the stone will begin at once. The deal was closed through the Citizens bank, Yellville.

### Arkansas Marble to Be Used in Tulsa University Building.

*Gazette*  
Special to the Gazette.  
Pyatt, June 25.—First deliveries of red marble for use in the construction of the University of Tulsa, Tulsa, Okla., being made. Three car loads have been shipped and shipments will continue regularly each week. The stone is a deep red shot through and through with crinoida and is known locally as St. Joe marble. The contract which J. L. Downum, of Yellville, has, calls for 60 carloads. The land on which the marble deposit is located was bought by the university. Downum's contract calls for quarrying and loading. The university is being constructed with the broken Ashler type of masonry to which the color and character of the marble is ideally suited.



# OUR MARBLE INDUSTRY

*Batesville Record 1928*

For many years Batesville marble has been favorably known as a popular building material. Until more recent times no special effort was manifested to push this business into the commercial trade circles of the country, although occasional contracts came in for the best of this product in construction of important buildings away from here.

One of the great monuments to the excellence and beauty of Batesville marble may be seen by every one who visits or passes through the city of Little Rock and will look upon our magnificent new capitol building. From basement to top of dome, the soft white radiance of Batesville marble shines forth in that edifice.

What was formerly known as the Pfeiffer quarries have passed under control of a new organization, the Batesville Quarries Company, with John P. Cargill as general manager in active charge. The plant and quarries are some five miles out of the city. The marble is cut into huge blocks from the quarries in the mountain side and taken to the plant, where it is sawed into slabs of varying thickness, according to specifications on orders for the material. Equipment of the plant consists of a battery of saw gangs that go through the stone, much as a saw goes through a log. Mr. Cargill states that while some trouble has been encountered from flaws or cracks in the stone, taken from near the surface, yet as the body is fol-

lowed into the hill, this trouble becomes less. So far as the deposit in this territory is concerned, it is so great that its extent is unknown.

Among some of the public buildings in which marble from these quarries has been used may be recalled the high school building in Oklahoma City, the Christian Science church at St. Joseph, Mo., and the Federal penitentiary at Leavenworth, Kansas, the material having been approved by government experts.

Since Mr. Cargill assumed management, the output has grown with extension of the marketing field. At the present time the Thompkins-Keil Marble Company of New York City take the entire output which is distributed to their trade in that territory. The building trades in that city use this stone extensively on interior work. Public buildings in Toronto and Montreal, Canada, contain interior finishings of Batesville marble, eight carloads having gone to Montreal and one to Toronto, direct from these quarries, within the past six months.

This business now affords regular employment to around forty men, whose homes are in this county. The works were recently motorized with electric current by the Arkansas Power and Light Company. This has affected a material reduction in production cost, below that under steam power. The payroll to labor averages \$40,000 a year. The policy is, to give home labor the preference and to patronize local business in-

(Continued on Page Five.)

## Steel Wire Used To Cut Native Marble

By TOM SHIRAS.

Guion, Ark., April 5.—With the same precision that a housewife slices a cake with a cake knife, the St. Claire Marble Company, operating a marble quarry near this place, is slowly but surely cutting a mountain of marble into commercial size blocks with a quarter-inch steel wire.

Looking at the wire and the power plant which pulls it, and the thousands of cubic yards of stone in the mountain, one is apt to say that it can't be done. Numerous thick slices of marble already cleanly cut from the face of the mountain are evidence that it can be done. And if you will stand and watch the wire whizzing through the marble at the rate of 15 feet a second, and see it gradually eat its way through the block at approximately six inches an hour you will be quite satisfied that it is practical.

H. F. Wolford, who has been operating in the White river country for the last 10 years, located this deposit of



The block of pure marble pictured is one of the largest ever taken out of a quarry in the United States. It was quarried by the St. Claire Marble Company of Guion and contains 600 cubic feet. It is 24 feet long, 6 feet across, and 4 feet thick.

stone several years ago, and with several associates, under the name of the St. Claire Marble Company, started operations on the quarry.

The marble deposit, which terminates in a bluff, abutting the White river division of the Missouri Pacific, was hard to open as a quarry because of its perpendicular nature. If a channeller, a regular block cutting machine had been put in operation, a considerable amount of initial expense in shaping the quarry would have been necessary. Wire saws have been used successfully in cutting

smaller blocks after they had been quarried, and Mr. Wolford tried this kind of a saw for this operation.

As a new departure in quarry methods in Arkansas it has worked successfully. Whether it could be operated on all quarries is problematical. The wire cuts down from the top, and there must be open spaces at each end of the block as deep, or a little deeper, than the cut is to go, in order to rig the equipment properly.

The power plant, which consists of a 10 h. p. gasoline motor, is on trucks so it can be moved from place to place as desired. The belt from the motor runs to a single drive shaft. On one end of this shaft is the belt pulley which connects it with the engine and on the other end is a grooved pulley wheel. The wire which does the cutting is one continuous piece.

One entire loop of the wire is made around the grooved pulley on the drive shaft. That part of the wire leading toward the block to be cut runs under a grooved pulley close to the block and well toward the bottom. This pulley works on a frame that fits in a grooved upright. From this pulley the wire leads over the block to be cut and down over the end and through another pulley rigged the same as the first. Weights in the uprights press down on both pulley frames, keeping the wire against the stone at cutting pressure at all times. From this last pulley the wire line runs to about six feet above the top of the block, passes through another grooved pulley and leads back across a hollow some 500 feet. Here it passes through another pulley attached to a tree with a cable, which lets it swing loose, then back to the pulley on the drive shaft, and so on.

A single wire is attached to the pulley frame on the tree, passes through another pulley, and is tied to a heavily loaded stone car. This car acts as a tension governor for the whole wire. As the cut deepens and the tension slackens, it slowly moves down the track, keeping the wire taut. When the tension is tightened the car is pulled back up the track.

The same cutting principal is utilized in cutting stone with this wire as is used in the regular quarry gang saws. The cutting friction is supplied with sand. A trough containing sand is set above the slot being cut by the wire. The sand is fed into the slot by a trickle of water passing through the trough. The only difference between the gang saws, which are toothless blades, and the wire saw, is that the former have a back and forth swing and the latter moves only in one direction.

The size of the block that is being cut naturally determines the cutting speed. On a block 20 feet long, the wire penetrates the stone at a rate of approximately six inches an hour. In cutting larger blocks the speed is slower.

Comparative costs between the wire saw and other methods of quarrying are all in favor of the former when conditions are such that it can be utilized. The installation cost is small and the operating expenses light. One would imagine that the wire would wear out very quickly, being ground between the sand and the stone, but considering the wear and tear it gets it is very long lived.

No actual cutting cost per foot of stone has been worked out, but to give an idea of the cost Mr. Wolford said that in cutting a block 100 feet long and 10 feet deep, 1,400 feet of wire was used. The wire costs three cents a foot, so the cost of cutting this block was \$42. After the wire has been used a certain length of time it becomes smooth and will not carry the sand. It also crystallizes and breaks.

Natural conditions at the St. Claire Marble Company's quarry make operations very economical. The main line of the White River division of the Missouri Pacific runs along the base of the bluff below the quarry, with just enough room between the rails and the bluff for a switch. After the big blocks of marble are cut from the ledges in the quarry by the wire saw a gigantic 40-ton steel crane picks them up, with no more effort than if they were toy blocks and sets them gently on a flat car.

At the present time this concern is quarrying three distinct grades of marble of different shades and textures, with other varieties higher up in the mountain which they will begin to work when they finally get their quarry completely faced up.

### Arkansas Black Marble to Be Put on Market.

Special to the Gazette. Locust Grove, April 7.—This section of Arkansas will give Italy and Belgium competition in the sale of black marble. George Terry of Batesville, who owns the fee and leases on 2,000 acres of black marble, and Thogmartin & Son, his associates, of Fort Scott, Kan., have started operations on the tract, and are uncovering commercial ledges that lay in a blanket formation. Preliminary work is accomplished with a steam shovel, which is used to locate ledges. Later the big machine will be used for stripping. Work will be carried on in two hills and as soon as a sufficient tonnage is stripped, quarry operations will start. The cutting and finishing plant will be located at Batesville, where the blocks will be hauled by trucks and tractors. The quarries will be on State Highway No. 25. Mr. Terry has had many tests made of the marble and it has stood up. When it is polished it cannot be distinguished from Belgian black marble. All black marble used in the United States comes from Belgium and Italy and is used for interior trimmings, mausoleums and art pieces. The marble will be cut for trimmings for buildings and other structural and monumental purposes, and will be made into lamp bases, vases and other art pieces. This is the only black marble quarry operated in the United States.

### Quarry Has Contract for 60 Cars of Black Marble.

Special to the Gazette. Jamestown, June 13.—The Devonian Marble Corporation of Cleveland, O., operating a black marble quarry near this place, has orders for 60 cars of black marble blocks. Twenty cars will be shipped to Quebec, Can., and will be used in the new parliament building, which is being built there. The first carload of black marble ever quarried in the United States was shipped from this quarry last January. The marble is equal in quality to that of Belgium. Until this time all the black marble used in the United States has been imported from Belgium and Italy.

### GROWTH OF THE QUARRY INDUSTRY IN ARKANSAS.

During the past three years approximately \$750,000 has been invested in plant equipment for developing stone and marble deposits in the upper White river valley in North Arkansas, Tom Shiras of Mountain Home writes in the Manufacturers Record. He points to this as evidence that the quarrying industry is taking on a new significance in the economic life of Arkansas.

Further evidence of the same sort was presented in a brief news item coming to the Gazette from Jamestown, Independence county. Last January the first carload of black marble ever quarried in the United States was shipped from a quarry at that place, and the company now has orders for 60 carloads of black marble blocks, 20 of them to be shipped to Quebec for use in the new Canadian parliament building under construction there. Heretofore, American demands for this beautiful stone have been met by importations from Belgium and Italy. The Independence county black marble, we are told, is the equal of the imported marble in quality.

It has long been realized that North Arkansas is a treasure house of commercially valuable stone. As Mr. Shiras points out in his article in the Manufacturers Record, there is probably no other section of the United States offering so wide a variety of

valuable materials of this sort. The list includes limestone, marble, cement shales, glass sand and phosphate rocks. Among the products now being manufactured from these deposits are cut and uncut building stone, polished building marble, monumental marble, sand for various purposes, lump and hydrated lime for structural and chemical uses, and ground rock for fertilizer purposes. And recent developments hold out the promise of still larger utilization of these important natural resources.

from \$25,000 to \$50,000. Devonian Marble Corporation, a Delaware concern with headquarters in Cleveland, O., certificate of domestication and appointment of John W. Newman of Little Rock as agent for service. The company will use approximately \$33,181 of its capital in this state. Paris Coal Corporation, Paris and

Batesville Black Marble Company, Batesville, certificate of incorporation; capital stock, 750 shares of no par value; M. L. Thogmartin and others, incorporators. Pfeiffer Cleaning Company, Little

### LARGE DEMAND FOR BATESVILLE MARBLE

Steadily Increasing in Popularity Outside of Arkansas.

Marble from Batesville is finding steadily increasing favor in the eyes of builders outside of Arkansas. It was said yesterday at the offices of the State Chamber of Commerce. Officials of the chamber had just learned that Batesville marble was being used in the interior work of the new Southern Edison building at Los Angeles, said to be the largest and finest office building on the Pacific coast.

"People in that section of the country are enthusiastic over the quality and beauty of the Batesville product," Dudley V. Haddock, manager of the Chamber of Commerce, said. "Marble from the same town in Arkansas was used in the new Roosevelt hotel at Los Angeles, and it aroused much favorable comment then. Naturally, the State Chamber of Commerce is highly pleased with the news that another Arkansas product is becoming popular outside of the state.

"That makes up to some degree for the lack of interest in Batesville marble shown by builders in this state. From their actions, one would think that Arkansas marble is not good enough for Arkansas buildings, but its success elsewhere indicates that it is an unusually fine product.

"Orders for 32 carloads of the Batesville stone have been received recently from New York city. It was used in the Aired hotel at Toronto, one of the finest structures in that city, and it is going over in a large way in other cities. In a large bank building at Columbus, O., sections of Belgian and Batesville marble were alternated in the interior work and the resulting comparison was another boost for the Arkansas product."

*Vertical - Gib. Gazette - June 20 - 1930*

*Gazette - 8-20-30*

*Gazette 10-18-30*



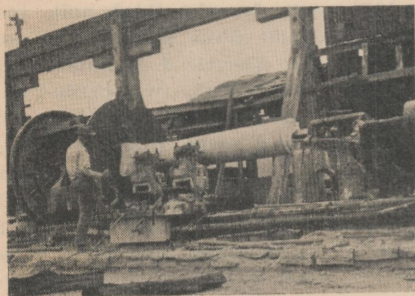
# Developing the Stone and Marble

of *mfg. Record*  
6-12-30  
*North Arkansas*

By  
TOM SHIRAS,  
Mountain Home, Ark.

INVESTMENT of approximately \$750,000 for plant equipment in developing stone and marble deposits in the upper White River valley in North Arkansas, during the past three years, gives the industry a new significance in the state.

Probably no other section of the



Turning Big Stone Column on Gigantic Lathe in Plant of Batesville Marble Quarries Co.

United States offers such a wide variety of commercial stone. Principal varieties are limestone, marble, cement shales, glass sandstone and phosphate rock. Products now being manufactured from these stones include: Cut and uncut building stone, polished marble for exterior and interior building purposes, monumental marble, glass sand for glass making, sand for many other purposes, lump and hydrated lime for structural

and chemical uses, crushed limestone for railway track ballast, rip rap, and ground limestone for fertilizer purposes.

Phosphate and limestone are available for fertilizer purposes in the territory. Phosphate rock occurs in large deposits on and adjacent to Lafferty Creek in Independence County. It is also present in other counties in both high and low grades; the latter are practically inexhaustible, as are the limestones which

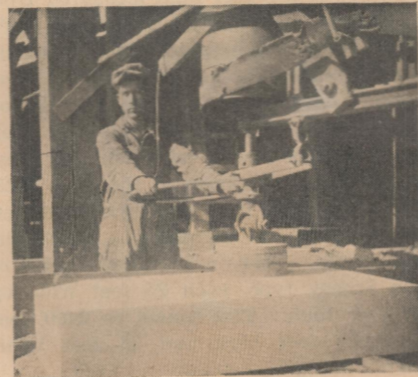


Surfacing Blocks With Stone Plane

occur in some instances in strata 200 to 300 feet thick.

Marbles in the White River country are highly crystallized limestones, principal varieties being the St. Joe, St.

Clair, Boone, Izard, black marble, cave marble or onyx. The St. Joe marble occurs in several shades of red; the St. Clair in pinks and golden vein; the Boone in grays, buffs and variegated; the Izard in grays and mottled, and the black in a true black which in color and texture compares favorably with im-



Polishing Machine

ported Belgian marble. The cave marble or onyx is found in caves and is a secondary deposit from adjacent limestone beds.

The St. Peters (glass sand) occurs in large deposits along the White River and is also exposed along many breaks and hollows of the interior.

The cement materials consist of limestone and shales and occur in large



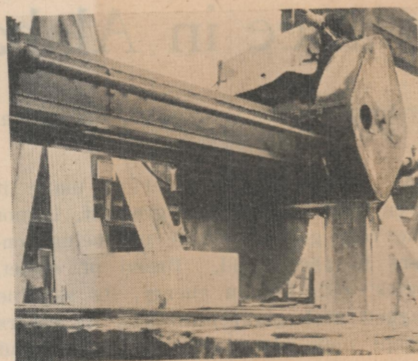
Plant of Batesville White Lime Company at Limedale, Near Batesville, Ark.

The company also operates a three-kiln plant and quarry at Ruddells, Ark. The plant here shown comprises six kilns and a quarry; hardwood and producer gas are used to fire the kilns. Both plants are operated by electricity. Demand is heavy for ground limestone for those sections of the South where the dairy industry is expanding, while there is a good market for crushed limestone for railroad ballast.

deposits near Batesville. No cement plants operate in the territory, but one large concern proved up an extensive acreage several years ago, purchased the land and is holding it in reserve.

While all the various kinds of stone in the upper White River valley have their economic value, the mineral fertilizer materials are probably the most significant. With its immense reserve deposits of these materials the agriculture of Arkansas is in an impregnable position. Expansion of the dairy industry in the South has already caused demands to be made on the limestone deposits in the territory.

All the physical features so necessary to quarry operations are found in connection with the stone deposits in the White River valley, many deposits occurring in the bluffs. The White River Division of the Missouri Pacific Railroad runs along the river from Batesville to Cotter, Ark., a distance of 100



Cutting Stone With Diamond Saw

miles, and transportation can be had at all quarry sites. The same conditions hold along the Missouri and North Arkansas Railroad, which follows numerous smaller streams that show outcrops of commercial stone and marble on the abutting hills. The streams furnish an abundance of water, and the sand ledges

always present furnish the sand that naturally is required for cutting purposes.

Six concerns, now operating quarries and manufacturing plants in the territory, include: Batesville White Lime Co.; Batesville Marble Quarries Company; Batesville Marble and Granite Company, all Batesville, Ark.; White River Marble Company, Cartney, Ark.; St. Clair Marble Co. and Silica Products Co., of Guion, Ark.

Besides the bedded deposits of stone, the loose stone of the White River country also has its value. Creek-washed boulders and field stone are used in nearby cities and in the hills for structural purposes; they are well adapted for walls in all buildings that lean toward the old English types.

Twenty years ago 90 per cent of all buildings constructed in the Arkansas Ozarks were constructed of lumber; now a high percentage of them are being built entirely or partly of stone.

## ARKANSAS MATERIAL IN BUILDING URGED

2-28-31  
Collector Russell Wants State  
Marble and Granite in Little  
Rock Postoffice.

(From the Gazette's Correspondent.)  
Washington, D. C., Feb. 27.—A request that Arkansas granite and marble be used in the construction of the new Little Rock federal building, and in other structures erected under the extensive federal building program for Arkansas, was made to the supervising architect of the Treasury Department today by Andrew J. Russell of Little Rock, internal revenue collector for the Arkansas district.

Mr. Russell was assured that specifications would be drawn that Arkansas marble and granite dealers would have full opportunity to compete.

Conferences looking toward the reopening of some of the Arkansas national banks which failed several months ago were held between the internal revenue collector and Treasury officials.

As chairman of the Republican State Central Committee, and acting in behalf of Republican National Committeeman Wallace Townsend, Mr. Russell held several conferences relative to patronage. Mrs. Russell accompanied him. They will return home Monday.

## BATESVILLE STONE FOR NEW BUILDING

Type Quarried in Arkansas  
Specified in Postoffice  
Contract. 9-2-31

Further assurance that Batesville stone will be used in the construction of the new federal building here was received by Senator Joe T. Robinson yesterday from the Treasury Department in Washington.

In response to a message which the senator sent Monday, Ferry K. Heath, assistant secretary of the Treasury, telegraphed that "Batesville stone will be required under contract for Little Rock postoffice."

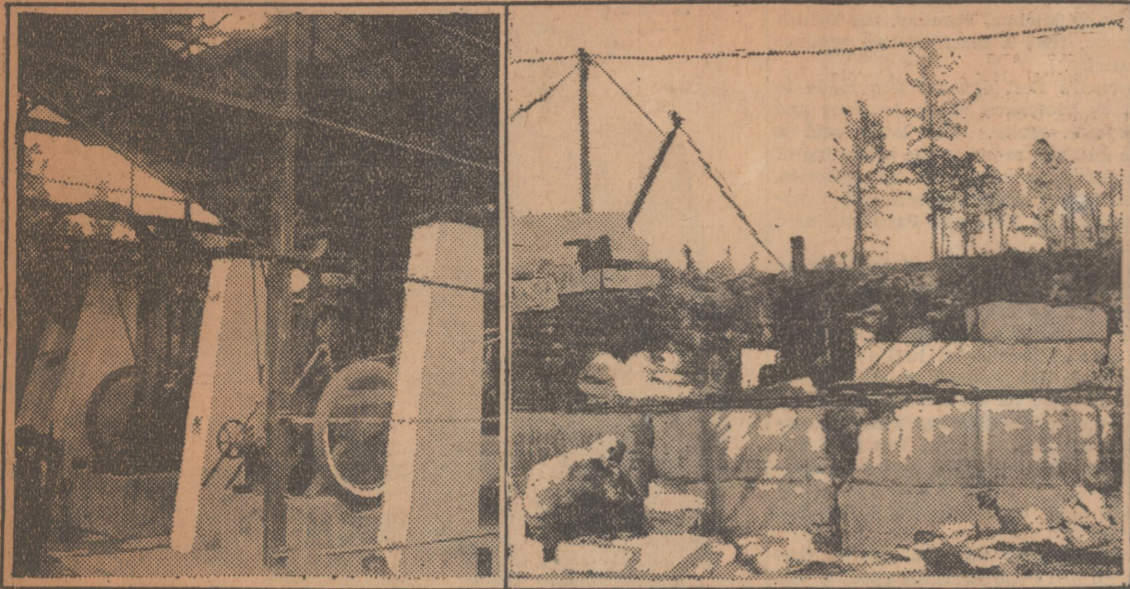
Senator Robinson expressed gratification at the definite word from the Treasury Department that a type of stone quarried in Arkansas will be used in the new building, which will occupy the block bounded by Capitol avenue, Fourth, Arch and Gaines streets.

The contract recently was awarded to R. P. Farnsworth & Co. of New Orleans, La., representatives of which spent several days in Little Rock last week preparing to begin work when notice is received from the office of the supervising architect in Washington.



# White River Marble to Be Used in Federal Building

*- Sept 6 - 1931 - Gazette*



Above at the right is shown a channeling machine cutting out quarry blocks of marble which will go into the building of the new postoffice in Little Rock. At the left is a view of the sawing department of the quarry.

The White river country in the Arkansas Ozarks will contribute to the beauty and durability of the new Federal building by furnishing the marble which goes into the edifice. The quarry from which it will be furnished is the oldest marble quarry in the state.

A hundred years ago early settlers of Independence county used this quarry, which is located about two miles north of Batesville, for monumental stone, and old tombstones still standing in the cemetery back of the Federal building in Batesville, attest to its quality. The old style script cut into them is as clear and sharp as if it were carved last week. The Batesville Marble Quarries Company now own the quarry.

Independence, Izard, Stone, Marion, Baxter, Searcy and Newton counties probably contain more varieties of marble than any like area in the country. A large part of this marble is still inaccessible to transportation, but several new quarries that have been opened up during the last few years demonstrate the fact that some day that section of Arkansas will be one of the largest marble producing sections in the United States. There are few cities of any consequence in the United States which do not contain some kind of marble from the upper White river country in some of their buildings. Besides the marbles there are various grades and colors of onyx or cave marble, which some day will be very valuable in the arts and trades.

### Have Many Colors.

Somewhere tucked away between the folds of two mountains, one can find a ledge of nearly every color of marble running from jet black to pure white. Beside the solid colors there are many beautiful variegated marbles, running through the pinks, grays, greens and reds that are equal in beauty and texture to Italian marble. The marbles are all laid down in horizontal ledges, and are quarried with channeling machines. The onyx is found for the most part laid down in the clay in caves, but some deposits have been found exposed on mountain sides.

If the pharaohs of Egypt had had the marble quarrying and cutting machinery that is in use today in the White river country they could have built the pyramids in one-tenth the time and with only a small part of the hand labor they employed. From the time a block of stone is cut in the quarry floor until it is finally swung on board the car for shipment it is handled entirely by machinery. The process of cutting and shaping marble or other stone is much the same process that is used in wood working except that the machinery is more ponderous and adapted to the specific purpose.

When one is traveling in Egypt and

gazes at the pyramids he wonders how they got the immense blocks of stone in place. Ask the same chap how they managed to do the same job on any of our stone skyscrapers and he would stammer a bit and say, "with noise." There is always a lot of racket around a new building and that is about all the average person knows about it.

### Are Easy to Quarry.

The big blocks of stone, weighing well up into the tons that you see are not difficult to quarry or handle. They are cut right out of the solid ledge with the channeling machine. This machine runs on rails like a locomotive, except that it moves so slowly you can hardly see it move. On one side is a series of heavy steel drills set a few inches apart. As the machine moves slowly over the quarry floor these drills keep pounding away in the same channel back and forth until the ledge is cut through. All the cuts are made one way, then the machine is set to work cutting crossways, cutting the blocks to the desired dimensions. When this operation is finished, a big crane swings over the quarry and picks the blocks out one by one and loads them on a car. If they are to go out rough, they are ready for shipment as they come from the quarry. If they have to be cut to smaller dimensions they go to the sawing department.

Sawing rock is a great deal like sawing wood except that the saws are different. They are about three-eighths of an inch thick and have no teeth. Sand is run into the cut with water and the cutting is done with friction. The motion is a back-and-forth motion about like a cross-cut saw. These saws are set in gangs. The big block of stone is set under the saw frame and as many saws put into it as are needed to get the desired number of pieces from the block. Cutting proceeds at the rate of about two inches an hour.

The St. Clair Marble Company of Guion uses a wire saw in their operations. It is the only one of its kind used in the territory. The cutting is done with a single three-eighths steel wire which is passed over the block under tension at high speed, with sand fed by water going into the channel. This is probably the cheapest method of sawing stone that can be employed.

For cutting blocks to the exact length, what is termed a cut-off saw is used. These saws are studded with black diamonds or borts, the same as are used in core drills and they cut very fast.

### Stone Is Planed.

Planes are also employed in shaping stone and the operation is much the same as in planing wood except that it is done on a larger scale. The stone plane is a powerful machine built to

stand immense strain and pressure. The blocks to be planed are locked tight on trucks and the huge machine with its steel cutting edge passes slowly over it, taking off the required bite.

One stands before some beautiful building and admires the gigantic stone columns, and wonders if they are really stone, and, if they are, how they were shaped. They were shaped just like wooden columns would be shaped, with a lathe. These lathes are no child's toy, however, but weigh thousands of pounds, and the bits used are heavy, cumbersome pieces of steel. The columns in the beginning are square. The square corners are knocked off and the turning operation begins. The operation is slow but sure and finally after several days, the square stone comes out turned perfectly round and smooth to dimension.

The carving of grill work and other art pieces is done with air drills, which have replaced the old maul and chisel.

The polishing is also done by machinery. The piece to be polished is run to the polishing room on a low car and the machine, which is composed of a long jointed arm, with a flat disk, is put to work. Sand is used under the disk first. When the piece is cut smooth, pumice stone is substituted for sand and the final operation is done with a buffer.

### BATESVILLE STONE FOR A NEW JERSEY COURTHOUSE.

The order received by the Batesville marble quarries for 60 cars of Batesville stone, to be used in a \$3,000,000 county courthouse now under construction at Hackensack, N. J., will enable this Arkansas company to employ a large number of men for several months, and thus help to improve the employment situation in that section of the state. It more-over aids powerfully in getting Batesville stone more firmly established. To have Arkansas marble selected by a New Jersey county for a monumental public building, in competition with building stone from all parts of the country, offered at lower prices, is invaluable and impressive advertising.

It is to be hoped that nothing will prevent the use of Batesville marble in the new Little Rock federal building.

## ENGINEER INSPECTS ARKANSAS MARBLE

### Mr. Collier Says No Decision on Batesville Stone Has Been Made.

*9-24-31 Gazette*

William Neville Collier, district engineer for the United States Treasury Department, division of public buildings, with headquarters in Kansas City, arrived in Little Rock yesterday afternoon after having inspected the marble deposits at Batesville yesterday. Mr. Collier said no recommendation had been made regarding use of the marble in the new \$1,000,000 federal building. He probably will remain in Little Rock today to inspect equipment and preparations for construction at the site of the new building. Mr. Collier said he did not know who would be assigned as supervisor of construction work or when the supervisor would arrive. It is expected that the Treasury Department representative will arrive before the end of the week.

Construction work was begun yesterday morning when the Newell Contracting Company of Little Rock, subcontractors for excavation, put a steam shovel and crew of men to work clearing the site. Work will be pushed as rapidly as possible, as the contract calls for completion of the building within 500 calendar days from date of the awarding of the contract, which was given about a month ago to R. P. Farnsworth and Company of New Orleans.

## TYPE OF MARBLE NOT AGREED UPON

### Whether Batesville Stone Will Be Used Here Undetermined.

*9-26-31*

The question of the type of marble to be used in the construction of the \$1,000,000 federal building here will be decided following the return to Washington of W. N. Collier of Kansas City, district engineer of the public buildings division of the Treasury Department.

Mr. Collier spent two or three days in Little Rock and Batesville, investigating the marble of the Batesville quarry and conferring with officials of R. P. Farnsworth & Co. of New Orleans, general contractors.

George Farnsworth, representing the contracting firm, pointed out that while the specifications to bidders sent out by the government required that the bidder name a particular type of marble that would be used, they also provided that such a designation was not to exclude consideration of other marbles of a similar type and quality.

### INCORPORATION MATTERS.

The Sequoyah Marble Corporation of Fort Smith filed articles of incorporation in the secretary of state's office yesterday. Capital consists of 3,000 shares of preferred stock with a par value of \$100 a share and 7,500 shares of no par common stock. Charles E. Jenks, Fred Hesser, Willard T. Holle and James W. Hicks, all of Carthage, Mo., are incorporators. The company will operate marble and building stone quarries in western and northwestern Arkansas. *9-24-31 Gazette*

## CONFER ON FEDERAL BUILDING MATERIAL

### Officials to Decide Soon as to Using Batesville Marble in New Postoffice.

*9-14-31*

(From the Gazette's Correspondent.) Washington, Sept. 12.—A decision whether Batesville marble will be used in the Little Rock federal building or another marble substituted in its stead will be announced by the Treasury Department soon.

Conferences between Treasury officials and R. P. Farnsworth of New Orleans, who was awarded the contract to erect the Little Rock federal building, were held in Washington yesterday. Nothing definite will be announced, it was said today, until field agents of the Treasury Department have inspected products of the quarries under consideration and made a report of their findings.

Some confusion seems to exist as to whether the contract permits the substitution of another marble for the Batesville marble. At the time the contract was awarded, it was said at the Treasury Department that the successful bidder would be permitted to substitute another marble of equally good grade in the event he could not secure the Batesville product in sufficient quantity and at a reasonable price.

Arkansas civic and political leaders have petitioned the Treasury Department to use home materials, including the Batesville marble, and also to employ local labor in the construction of the building.

## MORE FINE MARBLE FOR BATESVILLE TO QUARRY.

For a time after the contract was awarded, there seemed to be some doubt whether Arkansas stone would be used in the construction of the new federal building at Little Rock. But assurance has now been given by the general contractors and the subcontractor furnishing stone and tile that Batesville marble will be used. The stone will be quarried there and brought to Little Rock for cutting and finishing. The job, amounting to between \$45,000 and \$50,000, will thus furnish employment for Arkansas workers and put that much new money into circulation in the state.

These practical benefits are enough to make the announcement very welcome. In addition, an Arkansas building stone of exceptional quality and attractiveness will be given recognition it deserves. Only a few weeks ago it was announced that this same Batesville marble, competing with stone of standard quality and lower price, had been chosen on the basis of merit and excellence for use in a monumental new courthouse to be erected in Bergen county, New Jersey, whose officials had awarded a contract for some 60 carloads of the Batesville material. With the Atlantic seaboard preferring this marble, it would not have looked just right, or sat just right with Arkansas folk, to have it rejected for use within the state on a public project.



# LITTLE ROCK FIRM TO SUPPLY STONE

## Marble for New Federal Building to Be Quarried at Batesville.

*Oct 4, 1931 Gazette*  
Contract for the marble and tile which will be employed in construction of the new federal building in Little Rock was given yesterday to the Arkansas Marble and Tile Company of Little Rock by R. P. Farnsworth & Co. of New Orleans, general contractors.

Use of Batesville marble is specified in the contract which totals between \$45,000 and \$50,000, George Farnsworth, resident director of construction, announced.

Carl E. Heizman, president of the Arkansas Marble and Tile Company, announced that the marble will be quarried at Batesville and brought to Little Rock where it will be cut and finished for use in the building. Little Rock labor will be used in all work on the stone here and tile-workers will also be chosen from the city.

Night work on the building has been begun and will be continued until all excavation and foundation work is completed, it was announced. Construction of small forms, for use in pouring concrete, has already started and as rapidly as excavation allows the forms will be set in place to prepare for pouring of concrete footings and foundations before freezing weather.

# BUILDER PREFERS CARTHAGE STONE

## Batesville Product for New Postoffice Exterior Advocated at Hearing.

*9-22-31*  
Indications that R. P. Farnsworth & Co., general contractors, prefers Carthage (Mo.) cut stone for the exterior surfaces of the new federal building here, were apparent at a hearing yesterday before W. Neville Collier, district engineer in the division of public buildings of the Treasury Department.

The contracting company contended that the Carthage company was better equipped than the Batesville quarries to guarantee delivery of the stone. No official action will be taken on choice of the stone until after a transcript of yesterday's discussion has been submitted to the Treasury Department, Washington.

The hearing at the Union Trust Company building, was held at the request of the Little Rock Chamber of Commerce and Arkansas citizens who have advocated use of Batesville stone for exterior surfaces of the federal building. The discussion centered about ability of the Batesville Marble Quarries Company to produce stone in sufficient quantities in time to enable the construction company to maintain its schedule.

Representatives of the Carthage Marble Company dwelt on the equipment and personnel of the firm and intimated that the Arkansas concern did not have sufficient equipment to fulfill the order. John P. Cargill, manager of the Batesville company, in commenting on the equipment of his concern, said, "We can do it and all we want is the opportunity."

P. H. Scheid of the Scheid Cut Stone Company of Little Rock, fabricators and stone workers, said that his company was equipped to finish the stone quarried at the Batesville pits and that he could and would offer surety bond for delivery of the stone on schedule.

Prices Not Discussed.  
Comparative prices were not discussed and apparently prices of the two concerns were relatively close. Quality of the stone did not enter into the arguments other than in casual references.

L. K. Good, representative of R. P. Farnsworth & Co. of New Orleans, general contractors for the building, said that in his opinion the Batesville company could not deliver the re-

quired 35,000 cubic feet of stone in the time required. He objected to the interference of civic and municipal bodies into the activities of the company.

Both R. P. Farnsworth, head of the concern, and George Farnsworth, resident director of construction, were present at the meeting but allowed Mr. Good to do most of the talking for the concern. However, R. P. Farnsworth said that he appreciated the co-operation of persons and organizations here and that the policy of the concern was to co-operate insofar as was possible with local sub-contractors and business men, but that he did not consider it good business to award the contract to the Batesville firm when his opinion was that it could not fulfill the requirements.

**Basis for Bid.**  
George Farnsworth admitted, on questioning, that the company had used the Carthage company's figures in the preparation of the bid to the government for construction of the building here. The Farnsworth company also was represented at the hearing by H. T. Harrison, attorney.

D. Hodson Lewis, manager of the Little Rock Chamber of Commerce, in opening the discussion said use of Batesville stone was desired as a means of encouraging state industries, aiding state labor, satisfying state pride and keeping expenditures within the state as far as possible. E. E. Bonewits, industrial engineer, reported that he had investigated the plant at Batesville and that in his opinion the stone could be supplied readily for the construction of the building here. Mr. Cargill and Mr. Scheid supported Mr. Bonewits contention.

The Carthage stone company was represented by A. J. Meyer and H. P. Mills, president and vice president, respectively.

Walace Townsend, United States attorney, and Republican national committeeman, urged that the Arkansas stone be used if possible. Others representing the Chamber of Commerce included Carroll Thibault, acting president; J. K. Shepherd, Rex I. Bown, and George R. Gay, Dudley V. Haddock, manager of the State Chamber of Commerce and Postmaster A. E. Townsend also attended the meeting but did not participate in the discussion.

Use of Batesville marble in interior finish work was specified in the marble and tile contract, totaling approximately \$45,000, which was awarded several weeks ago to the Scheid company, and the marble will be quarried from the Batesville pits.

**Argues for Batesville Product.**  
Mr. Cargill said that the Batesville quarry has been working double shifts for several weeks producing an order for a courthouse at Hackensack, N. J., which involved nearly as much stone

as will be required for the postoffice here and that as a result of the work, the quarry is in good condition for large scale production. Additional equipment has been added, he said, and Mr. Bonewits agreed with him that there is sufficient stone on hand at the present time to supply a third of the amount required here.

By December 1 the Hackensack order will have been filled and enough additional stone quarried to supply half the amount needed here, Mr. Cargill said. The first stone will not be required here until about February 1, Mr. Cargill said, and by the time the remaining amount needed could be readily produced.

If the order goes out of the state, operations at the Batesville quarry will be suspended December 1, Mr. Cargill said, as other orders will have been filled and a large supply of stone accumulated. The Batesville quarry can not produce stone as rapidly as larger foreign concerns, Mr. Cargill admitted, but he is certain the stone can be produced at Batesville and finished in the Little Rock stone yards in ample time to finish the federal building here according to schedule.

# BATESVILLE STONE FOR NEW BUILDING

## Postoffice Contractor Agrees to Plan for Using Arkansas Marble in Part.

*11-4-31*  
Acceptance of the proposal by Treasury Department officials that both Batesville and Carthage stone be used in the new federal building at Little Rock was announced yesterday by George Farnsworth of the contracting firm, through the Little Rock Chamber of Commerce, which led in efforts to have Arkansas material used in the building.

Mr. Farnsworth said the proposal that Batesville stone be used from the granite at the base line to the terra cotta belt course at the third story, and that Carthage stone be used from the belt course line to the top, was satisfactory. He notified officials at Washington yesterday and permission to proceed with the work is expected immediately.

Chamber of Commerce officials were jubilant at the decision of the contracting firm. Use of a large amount of the Batesville stone will provide employment for many men at the quarries and at Little Rock, where the stone will be cut to dimensions.

Reports of impending labor trouble at the building were denied by Mr. Farnsworth, who said he did not know where they originated as they were without foundation. Government inspectors of building, construction, labor, and other phases of the work, are through here from time to time and there is no particular significance attached to their presence, he said. Work has been slowed down this week to avoid having to suspend it altogether since there was a delay in the shipment of steel for reinforcement in the concrete basement walls, Mr. Farnsworth said.

The steel, which is being fabricated by the Southern G. F. Steel Company at Atlanta, was improperly formed due to a confusion of detail drawing interpretation and had to be re-worked, Mr. Farnsworth said. He said he received notice that the work had been completed and that shipment would be made this morning. It is expected to reach here the last of the week and as soon as official approval of the initial installation is given construction of the basement walls will be rushed as rapidly as possible, Mr. Farnsworth said.

# EXTERIOR STONE CONTRACTS GIVEN

*Dec. 6, 1931*  
**Carthage and Batesville Quarries Allotted \$80,000 and \$30,000, Respectively.**

The Carthage (Mo.) Marble and Cut Stone Company was awarded a contract for all cut stone to be used on exterior walls of the new federal building in Little Rock and P. H. Scheid of Little Rock was awarded a contract for Arkansas stone for the finish of the interior court walls yesterday. George Farnsworth, resident representative of R. P. Farnsworth & Co., New Orleans, general contractors, announced.

Approximately \$80,000 worth of the Carthage stone is involved in the contract and approximately \$30,000 worth of Arkansas stone from the Batesville quarries will be used. The Carthage stone will be placed on all surfaces facing the streets from the top of the granite base to the top of the building.

The Arkansas stone will be used on the three walls of the open court from the second floor line to the top of the building. The five-story building is built about an open court which will begin at the second floor line.

The entire first floor will be used by the postoffice. Upper floors about the court will be occupied by administrative offices of federal officers and the federal court.

Officials of the Little Rock Chamber of Commerce, who have waged a fight for the use of Arkansas stone in the exterior surfaces, have not yet conceded defeat. When reports were first received that Missouri stone would be used for the building, D. Hodson Lewis, executive secretary of the chamber, and other officials began a campaign for the use of Arkansas stone.

A compromise believed to have been effected for the use of Arkansas stone for the first two floors and the Missouri stone for the remaining two was abandoned last week when the government was said to have accepted the Missouri stone for all exterior surfaces.

At that time Chamber of Commerce officials announced they would continue their efforts to have the Arkansas stone included in the outside surfaces.

# OFFICIALS FAVOR ARKANSAS MARBLE

## Will Ask Contractor to Use It in Postoffice, Ragon Telegraphs.

*Jan 14, 1932*

Continued determination to have Arkansas cut stone and marble used as extensively as possible in Little Rock's new federal building was expressed by Chamber of Commerce officials yesterday following receipt of a telegram from Congressman Heartsill Ragon who reported that Assistant Secretary of the Treasury Ferry K. Heath and the supervising and chief architect of the Treasury Department had agreed to telegraph R. P. Farnsworth & Company, general contractors, and request again that Batesville marble be used "for the three upper stories and all interior work except the court which is to be finished in brick."

The telegram was the latest development in a six months' fight to have Arkansas stone used in the building instead of the Carthage, Mo., stone, which the Farnsworth company announced would be used.

Carroll Thibault, vice president and chairman of the governing vice presidents' cabinet, expressed gratification and appreciation to Congressman Ragon, Wallace Townsend, Republican national committeeman from Arkansas, and Senator Joe T. Robinson for the efforts they have made to support the contention that the Arkansas product should be used.

D. Hobson Lewis, secretary of the chamber, also expressed his appreciation and said that although this represents the fourth attempt to have the Arkansas stone used, efforts will be as strenuously continued in support of the project as if no obstacles had ever been encountered.

Congressman Ragon's telegram was: "Have just finished conference with Assistant Secretary Heath and supervising architect and chief architect and they agreed to wire Farnsworth requesting that Batesville marble be used for the three upper stories and all interior work except court which is to be finished in brick. They will give Farnsworth extension of time if necessary. In case this cannot be arranged they have agreed to build court and all interior work of Batesville marble. Meeting was very satisfactory and all depends now upon the half-way reasonable attitude of Farnsworth."

# New Rock Crusher at Leslie Has Lucrative Business.

*1-16-32*  
Special to the Gazette.  
Leslie, Jan. 15.—Sam O. Denton has installed a rock crusher on the railroad yards in West Leslie and is crushing black marble.  
The crushed marble is put up in 100-pound bags and is used in making floors. Mr. Denton reports a ready sale for his product.

# HOME INDUSTRIES THAT USE HOME MATERIALS.

Material for making floors is being supplied by a rock crusher installed at Leslie by Sam O. Denton. He is crushing black marble and the product, which is put up in 100 pound bags, is said to find a ready sale.

At the Arkadelphia convention of the South Arkansas Chamber of Commerce Al G. Whidden of the Arkansas Power and Light Company told of the manufacturing adventure of a man in north Arkansas who began making walnut candy boxes with an original capital of \$100 and has built up a profitable enterprise.

These are two examples of a considerable number of small industries that have been started in this state with materials that lay ready to hand. Arkansas can't have too many of them. What we need is more men who see manufacturing opportunities and have the initiative and confidence to make a start on their own resources. Some of the greatest industries of the United States got their start as one-man enterprises with a small amount of capital. *Gazette 1-20-32*

# State Marble Approved by U.S. Treasury

## Wallace Townsend Notified in Letter From Seymour Lowman.

*1-27-32*  
A letter stating that the United States treasury department has approved the use of Batesville Black marble and Batesville Premier marble in the construction of the lobby and corridors of the new federal building being built here was received Thursday by Wallace Townsend, United States district attorney and national Republican committeeman. The communication came from Seymour Lowman, assistant secretary of the treasury, Washington, D. C.

This stone, which is extremely rich in color and takes an unusually high polish, is regarded by many engineers as superior to any found in America. The use of Batesville stone will also go into the exterior walls of the court of the building, while the front and sides will be constructed of Carthage (Mo.) stone.

The laying of the stone for the walls will begin about February 1, it was said. The steel framework for the structure will be completed within the next two or three weeks. This work is being done by the Arkansas Foundry of Little Rock, while the general contractors are R. P. Farnsworth & Company of New Orleans.

# OUR NATURAL WEALTH IN FINE BUILDING STONE.

*1-27-32*  
A New Jersey county, engaged in building a new \$5,000,000 courthouse, sent to Arkansas for 60 carloads of the same Batesville marble that will be used for the courtyard and interior trim of the new federal building at Little Rock. It may surprise some readers to be told that more than half the marble output of the United States is of Southern origin, while much of the granite and limestone

production comes from Southern quarries also. *1-27-32*

That is the statement made in the Manufacturers Record by Samuel A. Lauver, who adds that it would be almost impossible to follow the distribution of Southern quarry products to destinations throughout the United States, Canada, Cuba and South America. One Alabama limestone quarry has furnished material for buildings from the Gulf of Mexico to the St. Lawrence river, where Canada's largest office structure, the Dominion Square building at Montreal, is cased in this "Rockwood stone."

The largest marble office building in the world, the Fisher building at Detroit, is faced with Beaver Dam marble from Maryland, and also contains "Ozark Gray" marble from the Carthage (Mo.) area. This "Carthage stone" was used to build the Missouri state capitol building at Jefferson city. The Cordova shell limestone of Texas, closely resembling the famous Caen stone of France, forms the entrance of a public library at Worcester, Mass. *Gazette*

To Georgia goes the honor of sending marble to be used in constructing a war memorial at Rome, Italy, one of the world's ancient sources of fine marbles. And Georgia marble was used in the construction of American buildings as notable, and as widely separated, as the Shedd aquarium at Chicago, the Fogler library at Washington, the Ohio state office building at Columbus, and the Chrysler tower in New York city.

Tennessee marble was specified for the exterior columns and interior finish of the Internal Revenue building at Washington, and is being used in the \$5,000,000 Louisiana state skyscraper at Baton Rouge, the federal building at Louisville, Ky., and the Marshall Field building at Chicago. The white granite of the Mount Aury district of North Carolina was selected for the superstructure of the great Arlington Memorial bridge at Washington.

Quarrying of the fine building stone of various types in which Arkansas abounds is largely in the pioneering stage as yet. The extensive use and wide popularity of other Southern stone of which Mr. Lauver tells may well serve to remind us of the importance of this Arkansas resource, and the large quarrying development that may be hoped for when we make the most of our opportunities in this field.

# USE OF ARKANSAS STONE APPROVED

## Will Be Utilized in Interior of New Federal Building.

*Gazette 1-31-32*

Official confirmation by the Treasury Department of the contract for use of Arkansas stone on the interior of the new federal building in Little Rock was received by R. P. Farnsworth & Co., general contractors, yesterday.

However, Carthage stone will be used for most of the exterior of the building.

Difficulties over the kind of stone which will be used in the building have occupied attention of civic officials, the contractors and Treasury Department officials for several months.

Work on the new building is going forward rapidly and most of the steel work has been completed.

# Black Marble in Use For Terrazzo Flooring

*Feb 19, 1932 - Democrat*  
St. Joe, Feb. 13.—(Special.)—A rock crusher installed by Sam O. Denton in the railroad yards at Leslie, is crushing large quantities of the black marble quarried at various points near Leslie. The crushed stone is put up in 100 pound bags and is used in making terrazzo floors, the glistening black chips giving the floors a beautiful sheen.

Shipments are being made to all parts of the country, and the material is being used in the floors of many bank, hotel and government building lobbies.



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the county governments.)  
Black marble has been discovered in workable quantities near Fairland, Okla. *June 9, 1932*

## The Onyx Artisan

By TOM SHIRAS.

The caves in northwest Arkansas have attracted world-wide attention but L. P. (Louie) Weber of Eureka Springs, probably is more interested in them than anyone else, for they supply him with the raw material for his business. Weber manufactures onyx jewelry. His plant is the only one in Arkansas and probably the only one in the South or West. He started his craft as a boy, by making onyx wine glasses by hand, drilling them out with an old wagon-wheel drill and fashioning them into popular shapes. The wine glass market became dull and he turned to other articles, which he has been making now from this beautiful cave stone for 40 years. His plant is operated by hand and foot power. Like an expert craftsman in copper and gold, each piece he turns out has its own individuality. He takes great pride in his work.

The first plant in Eureka Springs was installed by Richard Wilson in 1888, but he did not make a success of it. Weber took up the work and has been in the business in Eureka Springs ever since. The principal articles he manufactures are clasp pins, tie pins, scarf pins, cuff buttons, paper weights, and other novelties.

Louie can pick up a piece of onyx and name the cave from which it came. To Louie it is a gem stone and he has an eye for its beauties. Look over some of the things he has created and listen to him for an hour, and you will come to the conclusion that there is romance in onyx.

Nearly every cave in the Arkansas Ozarks contains onyx. Louie could crawl into most any hole in the hills and get

enough material to last him a decade. But any stone called onyx does not fit into his scheme, because he picks and chooses with care. Its value to him lies in its color, its clearness and hardness, and he can show wonderful specimens. He has thin slabs, that, when held to the light, look like slices of bacon. Other specimens look like they came from a flower bed instead of a cave.

Onyx is crystalized limestone and some of it is almost as clear as glass. It is formed by water in confined spaces underground. The water contains lime and when it collects in a pocket, or percolates through the ground slowly, discharging in drips from the roof of a cave, the lime is redeposited as a solid. This solid is onyx. It is most commonly formed in the shape of stalactites and stalagmites. The stalactites are formed on the roof of the cave, at points where the water percolates through slowly, and the stalagmites on the floor, where the water strikes as it drips from the room.

The beautiful colors are given onyx by other mineral matter in the water besides lime. Iron gives it reds; copper the greens; cadmium all shades of yellows; zinc the browns, and arsenic the pale tan. A combination of these minerals gives a variegated and cloudy effect.

Some onyx is too soft or its texture too coarse for art work. The harder grades are required for jewelry, and art novelties.

During the last 40 years Louie has been in 117 caves in search of material for his work. There is not a known cave in several counties he has not explored and many others are known to him.

### Batesville Marble to Be Used For Texarkana Building.

Special to the Gazette. *9-28-32*  
Texarkana, Sept. 27.—It was announced yesterday that the material for the body of the new federal building will be Batesville marble, as provided in the original contract. The contractors sought permission to substitute Carthage stone, but this has been refused by the Treasury Department, in response to protests filed by Senator Sheppard for the local Citizens Committee. Trimmings will be of Texas granite.

## REPORT ON BLACK MARBLES PRINTED

Submitted to Governor Parnell  
By State Geologist  
Branner.

"Black Marbles of Northern Arkansas" is the title of a geological and economic report submitted to Governor Parnell yesterday by George C. Branner, state geologist.

Field work on which the report is based was done by Bryan Parks, formerly special assistant state geologist, and the text was prepared by Mr. Parks and J. M. Hansell. A section on the economic possibilities of the marble was prepared by E. E. Bonewits, who has done extensive geological survey work in the state. The report will be of much interest to marble manufacturers in central states and particularly those in Arkansas.

The black marble occurs as flat-lying beds of dark gray-black limestone in the Fayetteville and Pitkin formations. The length of the outcrop between Oil Trough, Independence county, and Marshall, Searcy county, is 225 miles and extends through Independence, Cleburne, Stone and Searcy counties.

### Only Black Marble in U. S.

It is pointed out that the Arkansas black marbles are the only true black marbles known in the United States and, with the exception of the Arkansas stone, all the true black marble utilized in this country is imported from Belgium. As the Arkansas product has a price advantage over the Belgian marble, in at least 21 states, it is highly probable that the Arkansas black marble industry will develop into one of importance, the report says. There appears to be a market for about \$200,000 worth of black marble annually between the Appalachian and the Rocky Mountains and this area is the most favorable market for Arkansas black marble.

The report contains 51 pages and includes five plates, 16 figures, and eight tables showing the results of physical and chemical tests of the black marble. A sectionized map, on a scale of about 2 1-2 miles to the inch, shows the distribution of the black marble beds.

The report was prepared by photolitho-print, a method of reproducing the author's manuscript by a combination of photography and lithographing.

## The Block of Marble of Arkansas—One Way to End Hard Times.

*Memphis Commercial Appeal*  
BY GEORGE MORELAND. *12-8-32*

Since earliest days in man's civilization marble has played an important part in his advancement. It has been used—probably was first used—by sculptors to give to the world some of our masterpieces of art. It is also used for both exterior and

interior decorations in the architect's art.

Most marbles are of a variegated color. Some are white, such as the famous Carrara marble of Spain, which is used for the most beautiful works of the sculptor's art. Yet others are black, and these last named are indeed the rarest examples of many varieties of marble.

It is not generally known that Arkansas produces an excellent quality of the rare black marble, the only state in the American union that produces black marble in merchantable quantities.

The Arkansas Geological Survey under the direction of Dr. George C. Branner, has issued a valuable circular on the subject of black marble which will add materially to the knowledge of the interesting subject.

This circular, entitled, "Black Marble of Northern Arkansas," by Bryan Parks and J. M. Hansell, with economic section by E. E. Bonewits, has just made its appearance and is now being distributed at a nominal cost by the Arkansas Geological Survey to those interested.

This valuable book describes the geology, distribution, and characteristics of Arkansas black marbles. It discusses both entertainingly and learnedly marketing methods and prices and makes recommendations for marketing the Arkansas stone. The book also contains a map of Northern Arkansas showing distribu-

### Three Black Marble Quarries Opened Near Leslie.

Special to the Gazette. *1-15-32*  
Leslie, Jan. 14.—The Bond Marble and Tile Company of Oklahoma City has started to open up a new quarry of black marble on the farm of J. D. Hurley about one mile northeast of Leslie. N. B. Anderson of Kansas City has opened another black marble quarry on the farm of C. A. Hollabaugh. S. O. Denson has opened a black marble quarry on land owned by Tom Hurley, east of Leslie, and has opened a terrazzo mill here for crushing black marble which will be used in building floors.

### Black Marble Quarry Near Mountain View in Operation.

Special to the Gazette. *3-6-33*  
Mountain View, March 5.—B. W. Brown, superintendent of the American Black Marble Corporation of Kansas City, arrived here last week and has a force at work on one of its quarries, three miles west of Mountain View, getting out black marble blocks to fill a government contract. The marble will be used in the erection of a postoffice building in Nebraska. Shipment will be made from Sylvania, on the White River division of the Missouri Pacific railroad.

### Black Marble Quarry at Leslie To Be Operated.

Special to the Gazette. *4-26-33*  
Leslie, April 25.—S. O. Denton of the firm of Wlado & Denton of Tulsa, Okla., has started working the black marble quarry about a half-mile east of Leslie. Shipment in car load lots will be started soon. The firm also has a terrazzo mill here with which to crush black marble which is used in making floors.

### Marble Company Resumes Work at Leslie.

Special to the Gazette. *9-20-34*  
Leslie, Sept. 19.—Boyd Bond, president and general manager of the Bond Marble and Tile Company of Tulsa, Okla., who has had the J. D. Hurley farm leased for the past two years and who has quarried and shipped several cars of black marble, is installing new machinery on the Hurley farm, one-half mile northeast of town, and will resume operations on a larger scale than formerly.  
He will employ about 15 men and will begin shipment of marble soon. It is believed that he will employ about 50 men when he gets other machinery installed. The black marble quarried here is of a fine quality.

tion of Arkansas' black marble beds. The book contains 52 pages and is printed as a photo-lithoprint reproduction of the author's manuscript. It is also illustrated with several appropriate and clear-cut photographs.

This book fills a long-time need in Arkansas for an assemblage of all the information on this important and too frequently neglected subject. Our Arkansas Geological Survey is doing a great work in placing in convenient form from time to time of information on the state's geology, a most alluring subject, not only about black marbles but on many other subjects about which our people should be informed and on which they are not always informed.

Our geology department should receive the undivided support of our people. It is a very important adjunct to the state government. When the world is made aware of the mineral possibilities of Arkansas, which work our geological survey is doing, industry will receive an impetus that cannot be other than beneficial to the state.

I thank Dr. George C. Branner, Arkansas state geologist, for remembering this columnist with a copy of the book on Arkansas marble which now adorns the "Arkansas shelf" of my little private library.



# Black Marble Deposits

An Ornamental Stone Now Found in Three Counties in North Arkansas May Lead to Competition With Belgium in Furnishing Wainscoting, Floors and Mausoleums in the United States.

May 12, 1935

By TOM SHIRAS

Gazette

It is probable that within a few years quarries in Independence, Stone and Searcy counties will be furnishing most of the black marble used in the United States. Until a few years ago most of it was imported from Belgium, and is known to the trade as "Belgium Black."

Black marble prospectors have been active in these three counties for the last five years, and several quarries have been opened. The Batesville Black Marble Company is the pioneer company in the field and is a regular shipper of this marble. It is marketed in commercial blocks, and in crushed form. The latter is used in laying terrazzo floors.

Prospectors found plenty of grief in their search for black marble. Some thought they had fine, commercial deposits, but when the blocks were sawed and polished they showed fine, white silica lines. Others found good deposits, but they were in boulder form and the boulders were too small to cut into commercial blocks. Many prospectors abandoned their efforts because of lack of money or because they did not find deposits that could be worked profitably. But George Terry of Batesville, head of the Batesville Black Marble Company, and the first prospector in the field, persisted and finally found a deposit that could be operated commercially. Most of the black marble now shipped from the state is shipped by this concern.

Several textures and grades of black marble are found in North Arkansas, that

compare favorably with "Belgium Black." Some take a polish resembling black glass, when finished, while others have a duller finish.

In the Independence county field, prospectors have found a new black marble, which they call "fossil black." It lies above the regular black marble ledges and contains tiny white fossils known as crinoidea, which are small crystallized fishbacks. When polished the tiny fossils show white on a dead black background, making a very desirable ornamental marble.

Black marble has been found in commercial deposits between Batesville and Locust Grove, and adjacent to Oil Trough, in Independence county. Near Mountain View, in Stone county, and at Leslie, in Searcy county. The ledges in some places, where found in place, have a thickness of approximately 30 feet.

All marbles get their color from mineral stains and black marble is no exception. The best grade is a hard, fine grain limestone, with about the same texture as lithograph stone. Originally it was overlaid with oil shale, and ages ago was probably submerged in an oil or asphalt pool. Gradually this oil or asphalt seeped into the limestone now known as black marble and gave it its color. Later it crystallized into marble, the whole process taking millions of years.

An apt illustration of this color theory is found near Locust Grove, in Independence county. A part of the old oil shale bed still overlies a part of the marble

ledge. A fresh broken piece of this shale still carries a strong odor of crude oil. The color theory is also borne out by large bodies of oil shale in Stone county, near Mountain View, which run 26 gallons of crude oil to the ton. Whether this oil, which no doubt at one time formed an oil pool around this shale and limestone, has escaped by evaporation or by underground movement, is a mystery many oil men who have visited this section would like to solve.

The use of black marble terrazzo for laying fine floors gives a wider market to the Arkansas product. In this form, however, it must pass through a manufacturing process. The stone is scraped free of all dirt and is then passed through a crusher, which reduces it to the size of a walnut up to about the size of an ordinary hen egg. After the crushing process it passes through screens which take all of the dirt and dust out of it. Then it is sacked and is ready for shipment.

In a terrazzo floor, the small pieces of black marble are laid in concrete, which leaves a rough, uneven surface. This surface is then honed down to a level and polished. These floors are becoming popular in large buildings, especially in the East. They are very beautiful as well as durable.

When blocks are shipped, the required dimensions are quarried, and these blocks are cut to size for the customer in the

marble yards in the city to which it is shipped.

Compared to other marble, black marble has a limited market. It is used for interior trimmings, wainscoting, terrazzo floors, etc., in buildings, and in the construction of fine mausoleums. Because it is rare in the United States, North Arkansas has an opportunity to build up a splendid industry around it.

## New Black Marble Quarry

By TOM SHIRAS.

Batesville, July 18.—The Arkansas Black Marble Company of this place has just completed opening a new black marble quarry near Locust Grove, 12 miles southwest of Batesville, in Independence county. They are operating a small terrazzo plant at this time, but will start the erection of a new plant on their yard in Batesville within the next few weeks. The new plant will have a capacity of approximately 40 tons of terrazzo a shift. They will install a battery of marble saws and other finishing equipment in the near future. The opening of the new quarry with equipment, and the installation of the new terrazzo plant will represent an investment of approximately \$15,000.

This concern enjoys a business situation that every business man hopes for but few achieve. They have no domestic competition, for the reason that their quarry is located on the only known deposit of true black marble in the United States. They have only one foreign competitor, a concern in Belgium, that heretofore has furnished most of the black marble in the United States.

Arkansas black marble is marketed in two forms by the local concern. In commercial blocks, which are now shipped to plants equipped with saws for sawing and finishing, and in the form of terrazzo, which is used in constructing floors.

Terrazzo is black marble crushed into small pieces and screened. Government standards classify it in four sizes: No. 0, 3-16th inch; No. 1, 1-4 inch; No. 2, 3-8 inch; No. 3, 7-8 inch.

In the manufacture of terrazzo the larger boulders of black marble are first passed through a regular jaw crusher, which reduces it to about the size of an ordinary egg. It is carried from the crusher by a belt conveyor to a hammer mill, which breaks it into finer pieces. From the hammer mill it is passed by belt conveyor to a series of screens, which screen it to government standard sizes. After it is manufactured it is sacked in heavy burlap bags, which are sewed like grain bags, and is ready for shipment.

Terrazzo floors, which have come into popularity, during the last few years, are made by laying the terrazzo in concrete, and when the mass sets, the floor is honed smooth with a mechanical hone. This type floor is now being used in most of the new hotel lobbies and the lobbies of other public buildings.

The large, commercial blocks of black marble are sawed into contractor's specifications and are used in the construction of mausoleums, for interior trimming, wainscoting and for other purposes where a strong contrast is desired. Independence county black marble finishes to a jet black and passes all the tests required by the building trade.

The Arkansas Black Marble Company is composed of George Terry and Roy Jeffery. George Terry is the pioneer in the black marble business in the United States. He was formerly a druggist in Batesville. Mr. Jeffery is a lumberman and stove manufacturer. Fifteen years ago George Terry saw possibilities in the black marble deposits, withdrew from the drug business and began to take his primary lessons in the black marble business. Early in the game he discovered the fact that there was plenty of black marble but very few commercial quarries.

In fact, not until a year ago did they find a quarry that filled all the necessary specifications of a commercial quarry that would supply all-purpose marble. This is the new quarry which they have just opened up. They

now have a face in this quarry approximately 30 feet high and 150 feet wide. The marble occurs in stratas of from 12 inches to 38 inches thick and they are quarrying blocks of various thickness running as long as 15 feet. They are now shipping both terrazzo and commercial blocks to all sections of the United States.

## Plan for Wider Use of Marble

Mayor Overman, Arkansas representative of the National Association of Marble Producers, and P. H. Scheid of Little Rock, operator of a limestone quarry near Batesville, yesterday went to Batesville, where they attended a conference to discuss methods of obtaining a wider use of marble and stone from the Batesville region.

Others present at the meeting included W. F. Albright, chairman of the Batesville Chamber of Commerce; E. H. Glenn, chairman of the organization's industrial school, and George Terry, H. F. Wolford and C. T. Jones, also all of Batesville.

As a result of the meeting efforts will be made to obtain use of Batesville marble and stone on buildings being erected, especially in Arkansas and nearby states, under Federal work projects as well as on other structures.

## Arkansas Marble May Be Used In Los Angeles Building.

Special to the Gazette. 9/29/1936  
Washington, Sept. 28.—Senator Hattie W. Caraway learned that in the construction of the new federal building at Los Angeles, Cal., it was reported that the bidding for the marble was limited to marble from another state, with no alternates allowed although local contractors desired to bid specifying Arkansas marble which the contractors insisted was equal in quality, with slight variation in color. Senator Caraway took the matter up with the Treasury Department and obtained a promise that should Arkansas marble be submitted by the contractor, it will be considered.

## Black Belgian Marble Bulletin Board at Ouachita.

Special to the Gazette. 1935

Arkadelphia, Nov. 14.—Black Belgian marble, found only in Belgium and near Batesville, Independence county, was used for the bulletin board of the Koine Club, composed of students of Greek at Ouachita College. The sculpturing was done by B. F. Worley, ministerial student, who carved the large marble tiger that was placed on the campus last year. The letters and drawing on the bulletin board were raised by a sand-blasting machine. The drawing was by C. F. Tarrant, also a ministerial student. His idea was obtained from the scripture scroll used by the Apostles Paul and Timothy of the New Testament period.

The scroll carries in Greek the words from I Timothy, 4:13. At the lower part of the board is a green felt pad on which bulletins can be pinned. This black marble bulletin board will be mounted on the wall in the lower hall of the main building.

The board was presented to the Koine Club at chapel exercises today by Withrow Holland, professor of Greek.

The Greek class at Ouachita is one of the largest in the South. It has 58 members. Officers are: Bernes Selph, Sparkman, president; Jack Whitlow, Augusta; Charles Ashcraft, Malvern, and M. W. Scully, El Dorado, vice presidents; Verna Tommie Green, Little Rock, secretary, and Eugenia Ammons, Pine Bluff, treasurer.

## New Black Marble Quarry Near Locust Grove Opened.

Special to the Gazette. 3-22-36

Locust Grove, March 21.—The Arkansas Black Marble Company, which has been operating in this section for several years, is opening up a new quarry near this place. The new quarry shows the best grade of black marble ever found by the company. It lies in stratas with very little overburden and can be operated very economically. Roy Jefferys of Batesville recently purchased the controlling interest in the concern. As soon as they have a sufficient face of black marble exposed they will start to quarry blocks and keep a stock of this stone in their yard at Batesville, where they also operate a terrazzo plant. Terrazzo is broken black marble used in floors, being laid in concrete and honed level and polished. The company also furnishes considerable amount

of the stone in the finished form for interior trimmings, mausoleums and other purposes. Arkansas is the only state in the Union that is producing black marble that compares in quality with that imported from Belgium.