



# ARKANSAS HIGHWAYS

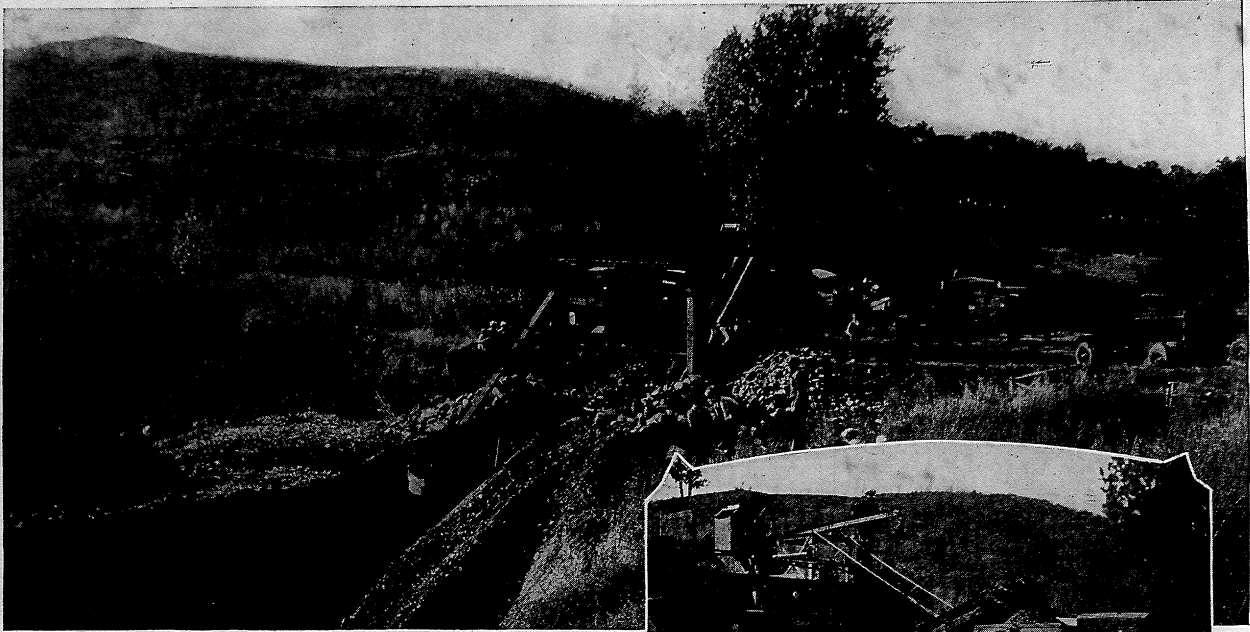
**Beginning Arkansas'  
Greatest Year**

Vol.7

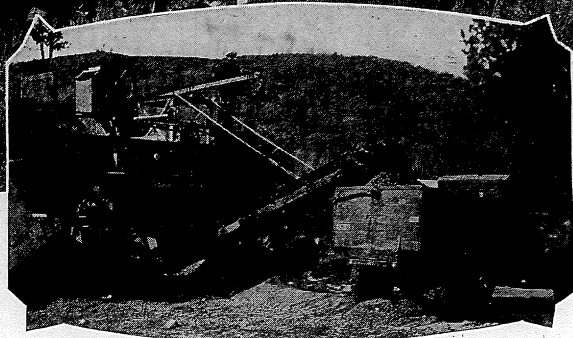
JAN.-1930

No.1

# PIONEER GRAVEL EQUIPMENT



No. 12 Pioneer Screening, Crushing and Loading Plant hooked up with drag line and Caterpillar 60 H. P. unit, operating on regravelling job on section of Stillwater cutoff. Roth Construction Company of St. Paul, contractors and owners of this equipment.



## Endorsement Plus!

A complete line of 11 different sizes of Screening and Crushing Plants, also Loading Plants, Storage Bins, Drag Lines, Conveyors, Shakers, Revolving Screens, etc.

John Roth's road graveling outfit is pictured above, on the job. The following conversation took place:

We—"Mr. Roth, we are taking a few pictures of your graveling outfit for our client, Pioneer Gravel Equipment Manufacturing Co. of Minneapolis."

Mr. Roth (just getting out of his car to look things over)—"Help yourself—go to it!"

We—"By the way—how's this Pioneer Screening, Crushing and Loading Plant working out?"

Mr. Roth (with a lot of enthusiasm): "Well, it's working out 100 per cent. We are getting 500 cubic yards of one inch reduction per day out of it. There is not a better plant made."

This is endorsement plus! Performance is what counts! Pioneer Screening, Crushing and Loading Plants are portable and economical to operate. They give required capacities of crushed gravel of uniform size. They are rugged and built to stand up under hard use.

*Write for Pioneer Gravel Equipment Catalog*

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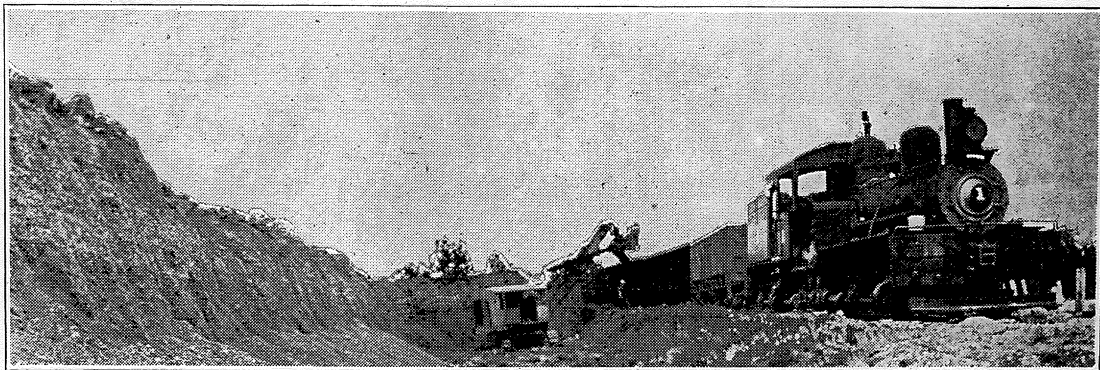
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WRITE FOR CATALOG

# ARKANSAS HIGHWAYS

Official Monthly  
Magazine



State Highway  
Department

"Arkansas Highways" is edited in the offices of the Highway Department at Little Rock. Communications relative to advertising or articles and photographs submitted for publication should be sent to The Editor, care Highway Department, Little Rock. The Bulletin is sent free to State and County Officials, newspapers of the State and Road Commissioners who apply for it. Permission to reprint any matter contained in "Arkansas Highways," with proper credit is granted to all newspapers of the State.

VOL. VII

JANUARY, 1930

No. 1

## Much Ado About Free Auto Tags

By DWIGHT H. BLACKWOOD, Chairman of the Arkansas Highway Commission

Quite a little tempest in the proverbial teapot is being stirred up over the discovery that the last Legislature, recognizing the abuses to which the free "official" tag law was being subjected in increasing volume throughout Arkansas, declared there should be no more free tags.

Certain mayors and county judges, unduly alarmed over the effect which the new law will have upon them, have raised a clamor for its repeal, or nullification by executive proclamation. Meanwhile, a few, for reasons doubtless best known to themselves or their political advisers, have marked time by berating and abusing the Highway Department and the Highway Commission, seeking to convey the impression that these agencies were unfairly and unjustly seeking to encroach upon the rights of the smaller political subdivisions.

First, it may be stated that neither the Department nor the Commission had anything directly to do with the passage of the new law. It was the outgrowth of the universal observation of legislators that the State Highway fund was being deprived of thousands of dollars of revenue through the growing tendency to "ride" the free tag through local political influence and "pull."

Second, it may also be understood that neither the Department nor the Commission can repeal or suspend the operation of the law. Only the Legislature can do that. For these reasons the worthy gentlemen who have been rending their clothes, girding themselves with sackcloth, heaping themselves with ashes and sending up a loud lamentation in and about the Highway Department, declaring themselves ruined if they do not get their customary free auto tags, may as well go on back home and direct their attention to the tender mercies of the oncoming General Assembly. It is to it they must cry for their help, if any.



Meanwhile, the common, ordinary, hard-working citizen of Arkansas who has to manage somehow at the first of the year to pay for his own tags, is not so greatly excited over the prospect that his neighbor down the way, with a little more political pull, perhaps, is at last having to dig down in his very own jeans and fork over the price.

For this common, ordinary, hard-working citizen, not nearly so green, perhaps, as he may look, has known all these years that what was fair for the goose ought to be fair for the gander. He has also known that something was out-of-joint when, by some hook or crook, so many semi-official "inspectors," "supervisors," "volunteer firemen," and plain, ordinary political henchmen were managing to ride the highways, for which he was paying, without putting up any of their own hard cash.

Hence, although the Highway Department is not directly involved either way, as is quite evident from the history and status of the law, we may perhaps be indulged the opinion, from the side-lines, that all this much ado over free auto tags, this raging tempest of grief and lamentation, will subside as the public analyzes the real situation, and learns to appraise the baby talk of certain officials over the imminent "arrest" of their fire trucks going to a fire, and other similar foolishness.

Such whining and crying is not unusual in cases where personal privileges at public expense are rudely curtailed. The weaning process, since time immemorial, has been a noisy one. But ordinarily no one is seriously hurt, and eventually, it may be hoped, almost all, if not everybody will be happy.

For it may be said, in general, and in connection with the highway program in particular, that the public will be glad to see the auto license tax dodger "shell down with the corn."

## Arkansas Leads In Grade Crossing Elimination Campaign

Director of American Highway Educational Bureau at Washington Discusses Movement for Making American Highways Safer in 1930

By James W. Brooks

The reduction of danger points in highway travel is to be one of the outstanding objectives in highway engineering during 1930.

Highway officials realize that whatever else may be done toward impressing upon the public the necessity for more careful driving as a protection against loss of life and limb, a large measure of responsibility rests upon their engineering departments in the elimination of rail-road grade crossings. Aside from securing dependability under wheel through substantially built road surfaces, they are keenly alive to the fact that safety in movement must also be assured.

This work of providing for a maximum of safety in motor vehicle operation is to be carried forward through more aggressive effort in overpass and underpass construction, and where possible, through the relocation of roadways at danger points.

For the elimination of grade crossings, more capital is needed. Within a few weeks, it is expected that the New Jersey Legislature will take the 1930 lead by adding one cent to the present two-cent gasoline tax rate in that State and apply the additional one-cent wholly to the grade crossing problem.

New York has already taken steps toward the same objective in the passage of a \$300,000,000 bond issue for overpass and underpass construction.

During 1928, approximately 1,000 of these extreme danger points in highway travel were eliminated. Of the total amount, nearly 300 were removed by overpass and underpass construction, while slightly over 700 were eliminated by a relocation of roads.

Arkansas led with the elimination of eighty-six death traps, eighty-one of which were accomplished through relocation and the remaining five through underpass and overpass construction.

Missouri followed with eighty-three death trap removals, sixty of which were accomplished through relocation.

Pennsylvania came next with sixty-four safety achievements of this character, followed by South Carolina with fifty-seven and Alabama with fifty-five.

Maryland reported three grade crossing eliminations for 1928 and Virginia reported a total of twenty-four.

Vermont, Tennessee, Rhode Island and Louisiana each reported one, while Oregon, New Hampshire and Connecticut reported none.

Reports now coming in for 1929 already indicate a considerable advance over 1928 in the reduction of grade crossing danger points.

Notwithstanding the fact that lives are to be saved through the elimination of these death traps, highway officials are still confronted with disheartening opposition from property holders who oppose the relocation of roads for selfish reasons, forgetting that such relocation would lessen the dangers of accident or death in their own families. To prevent their front gates from being isolated, as it were, through a more logical routing of the roadway, all of the political power they can possibly muster is too often brought to bear against relocation projects which common sense alone would dictate as the right thing to do.

It is the old story over again of personal interest in opposition to the general public good, and because of this fact, highway officials and their engineers have a great deal more to contend with than their ordinary engineering problems.

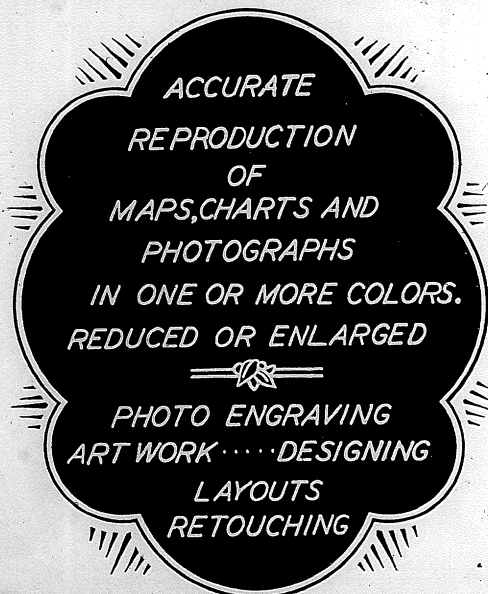
### HIGHWAY EMPLOYE GOES TO SUMATRA

In response to a very flattering offer, Harry Fish, statistician and assistant personnel officer of the Highway Department, this month has resigned his position and is now enroute to the Island of Sumatra, where he will be in charge of an extensive road building program planned by the Standard Oil Company in connection with its various large holdings on the island.

Mr. Fish is an able and experienced engineer and by reason of his pleasant personality was popular among his associates, who will wish him well in his new position.

One of the eight cruisers authorized by Congress and now under construction has been named Chicago. And still we talk of peace.

## PEERLESS ENGRAVING CO.



## Highway Commission Awards Eleven Important Contracts

First Meeting of New Year Sees 32 Miles of Road and 3,990 Feet of Concrete Bridges Placed Under Contract

At its first letting in 1930, held in Little Rock January 21, the Arkansas State Highway Commission awarded eleven contracts for road and bridge work to be commenced immediately, involving a total outlay of \$630,248.73.

The contracts call for the construction of 32 miles of road and 3,990 feet of reinforced concrete bridges. The most important individual items covered in the letting were a bridge on Highway No. 70 in St. Francis County near the Crittenden County line, and a series of bridges on Highway No. 71 between Fayetteville and Winslow. The first went to Peterson and Earnhart, contractors of Montgomery, Alabama, for \$152,447.66, and the second to the Maxwell Construction Company of Columbus, Kansas, for \$116,136.27.

Other jobs let, and the successful contractor, in each case the low bidder, included the following:

Job No. 196—Approximately three miles of grading and drainage structures on the Forrest City-West Memphis road, State Highway No. 70, St. Francis County, to J. G. Newkirk, Plainview, \$52,601.57.

Job No. 7116—Approximately seven miles of grading and drainage structures on the Three Creeks-Louisiana State line road, State Highway No. 15, Union County, to E. A. Enloe, Shreveport, La., \$42,862.49.

Job No. 2102—Approximately six miles of grading and drainage structures on the Crossett-West road, State Highway No. 2, Ashley County, to Alexandria Construction Company, Alexandria, La., \$31,397.47.

Job No. 7115—Approximately 10 miles of grading and drainage structures on the Hampton-Calion road, State Highway No. 115, Calhoun County, to Ayres & Graves, Hope, \$49,042.71.

Job No. 9107—Approximately six miles of gravel surfacing on the Marshall-Leslie road, State Highway No. 65, Searcy County, to George Millerd, New London, Wis., \$20,016.28.

Job No. 3119—Approximately 712 lineal feet of reinforced concrete deck girder bridges on the Hope-Fulton road, State Highway No. 67, Hempstead County, to Reynolds & Sutton, Nashville, \$53,898.05.

Job No. 8116—Approximately 207 lineal feet of reinforced concrete and structural steel bridge over the Petit Jean River on the Danville-West road, State Highway No. 10, Yell County, to Richardson Ayres, Hope, \$20,833.80.

Job No. 10133—Approximately 654 lineal feet of treated timber pile bent bridges with an alternate of concrete floors or timber floors with asphalt plank wearing surface on the Jonesboro-Craighead road, State Highway No. 39, Craighead and Poinsett counties, to W. L. Sharpe, Memphis, Tenn., \$28,986.90, concrete floors.

Job No. 7111—Approximately 714 lineal feet of reinforced concrete and structural steel bridges and 174 lineal feet of earth embankment approaches thereto on the Smackover-Camden road, State Highway No. 167, Ouachita County, to Richardson Ayres, Hope, \$62,025.53.

Bids on six other projects located in territory affected by the recent flood waters were rejected and will be re-advertised, when waters have subsided sufficiently to permit highway department engineers to make revised estimates.

No action was taken by the Commission on the De-Valls Bluff toll bridge controversy, although it was indicated that the possibility of instituting condemnation proceedings or constructing another bridge, as a solution for the toll situation, would be discussed at the February meeting.

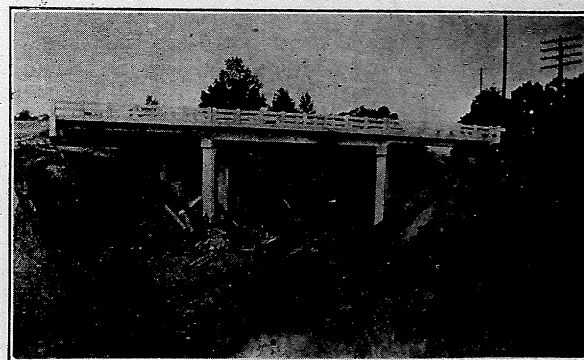
The next road and bridge letting was announced for the middle of March, following the sale in February of the \$18,000,000 worth of road and bridge bonds authorized for the financing of the 1930 program, which will be the largest in the history of the State.

### FLOOD DAMAGE RUNS INTO MONEY

Recent high waters at various points in the State will cost the Highway Department approximately \$250,000 for necessary replacement of highway surfacing and grades, according to preliminary estimates made by Charles S. Christian, State Highway Engineer.

Recession of the floods at various points may reveal additional damage, but Mr. Christian is hopeful the work may not cost in excess of the figure mentioned.

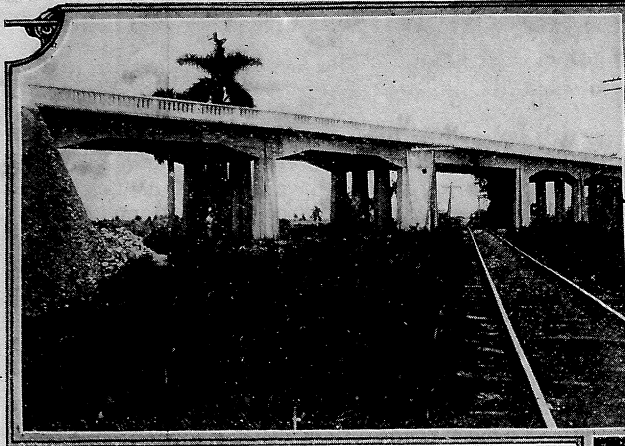
Under Mr. Christian's direction, engineers of the department are making plans for the promptest possible rehabilitation of the flood-damaged roads, when weather conditions permit.



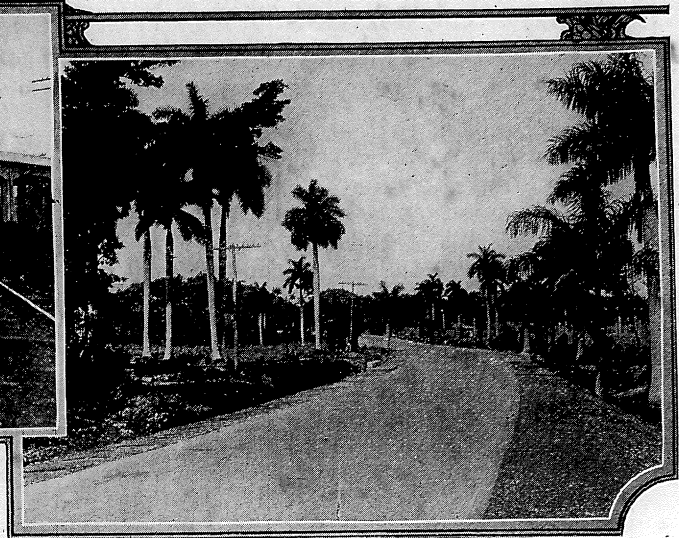
A TYPICAL ARKANSAS OVERPASS

Quite general has been the commendation received by the State Highway Department on its program of grade crossing elimination.

Typical of the overhead crossings which have figured in this program is the Texas and Pacific Railroad overhead bridge pictured above, located on U. S. Route No. 71 in Miller County near Texarkana. This job of reinforced steel and concrete cost \$11,000.00; Reynolds & Sutton of Tyler, Texas, being the contractors.



New Cuban Highway Costing \$100,000,000 Has No Grade Crossings, No Sharp Curves and No Steep Grades in 700 Miles



## Cuba Shows The Way In Modern Highway Building

By Hamilton M. Wright

While Arkansas and a number of other southern and southwestern States are doing notable work both in the construction of permanent modern highways and in the elimination of many grade crossings and sharp curves, it has remained for the republic of Cuba to show the way in the complete elimination of the old familiar "Stop, Look and Listen" sign.

I have just returned from an inspection of the wonderful new Central highway being built across the island from west to east, approximately 700 miles long. In this wonderful asphalt and concrete highway, exemplifying the very latest and most approved engineering ideas of drainage, grade, alignment and surfacing, there is not to be found a single grade crossing, sharp curve or steep grade. This is a notable and epoch-marking achievement since nowhere in the United States or in the world is there to be found so long a modern highway with none of these traditional danger points.

The achievement is even more notable when it is considered that Cuba has many mote natural difficulties even than Arkansas with her many, many streams. In

the 700 miles traversed by the Carretera Central Highway there are innumerable rivers and streams to be crossed that rise to torrential heights following the tropical cloudbursts. There are mountains and hills of heavy rock formation, interspersed with lakes and streams and lowlands in which marshy depressions add to the perplexities of the highway builder.

Throughout the course of the new highway which will be completed and opened early next year there are thirty-two unavoidable railway intersections. In twenty-five of these crossings overpasses are being completed and in seven the highway is being built under the railroad crossing. Because of the heavy rains which fall in Cuba during the summer all of the overpasses have to be built right down to bedrock and firmly anchored, and each of the underpasses has to be adequately drained.

Apparently no expense is being spared to assure the very finest permanent construction and safety and I can truthfully say that it will be the finest country road I have even seen and the safest highway throughout its great length that has yet been built. With its course frequently fringed by row upon row of majestic royal palms it is also one of the most picturesque and beautiful highways in the world.

The substantial sub-grade is always overlaid with twelve inches of stone; above this Portland cement concrete six inches in the center and nine at the sides, and above this two inches of very strong, resilient surface of Warrenite-bitulithic, a type which has been used on hundreds of American streets throughout the United States. The road extends like a ribbon through the land with many miles of the completed sections now in constant use.

Although it passes into mountainous districts, nowhere is there a grade of more than five per cent or a turn of more than four per cent curvature. Right-angled turns or sharp turns such as send cars careening off the road in the United States are unknown. It will

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be possible to ride between Havana and Santiago de Cuba in eighteen hours and the Cuban government figures that the traffic between these two cities and other provincial capitals along the line will be so great that many accidents would occur were grade crossings permitted.

The road will run from Pinar del Rio City, west of Havana to Santiago de Cuba on the eastern part of the island. It is already possible to ride on the highway about 75 miles west of Havana and 75 miles east of the city. The road to Pinar del Rio in the heart of the tobacco district will be completed by the 20th of May, the anniversary of Cuban Independence. By that time you will be able to ride from Havana to the city of Santa Clara. The work in the Province of Camaguey will be completed by the middle of the year, leaving only the work in mountainous Oriente Province to be finished. As sections of the road in Oriente are already being used, it is believed that sometime about the middle of 1931, at the latest, the entire highway will be thrown open. But by the middle of the present summer tourists should be able to ride through 450 to 500 miles of unknown country.

President Machado of Cuba does not regard this road as an isolated project. It is part of a stupendous scheme for the development of the island. Cuba has been a two-crop country, sugar and tobacco. The fluctuation in the price of sugar has vitally affected economic conditions in the island. Intensive farming and stock raising

will be introduced. New schools, asylums, sewers, viaducts, irrigation works, harbor works, water works, and public markets are under construction. The agricultural college at Havana has been expanded. Jersey cattle and other valuable stock are replacing the old Spanish cattle and razorback hogs. I have seen fine herds of Jerseys on the island. Fine horses are being bred. Cuba will put in an ocean ferry service connecting Havana with Key West and the Atlantic Coastal Highway there. At the present, cars can be daily transported between Key West and Havana in winter season, for \$30 round trip when accompanied by driver. There is no duty on tourist cars into Havana.

#### Emotion

A man was discovered by his wife one night standing over his baby's crib. Silently she watched him. As he stood looking down at the sleeping infant, she saw in his face a mixture of emotions—rapture, doubt, admiration, despair, ecstasy, incredulity. Touched and wondering alike at this unusual parental attitude and the conflicting emotions, the wife with eyes glistening arose and slipped her arms around him.

"A penny for your thoughts," she said, in a voice tremulous with tenderness.

Startled into consciousness, he blurted them out:

"For the life of me, I can't see how anybody can make a crib like that for three forty-nine!"

—*Gas and Electric News.*

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## Prospects Good For Increased Federal Aid

Passage of Dowell Bill in House Indicates Final Action Increasing Federal Aid Funds by \$50,000,000 Annually

Arkansas will profit to the extent of almost \$1,000,000 annually for her highway construction fund through the final passage of the so-called Dowell bill in the national Congress.

Highway enthusiasts are rejoicing over its unanimous approval recently by the House of Representatives, which is declared to presage similar action in the Senate, and speedy enactment into law.

The bill calls for a total appropriation of \$300,000,000 for road building in the three-year period beginning next year.

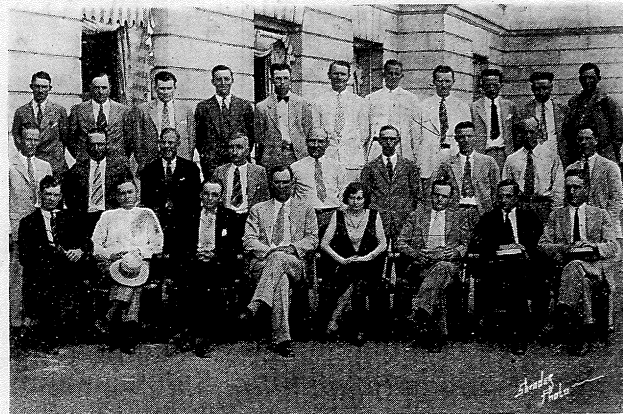
Among the speakers who had a prominent part in the final action of the House were Congressman Claude A. Fuller of Eureka Springs, and Congressman D. D. Glover, of the Sixth Arkansas District.

Congressman Fuller, since his election, has become a member of the House Committee on Roads, which recommended the measure. He made a strong appeal for its passage, declaring that Federal Aid in road building had done more than all other influences combined to lift America out of the mud.

Congressman Glover declared that no other legislation had met such widespread approval by the people of all parts of the country.

The Dowell bill increases the present annual appropriation of \$75,000,000, effective since 1925, to \$125,000,000 annually, beginning with the next fiscal year.

Considerable discussion, in connection with the passage of the bill, revolved around possible action removing the present limitation of the amount the Federal Government may aid in the construction cost to \$15,000 per mile. It was pointed out that in modern road building there are many instances in which it is necessary to spend considerably more than \$30,000 per mile to get the right kind of permanent highway, and that where there is Federal participation it ought to be on a fifty-fifty basis.



### WAIT A MINUTE PEOPLE, HERE'S DISTRICT No. SIX

Before passing on the question of which district has the snappiest, most capable and best-looking organization among the State Highway Department forces, you are asked to consider carefully the above group picture of those who make the "wheels go around" in District No. 6, which has its headquarters in Little Rock, under the direction of A. W. Buford, District Engineer.

Mr. Buford's district, in which he is responsible for all maintenance work and exercises supervision over all new construction, includes Pulaski, Faulkner, Prairie, Lonoke, Saline, Garland, Grant and Hot Spring counties.

The personnel above may be identified as follows: Front row, *right to left*—A. W. Buford, W. A. Stanton, Jr., Marion Lamb, Nola Lee Plant, L. V. Murray, Louis Cone, A. G. Moses, and R. D. Robbins.

Second row, *left to right*—Max Hardaway, W. R. Wilcox, Geo. T. Foster, J. E. Garrett, Robert Ruffin, Jr., J. E. Henderson, F. N. Margrave, E. M. Davis, and H. E. Throop.

Third row, *right to left*—G. G. Carter, Earl Sanders, B. A. Wilson, E. B. O'Brien, John Cooper, C. K. Davis, J. M. Woods, Bruce Whitlock, Max Brooks, W. F. Marion and G. B. Gill.

The dream of today will be the realization of tomorrow, and the completion of the chain of lakes, and of the paved highway through Arkansas, will be the realization.—*Hot Springs Sentinel-Record*.

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BROADWAY AT FIFTH

## Road School To Study Low Type Surfacing

Southwest Road Show and School at Wichita Will Feature Discussion of Best Methods of Surface Treating

An announced feature of the fifth annual Southwest Road Show and School to be held in Wichita, Kansas, February 25 to 28 that will be of special interest to Arkansas will be the study of the most important low-cost method of seal-coating for the temporary surfacing of dirt, rock and gravel highways.

Officials of the United States Bureau of Public Roads, of the Highway Departments of the southwest and engineers from the various schools of the section will participate in the discussion. Arkansas officials will particularly be interested in the discussion of this phase of road construction because of the problems confronting the State along these lines. While the ultimate objective of the State Highway program is the permanent surfacing with asphalt or concrete of all of the important roads in the system, limitation of funds will make it necessary for temporary measures to be worked out whereby many miles of gravel, rock and dirt highways may be given a smooth and dustless surfacing which will give temporary relief at comparatively small cost.

Officials of the Federal Bureau of Public Roads have been studying the question from a national standpoint

because of similar problems which are confronting other States of the Union and the very latest finding of engineers will be studied and discussed as part of the Wichita program.

Other features of the school which have been announced by Secretary F. G. Wieland include maintenance organization, bridge design, development of county systems and motion pictures demonstrating the very latest developments in road construction both in America and in foreign countries.

An additional feature of the school will be one of the most complete exhibits of road building machinery ever arranged by machinery manufacturers for showing in the southwest.

### Cutting

A girl met an old flame, and decided to high hat him. "Sorry," she murmured, when the hostess introduced him to her, "I did not get your name." "I know you didn't" replied the old flame, "but that is not your fault. You tried hard enough."—*Atchison Globe*.

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U-T-I-L-I-T-Y

## Clarendon Bridge Project Plans Still Indefinite

Highway Officials Still Hope for Joint Action With Cotton Belt in Spite of Announcement That Railroad Will Not Participate

Although Charles S. Christian, State Highway Engineer, has received a letter from the Engineering Department of the St. Louis Southwestern Railroad (Cotton Belt) to the effect that they are not interested in entering into an agreement with the Arkansas Highway Commission for the joint construction of a highway-railroad bridge and viaduct across White River at Clarendon, officials still are hopeful that the arrangement may be consummated.

It is thought that the decision announced in the letter to Mr. Christian was based upon a misunderstanding of Highway Department plans for the financing and construction of the structure. Overtures in the matter originally were made by Daniel Upthegrove, President of the Cotton Belt, to the Commission and in view of the heavy cost of the proposed State-owned toll bridge at Clarendon, prospects of an arrangement for a jointly-owned structure were welcomed by the State Highway Commission.

It had been estimated that a joint structure would cost in the neighborhood of \$3,000,000, whereas the highway toll bridge itself will cost the State approximately \$2,000,000. The White River at this point presents many very difficult engineering problems which will make the Clarendon bridge by far the most expensive of the toll bridges planned under the present program.

Following out President Upthegrove's suggestion, tentative plans for the joint structure had been worked out and were to have been discussed recently with Mr. Upthegrove by Dwight H. Blackwood, chairman, and Justin Matthews, member of the Commission, in an interview at St. Louis. However, Mr. Upthegrove was suddenly called to New York on emergency business and

the interview has not yet been had. In the meantime the Engineering Department of the railroad, acting, it is thought, on incomplete information regarding the plans of the Commission, announced that the railroad would not participate.

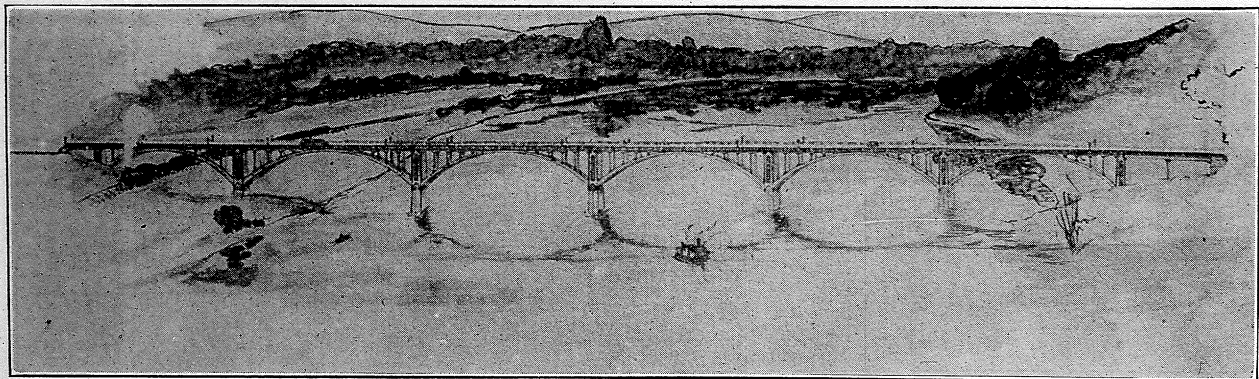
It is unlikely that a final decision as to its own plans will be made by the Commission until Mr. Blackwood and Mr. Matthews have had opportunity to have their interview with President Upthegrove, although the engineering work preliminary to the construction of the highway toll bridge will go forward. Ira G. Hedrick, Bridge Engineer of Hot Springs, and designer of the Fulton, Newport and Augusta bridges, will be the designer of the Clarendon bridge.

### MISSISSIPPI COUNTY BUILDING SECONDARY ROADS

Grading and gravel surfacing of more than fifteen miles of secondary roads, giving an important agricultural section an outlet to U. S. Highway No. 61, has been begun in Mississippi County by the letting of a \$150,000 contract to A. C. Kennedy, a Little Rock contractor.

The work is being done by the Joiner Road Improvement District and the contract awarded to Mr. Kennedy involves approximately fifteen miles of road. It is anticipated that the contemplated program of improvement of secondary roads in Mississippi County will involve an expenditure of more than \$800,000.

There are poor people in the Ozarks who live in such dilapidated shacks that every time it rains they have to go out and get in the sedan.



## The Ozark Bridge Over Arkansas River

It is a little too early for us to give our readers an actual photograph of the beautiful new reinforced concrete bridge which is being built across the Arkansas River on State Highway No. 23 in Franklin County. However, the structure, which is to be a toll bridge replacing a ferry at this point, is progressing rapidly and the above is an artist's conception of what it will look

like when it is completed by M. E. Gilloiz of Monette, Missouri, the contractor.

The bridge will be 536 feet long and will cost \$372,000. It will be an important link in the new Highway No. 23 connecting the north and south highways paralleling the Arkansas River from Little Rock and Fort Smith.

## *Gas Tax One of the World's "Greatest Inventions"*

An Editorial from the Manufacturers' Record

It has been said that the greatest inventor in the world's history was the man who invented interest. Perhaps equal honor should go to the man who invented a system by which States can secure magnificent highways without a dollar of cost to any one. That invention is the tax on gasoline which pays the cost of highway construction and the amortization of bonds where bonds are issued to hurry the work forward. Even the man who buys the gasoline and pays the tax in reality pays nothing, for it has been proven by repeated tests that the reduction in the cost of operating a car by reason of lessened wear and tear, and lessened consumption of gasoline on good roads as compared with bad roads is so great that the users of gasoline really save money by the construction of good highways through the gasoline tax levy.

Improved highways are changing the whole life of this country. They are bringing the people of all sections into closer contact and developing a broader spirit of nationalism. They are the means by which religious and educational work can be advanced. They help the farmer to reach the city with his produce, and they help the city consumer to secure the farmer's produce with less difficulty than in the olden days of mud roads, or equally troublesome sand.

Last year this country spent on the building and maintenance of highways \$1,300,000,000. It is indicated that \$1,600,000,000 will be expended on highway work in 1930. The income from the gasoline tax was \$435,000,000 in 1929.

Some States have issued bonds so as to hasten the building of roads more rapidly than by the pay-as-you-go system. Many counties have issued bonds for coun-

try roads without having the benefit, except in one or two States, of any portion of the State gasoline tax.

The march of civilization can never reach out fully into the country districts until we extend our roads from the main arteries which are now constructed, or under construction, so that every portion of the country can be reached by at least fairly good, modern highways.

### BRIDGE TOLLS ARE REDUCED

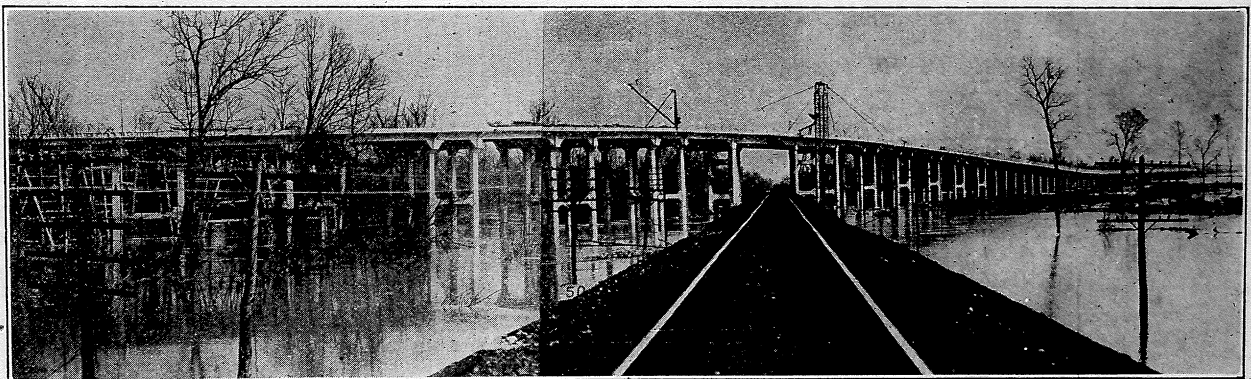
While the State Highway Commission is seeking a way to give permanent relief from the unreasonable tolls that have been charged by the owners of the private toll bridge over the White River at DeValls Bluff, a measure of temporary relief has been given by a War Department order fixing the maximum charge at 75 cents. This is 25 cents lower than the fee that has been demanded heretofore.

The order, officially handed down by Patrick J. Hurley, Secretary of War, followed an investigation made by the Department at the request of the Arkansas Commission.

It is predicted that before the Highway Commission ends its present campaign, further relief will be assured tourists, whether the State has to build a toll bridge or further reduction is secured in the tolls charged by the present bridge.

We have two very excellent bridges in Garland County, and we have patience in the matter of connections. The connected highways will bring increased patronage in 1930, and watch things hum thereafter.

—Hot Springs Sentinel-Record.



## A Broadside of The Harahan Viaduct

Several times recently we have had stories relative to the progress being made on the Harahan viaduct approach to the Harahan bridge, the entrance to Arkansas from Memphis on U. S. Highway No. 70, which soon is to be opened to traffic.

Above is to be found a progress photograph giving as wide a broadside of one section of the structure as a

panoramic camera could reach. The viaduct, which is being built by the Fuller Construction Company of Dallas, Texas, actually consists of three reinforced concrete bridges of this general design, totaling almost a mile in length. With a long section of earthen fill, the viaduct bridges the low, marshy ground which borders the Mississippi River on the Arkansas side.

### ASSEMBLY POINTS FOR MATERIALS ANNOUNCED.

Points at which sand and gravel storage piles will be established as a means of expediting the great construction program of the coming summer have been announced by the State Highway Commission, in connection with the award, to a large number of producers, of contracts for 341,777 tons of gravel and crushed stone and 203,561 tons of sand which it is estimated will be needed.

The points, as they have been grouped for convenience in shipping and computing freight rates, are as follows:

Group No. 1—West Memphis, Heth and Round Pond.

Group No. 2—Pine Bluff, Fairfield, Noble Lake, Moscow, Tamo and Grady.

Group No. 3—Cabot, Austin and Ward.

Group No. 4—Malvern and Benton.

Group No. 5—Hoxie, Minturn, Alicia and Pochontas.

Group No. 6—Springdale, Lowell, Rogers, Woolsey, Brentwood, Winslow, Greenland, West Fork.

Group No. 7—Arkadelphia.

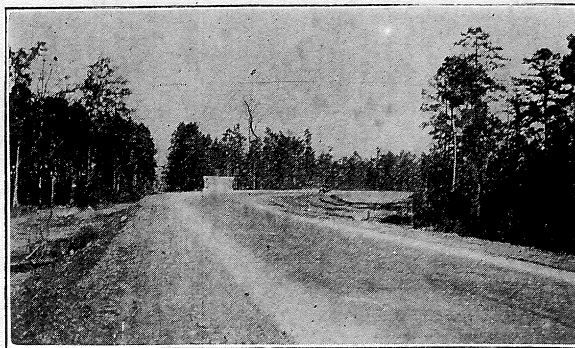
Group No. 8—Bald Knob, Judsonia.

Group No. 9—Kaltog Spur, Swifton, Tuckerman.

Group No. 10—Greenwood, Huntington, Mansfield.

Group No. 11—Fulton, Sprudel, Sheppard, Guernsey, Hope, Curtis, Gum Springs, Prescott, Boughton, Gurdon, Biene.

Group No. 12—Beebe, McRae, Garner, Higginson.



### OUR COVER PAGE

On the front cover page and in the above smaller photograph may be found two very interesting glimpses of the new Malvern-Donaldson concrete pavement on U. S. Route No. 67 in Hot Spring County recently completed by T. S. Clements, contractor of Shreveport, La., for the State Highway Department at a cost of \$203,000.00.

This new strip of concrete covering an important link in this important cross-State highway has eliminated many of the bad weather terrors of automobile traffic between Little Rock and Texarkana. It is a fraction over ten miles in length, has no sharp turns and such curves as there are have been widened and super-elevated to eliminate all danger to fast moving traffic. As the photograph shows, there are wide shoulders on either side of the pavement and the right-of-way has been cleared of all obstructions which might cut off the view and increase the danger when turns in roads are unavoidable.

### PENNSYLVANIA GETS MOST FROM THE MOTORISTS

Figures compiled by the U. S. Bureau of Public Roads show that the State of Pennsylvania, of all States in the Union, gets the largest total revenue from motorists. The total gas, chauffeur and auto tax in that State in 1928 was \$49,622,603; California was second with \$39,141,663; Michigan was third with \$37,011,427; Ohio, fourth, with \$36,724,956; Texas, fifth, with \$35,995,267.

Pennsylvania, however, did not have the largest tax per individual car. That "honor" went to Florida, where the average license and gas tax extracted \$45.86 from each motorist. In Oregon the average license and gas tax paid by the individual motorist was \$43.70 and in Arkansas, the average was \$43.60.

The total number of motor vehicles registered in the United States was 24,493,124; an increase of 1,359,883 over 1927. Only one State, and that for the first time in history, went over the two million mark, New York having a total of 2,083,942 motor vehicles registered at Albany.

### He Knew Her

Mrs. Campbell: "Dear, I saw the sweetest little hat downtown today."

Campbell: "Put it on and let me see how you look in it."—*Cigar and Tobacco Journal.*

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## Trees Along State Highways

An Editorial from the Minneapolis Tribune

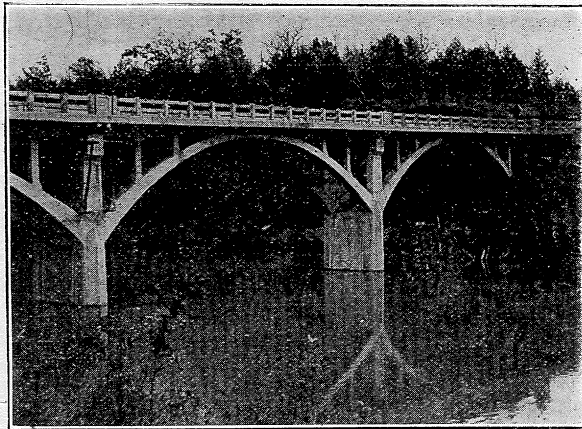
In his annual report Secretary of Agriculture Hyde recommends the beautification of highways by planting trees and calls attention to a recent amendment to the Federal Highway Act which provides that the Federal Government will pay half the cost of planting trees along roadways.

With the theory of beautification none can take issue, but in the prairie States of the northwest experience has proven that while trees may add to the appearance of highways in summer months, in winter they increase the problem of keeping roadways free from snow.

They form a barrier that becomes a groundwork for drifts and by shading drifted areas from sunshine prevent snow from melting rapidly in spring, increasing travel hazards for those using the roads.

It is doubtful if there are many sections of the northwest where it will pay to plant trees along highways. But there is plenty of room to plant them back from the roadways around groups of buildings. Groves of this kind afford fine shelter against winter storms and provide a supply of wood that can always be utilized.

In areas where there is no snow problem the suggestion that trees be planted along highways as a beautification measure is splendid, and the Federal idea of encouraging it by paying half the cost is commendable.



THE BIG MULBERRY BRIDGE

Automobile traffic between Little Rock and Fort Smith is rejoicing over the completion of the Big Mulberry bridge, located between Alma and Ozark on U. S. Route No. 64.

This structure which, because of the configuration of the terrain and the vagaries of Big Mulberry Creek, has been built in two sections, is a total of 827 feet in length.

Reynolds & Sutton of Tyler, Texas were the contractors and the total cost was \$64,000.



THE FOLKS IN DISTRICT No. NINE

One of the best looking groups in all the twelve district offices of the State Highway Department, as you will readily agree after studying the above photograph, is that of the Harrison office, District No. 9, of which District Engineer Fred E. Coker is the "boss."

District No. 9, operating out of the Harrison headquarters carries supervision over all the State Highway construction and maintenance in Boone, Carroll, Marion, Madison, Baxter, Newton and Searcy counties.

The personnel shown above is as follows:

Front row, left to right: Mr. B. A. Sturgeon, Assistant District Engineer; Mr. E. A. McRae, Chief Draftsman; Mr. John Robinson, Draftsman; Mr. John Hicks, Draftsman; Mr. W. M. Tucker, Resident Engineer; Mr. E. E. Polk, Maintenance Engineer.

Back row, left to right: Mr. W. W. Walton, Draftsman; Mr. L. L. Cralle, Rodman; Mrs. Anna P. Watkins, Clerk; Miss Jewelle H. Fowler, Stenographer; Mr. Harry M. Wright, Construction Engineer; Mr. W. R. King, Checker; Mr. Jesse Stinnett, Instrument Man; Mr. F. E. Coker, District Engineer; Mr. Paul Hawkins, Instrument Man.

A group of traveling men were swapping lies about their radios in a Smith Center drug store. An old man had been listening silently.

"Got a radio, old man?" asked one of the drummers.

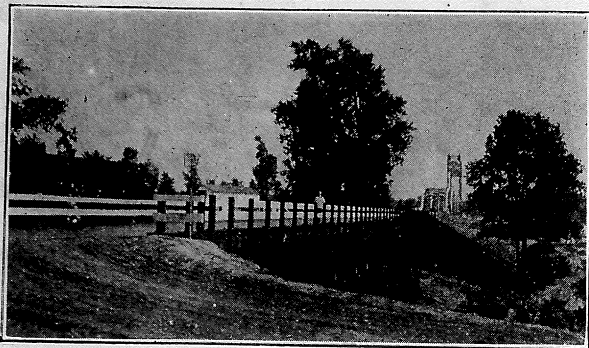
"Yeah," replied the old fellow. "I got a little two-tube affair. It's a pretty good one, though."

"Can you tune out these little stations with it?"

"Well, I was listening to a quartet the other night, an' I didn't like the tenor, so I just tuned him out and listened to the three of 'em."—*Hardware Age*.

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### APPROACH TO CODY BRIDGE

In a recent issue of "Arkansas Highways" there was carried a story of the opening of the new Cody bridge over St. Francis River near Marianna, a structure of unusual interest on account of its lift span, which can be raised so as to allow river traffic a clearance of 70 feet above the highest flood waters ever recorded.

In connection with the story there was run an excellent broadside picture of the bridge. In order to bring traffic to the bridge, however, it was necessary for the State Highway Department to build a second bridge 336 feet in length over Cow Bayou just south of the St. Francis River. This bridge was built of creosoted timber and is approached by a high dump 320 feet long. The photograph above shows the Cow Bayou bridge, while in the background dimly outlined may be seen the main bridge over St. Francis River.

### AMERICAN ROAD BUILDING IN 1930

As Arkansas enters another year of her own splendid road program it is not amiss to cast about to see what the other forty-seven States are planning to do. While it is estimated that approximately \$25,000,000.00 will be spent directly or indirectly in our own State Highway program, and while this will be the high water mark for such expenditures in Arkansas, still compared to the national program, it will be little more than the proverbial "drop in the bucket."

Recently compiled figures show that the various States, counties, municipalities and other local units will spend an aggregate of more than two billion dollars during 1930. This will be a high-water mark in our national history and will be a very material factor in

the continuation of national prosperity which has been the recent objective of industrial conferences called by President Hoover.

The development of the road building program in America has constituted one of the most rapidly moving dramas in our history. Less than twenty-five years ago appropriations for highway construction remained an insignificant part of governmental budgets, local, State or nation. At present these appropriations are exceeded by very few items. Our entire progress as a nation is dependent to a great degree on the increasing adequacy of our highway systems. No community and no State can hold aloof from the movement without imperiling its future.

Those who hang back even for a day must pay a heavy price for their conservatism. It should be a matter of deep gratitude on the part of all citizens that recent political and economic events have so shaped themselves as to put Arkansas well in the lead in the race for the attainment of a completely adequate system of State highways.

### FLOOD CAUSES LONG EXTENSION OF LICENSE PERIOD

While the continued rains and high waters of January caused heavy damage to many State highways they proved to be not an unmixed evil from the standpoint of those who had to purchase automobile license tags, as they resulted in the extension by Governor Parnell of the time in which tags might be obtained without penalty until January 25. It is believed this is the longest extension ever granted but it was justified by the flood conditions existing in various parts of the State which made it impossible for residents of rural sections to reach their county seats.

### AIRPORTS AT FORREST CITY AND BLYTHEVILLE

Among the smaller cities of the State which are planning to prepare themselves to handle modern air traffic are Forrest City and Blytheville, both of which are looking about for suitable sites.

Blytheville is also interested in the possibility of securing a location of a training field and school for fliers.

"Not many fellows can do this," said the magician as he turned his Ford into a lamp post.

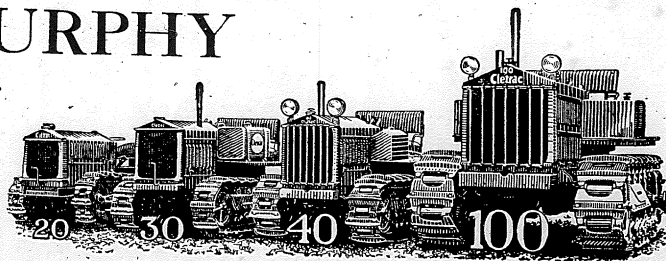
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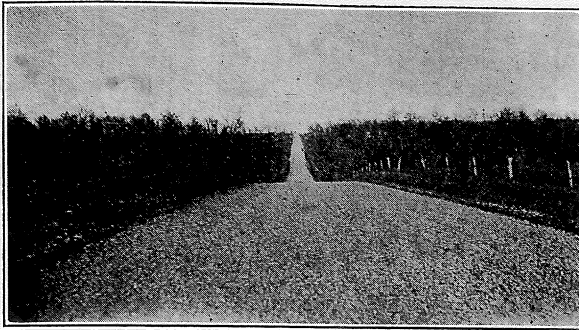
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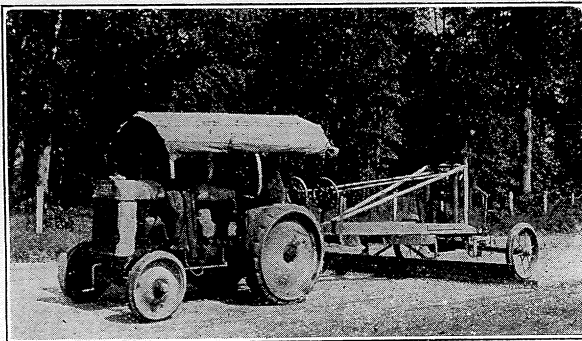




### A TYPICAL CRUSHED STONE ROAD

Straight as the proverbial arrow runs the above section of one of Arkansas' new crushed stone highways between Wooster, in Faulkner County, and the Cleburne County line on State Highway No. 25. This highway, several sections of which now are under construction, connects U. S. No. 65 at Wooster with State Highway No. 16 at Heber Springs.

The particular section pictured above is 19.8 miles long and cost \$138,000.00. M. O. Weaver of Iowa Falls, Iowa, was the contractor.



### A SNAPPY ROAD MAINTENANCE OUTFIT

Typical of the equipment which the State Highway Department is using in its maintenance of several thousand miles of dirt, gravel and crushed stone highways, is the above outfit as photographed on the job on State Highway No. 11 between Hazen and Des Arc.

In the hands of a skilled operator one of these little outfits can cover a wide range on days when conditions are favorable for light grading. Such road patrols throughout the State are responsible for the maintenance of smooth-riding surfaces on the highways not yet permanently surfaced.

#### NOTICE TO CONTRACTORS

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The new hardware clerk prided himself on always having a snappy comeback.

"Do you keep refrigerators?" the timid-looking woman inquired quietly.

"No," he snapped, "we sell them."

"Anyway," she said as she strolled toward the door, "you'll keep the one you were going to sell me. Good morning."—*De Laval Monthly*.

"Did you hear the one about the girl who went automobile ridin' with a feller and only got one shoe muddy?"

"Naw."

"Well, she reconsidered."—*Judge*.

Fair Young Thing: "I wonder what causes the flight of time?"

Brilliant Young Man: "It is probably urged on by the spur of the moment."—*Answers*.

Proud Papa: "Don't you think it's about time the baby learned to say 'Papa?'"

Mother: "Oh, no. I hadn't intended telling him who you are until he becomes a little stronger."

Agitated Wife: "I'm positive that was a human being we ran over."

Motorist (in thick fog): "Good. Then we're still on the road all right."

Cole—"They say a man's first thousand dollars is hardest to get."

Black—"I don't know. An oil stock promoter got mine easily enough."

Student caught speeding—"But, officer, I am only a student."

Cop—"Ignorance is no excuse."

"Papa, does one wife too many make a man a bigamist?"

"Not necessarily, son. I have one wife too many and I'm no bigamist."

#### Give 'Em a Chance

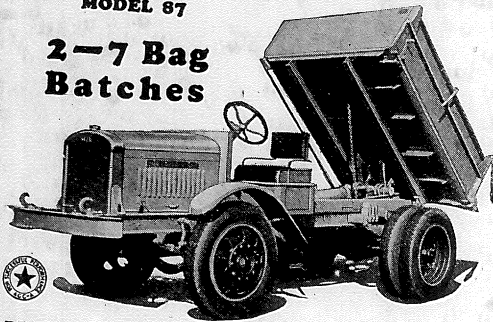
George—"Do you believe in clubs for women?"

Earl—"Yes, if kindness fails."

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The horse-drawn covered wagon has been replaced by the luxurious automobile and motor coach and the Arkansas State Highway Department, through its constructive program, is bringing Hot Springs closer to the citizens of the State.

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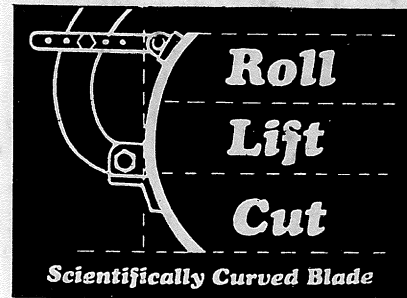


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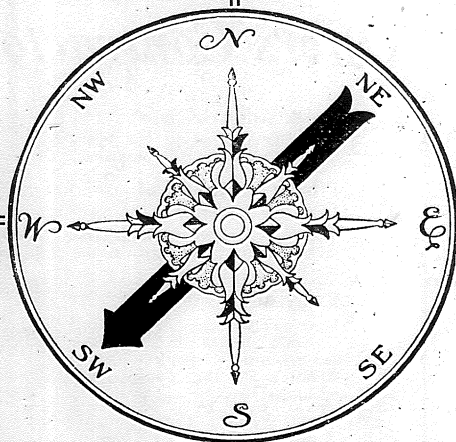
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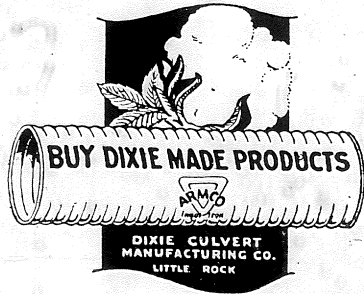
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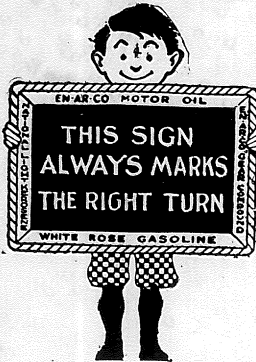
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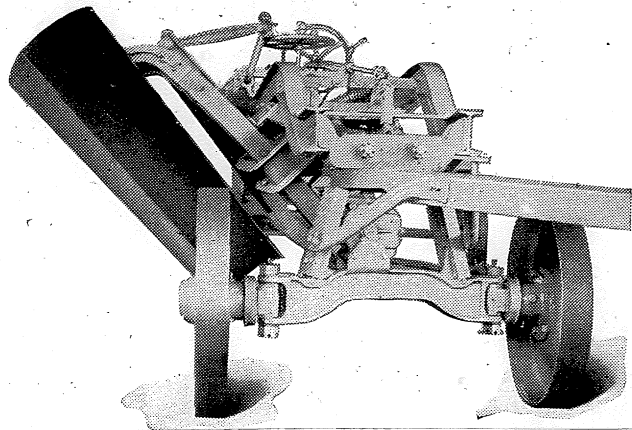
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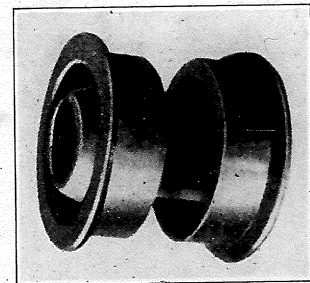
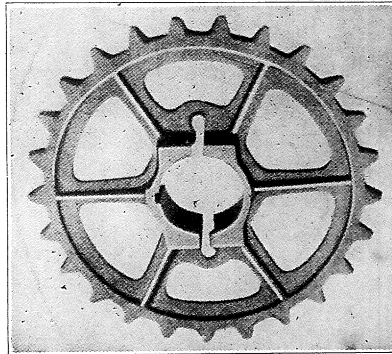
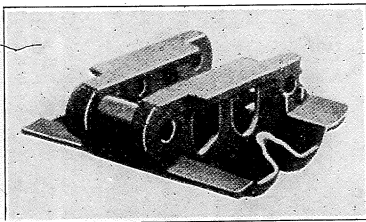
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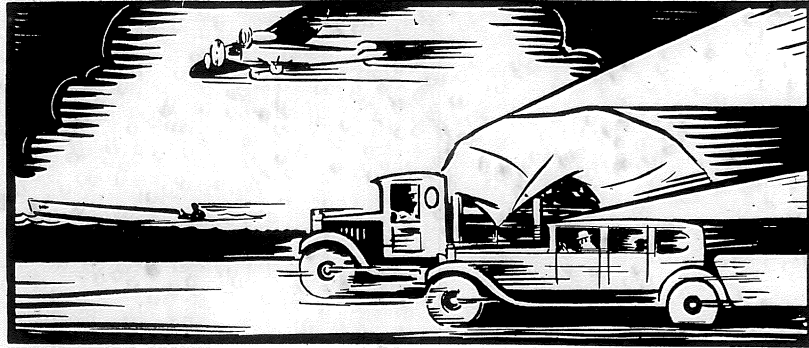
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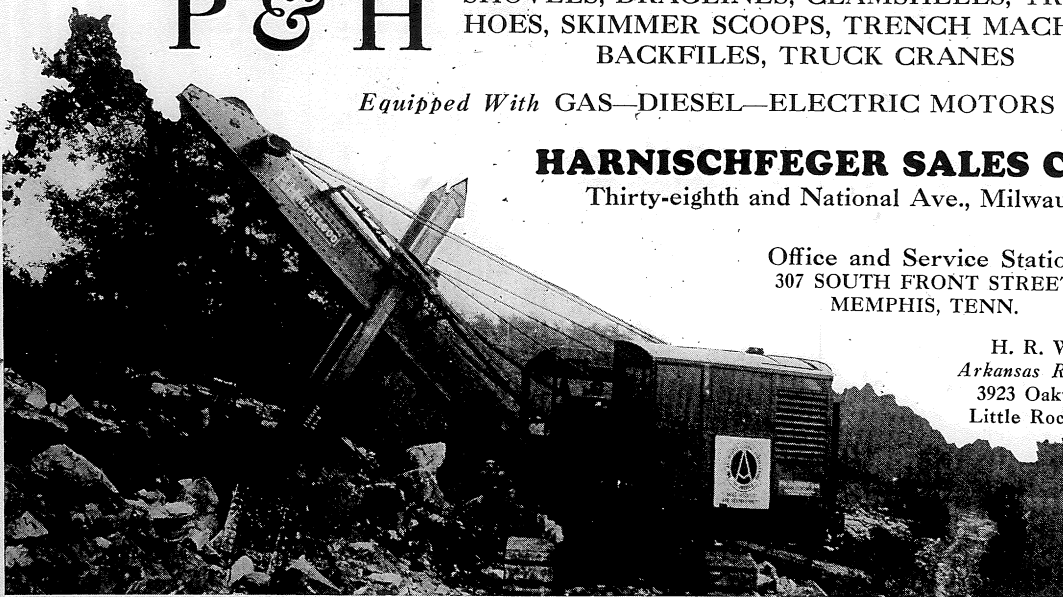
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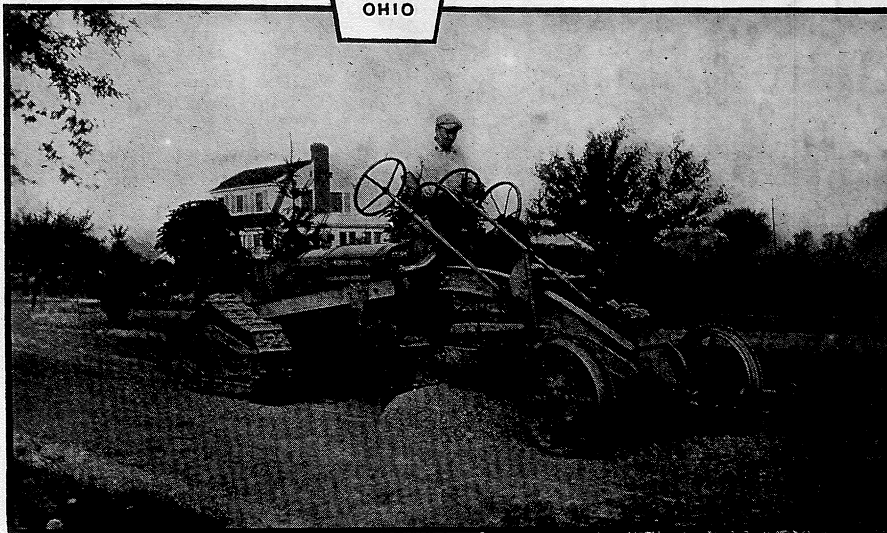
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