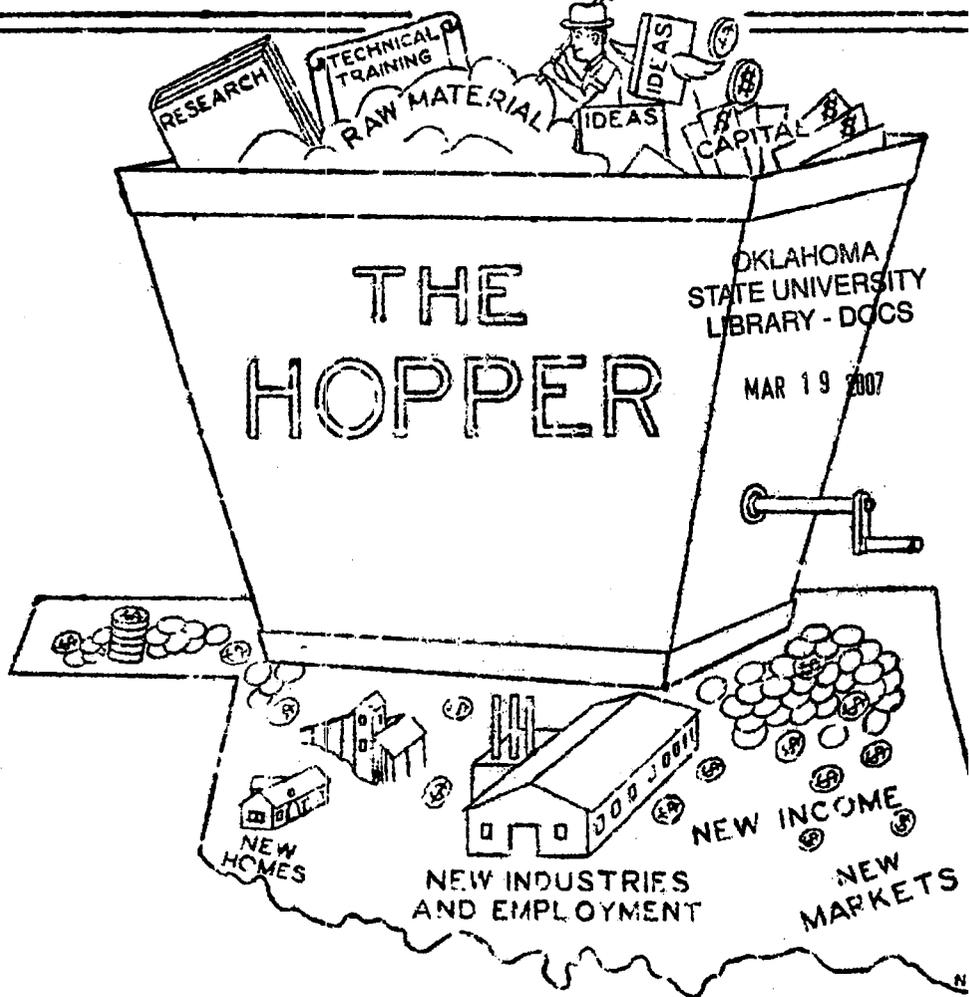


OKLAHOMA MINERAL INDUSTRIES CONFERENCE



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HOPPERATOR'S PAGE

GREETINGS

Happy New Year to Oklahoma industry and a hearty welcome to the glass and other manufacturers who have seen the advantages of Oklahoma's abundant fuel supplies at low cost.

Already a leading producer of container glass-ware, Oklahoma, with practically everything to offer the glass industry is giving fair promise of becoming more and more important as a producer of other types of glass products. The several new plants and expansion of established plants rank Oklahoma as the state with the greatest growth in glass manufacturing in 1947. So--Greetings to the glass industry, and may the new year see even greater growth than 1947.

But glass is not the only industry with heavy requirements for fuel that has discovered Oklahoma. What is to be one of the larger rock wool plants of the country is in process of building. Representatives of several phases of the ceramic and other mineral industries are making inquiries.

Expansion of mineral processing industries means greater demand for mineral raw materials and fuels, and greater prosperity for producers of such materials. In the future it will mean opportunities for development of materials now lying dormant--opportunities for new producers. The Oklahoma Geological Survey extends New Years greetings to our friends--Oklahoma's mineral industries, old and new, processors and producers. May your tribe increase! May we be even more helpful to you in 1948!

THE MAGIC CIRCLE
AN INDUSTRIAL EMPIRE

By

Walter A. Bowers, President

Utopia College, Eureka, Kansas

(Address before Oklahoma Industrial and Mineral Industries Conference, Nov. 17, 1947, Tulsa, Okla.)

Tulsa, Oklahoma, "oil capital of the world" is within one hundred miles of the center of what Roger W. Babson, internationally known economist, calls the "Magic Circle" area of the United States. Included in the "Magic Circle" are Iowa, Nebraska, Missouri, Kansas, Arkansas, Oklahoma and Northern Texas which Mr. Babson describes as "richest in peace and safest in war." Its center coincides with Eureka, Kansas, near a small Kansas community named "Utopia." Here Mr. Babson has founded "Utopia College" to teach security minded adults and career minded youth principles fundamental to building of the "Magic Circle" into an industrial empire.

The "Magic Circle" has just come through an era of war-induced prosperity such as it may not enjoy again in our lifetimes. The annual income of the "Magic Circle" has risen in ten years from six to sixteen billion dollars. Bank deposits have gone up in some parts of the "Magic Circle" as much as five hundred per cent. "Magic Circle" farm and city land values have doubled everywhere. The western "dust bowls" of the twenties and the thirties have become the "boom bowls" of the forties with land values up three hundred, four hundred and five hundred per cent.

As Mr. Babson points out, his "Magic Circle" is the richest four hundred mile radius on earth. To the West is the greatest wheat area on earth. To the North is the greatest corn belt on earth. To the South is the greatest cotton belt on earth.

To the East is the greatest single milk producing area of the earth. In the center is one of the greatest cattle raising areas of the earth. It is one of the greatest butter making areas. It is rich in poultry and eggs and sheep and wool. It is rich in truck garden products and orchard fruits. It is one of the greatest soy bean areas. Nearby is one of the greatest rice areas, also one of the greatest citrus fruit areas.

The "Magic Circle" is equally rich in mineral wealth. The "Magic Circle" leads the world in oil. Under its western plains lies the greatest gas field of the earth. From Iowa through Missouri and Kansas and Oklahoma the "Magic Circle" is underlaid with vast coal reserves. Great salt reserves underlie most of the western half of the "Magic Circle." It is a leading area for production of lead and zinc. It has been the greatest area for production of bauxite and aluminum ores. To the South are the greatest sulphur deposits of the earth. It has among the largest deposits of chalk and gypsum. It has vast deposits of bentonite and dolomite and tripoli. The granites and sandstones and limestones of the "Magic Circle" are among the world's finest for building purposes. In or near the "Magic Circle" are reserves of potash and phosphates and nitrogen and lime. Not far away are iron and copper and silver and magnesium and mercury and brines and salts and many other essentials of modern chemical industries. Hay and straw and vegetable cellulose materials offer an inexhaustible source of wall-board, paper, films, plastics, rayons, coating and wrapping materials, and thickeners. Volcanic ash deposits in the "Magic Circle" are the source of three out of five of America's greatest selling kitchen cleansers. Approximately twenty-five per cent of the farm income of the United States and better than twenty per cent of the mineral production of the United States comes from the "Magic Circle."

The "Magic Circle" is rich not only in natural and business resources, it is rich in human resources. Fifteen million people live in the "Magic Circle"--six million are in the "Magic Circle" labor force. While one third of the population lives on farms, there are almost one million skilled or semi-skilled workers including approximately four hundred thousand craftsmen, four hundred thousand operatives and two hundred thousand service workers. Twenty-three per cent of all the public schools in the United States are located in the "Magic Circle"--forty-seven thousand out of two hundred eight thousand. Out of seven and a half million in the United States who have attended college, better than nine hundred thousand live in the "Magic Circle." Selective service records during World War II showed the best health among men from the "Magic Circle." There are less class distinctions between rich and poor, between workingman and capitalist, and more teamwork between labor and management in the "Magic Circle." There is more individual initiative and private enterprise, a larger percentage of single proprietorships, more local self-government and better performance of state and local functions of government in the "Magic Circle" than anywhere else in the world.

Surrounding the "Magic Circle" are among the greatest markets of the earth. Within five hundred miles of the outer rim of the "Magic Circle" are included better than fifty-five million of the richest, most intelligent customers on earth--each, this year, with an average income of better than one thousand dollars--a total purchasing power of between fifty-five and sixty billion dollars. The world's best transportation systems reach these markets. Within five hundred miles of the "Magic Circle" there are better than one hundred sixty-five thousand miles of railroads and better than two million miles of highways and thirty thousand miles of air lanes.

With all this richness of the "Magic Circle" in agricultural and mineral and human resources--and with the millions of people and the billions of purchasing power in enormous markets so near at hand on every side, you might think that population would be flocking into the "Magic Circle" by hundreds of thousands and that the "Magic Circle" would be growing by leaps and bounds. But, actually, just the opposite is true. In the period from 1930 to 1940 more than a million and a half people left the "Magic Circle." Even with immigration of nine hundred thousand people the net emigration was almost two-thirds of a million people. Only the birth rate saved the "Magic Circle" from a net loss of population for the ten year period. Three states--Nebraska, Kansas, and Oklahoma--actually lost two hundred thousand people. Only Kansas of the three has shown any substantial recovery--and even then percentage wise the increase was only approximately one-half of one percent compared to an average for the United States of almost five percent and for states like Arizona of thirty percent. The loss was greatest among young people--many of them college and university men and women--the topsoil of energy, imagination and ability of the area lost to the future. What was the reason?

Look over the figures on sources of income for the "Magic Circle" and you will find that twenty percent of "Magic Circle" income is from agriculture and only six percent from industry. For the United States as a whole just the opposite is true--twenty percent of the income is from industry and only six percent from agriculture. Here is the richest agricultural and mineral area of the earth losing population because it lacks industry.

At the present time most "Magic Circle" mineral and agricultural raw materials are shipped out of the area at "give away" prices to be manufactured and processed in the North and East and then shipped back to the "Magic Circle" as valuable manufactured

products worth ten to a hundred times their raw material value. The "Magic Circle" gives away its wheat to Battle Creek or Niagara Falls at seventy-five dollars to one hundred dollars a ton and buys it back as shredded wheat or bran flakes at three hundred to five hundred dollars a ton. The "Magic Circle" gives away wheat straw and hay for ten dollars a ton and buys back newsprint paper at one hundred to one hundred fifty dollars a ton. The "Magic Circle" gives away alfalfa hay out of the field at ten to fifteen dollars a ton to New Jersey or New York or Detroit and buys it back at the corner drug store as vitamin pills at one thousand to two thousand dollars a ton. The "Magic Circle" sells cowhides at five dollars a hide and buys back shoes and fancy leather goods at one hundred to two hundred dollars a hide. The "Magic Circle" sells oil at two dollars a barrel and buys back flavoring extracts, synthetics and fancy perfumes made from oil at two hundred to a thousand dollars a barrel. The "Magic Circle" sells its salt at two to three dollars a ton and buys back industrial chemicals and expensive medical preparations made from salt at two hundred to one thousand dollars a ton. The "Magic Circle" sells volcanic ash at a dollar a scoop shovel. It is shipped by the carload to Chicago--a little soap added--and it comes back to the "Magic Circle" dressed up in a fancy box as kitchen cleanser at one hundred dollars a scoop shovel. Carbon black goes out of the "Magic Circle" at five cents a pound and comes back as shoe polish at a dollar a pound.

If these differences could be retained by industry in the "Magic Circle" they would provide industrial opportunities for young people in the "Magic Circle"; would provide income from industry to offset fluctuations in income from agriculture in the "Magic Circle"; would squeeze out every possible dollar of manufacturing income from the mineral and agricultural resources of the "Magic

Circle"; and would prepare the "Magic Circle" to be an island of strength and defense for America in time of war.

It is to encourage this type of thinking that Roger W. Babson has established Utopia College in the center of this "Magic Circle" at Eureka, Kansas. In Utopia College, Mr. Babson will seek to encourage a program in which every agency will have its own special part and all parts will be equally important to the whole. His program can be stated as five questions--"What", "Where", "Why", "How", and "How Much" industry in the "Magic Circle"?

"What?" The first question is--what industry? For this two types of studies must be made--the first can be called a study of surpluses and the second can be called a study of deficits. A careful inventory must be made of every possible agricultural and mineral resource. Such a study will bring out immediately what are probably the best surplus industries for the state and area. Second the per capita production of every industry of America must be compared with the present industrial production of the area to discover deficit industries.

"Where?" The second question is--where shall industry be located? This question also requires two types of studies. The first study requires the division of each state into economic areas. Cities like St. Louis, Kansas City, Denver, Dallas, Memphis, Omaha, Oklahoma City, Tulsa, Wichita, Lincoln, Topeka, Springfield, Joplin, Ft. Smith, Muskogee, and McAlester command major economic areas in each state. To each of these still smaller areas are subordinate, based on drainage areas, soils, growing seasons, similarity of crops or transportation facilities or other factors that produce economic affinity in the towns and counties of smaller economic areas. The second study requires analysis of income and outgo and imports and exports of each

economic area to determine local surpluses and deficits and the state of development or under-development of each industry and area. By comparing the results of this study with the average or optimum size plant for each industry that might be developed in the area it will be discovered that some areas are in greater need of certain types of industry than others and soon the proper distribution of new industries and proper location of right size plants will unfold for each area and each state and the entire "Magic Circle" like a magic carpet.

"Why?" The third question is--"Why should an industry be located in a particular area or community? To start with, industries can be divided into five basic groups -- 1) industries near raw materials, 2) industries near the market, 3) industries requiring special labor, 4) industries having special processes or equipment and 5) optional industries where the various "why" factors are a "toss-up."

1. Industries that locate near raw materials usually include those where the manufacturing process produces considerable savings in weight or change in form or shape such as furniture or paper or packing or smelting and so forth.
2. Industries that locate near the market usually include those where the product is perishable or involves a time factor or a quick style factor or the finished product is very bulky or heavy. Included in this group are bakery products, ice and ice cream, newspapers, paper boxes and shipping containers, heavy upholstered furniture, cement and building materials and so forth--ubiquitous materials.
3. Special labor industries include textiles and apparel industries--highly skilled machine shop products--industries where the skills have grown up through generations of training and experience.
4. Special process industries include many of the most modern industries where scientific and engineering skill and special plants and equipment are important--including such as refining and extracting and catalyzing industries making such products as chemicals,

paints, fertilizers, synthetics, plastics, oils, alcohols, cellulose and viscose products and so forth. 5. Among the "optional" industries are many that are the most attractive of all--such as the making of watches and clocks, of locks, of builders hardware, of special tools and machinery, the making of refrigerators and radios and other products of high value for the weight--jewelry and toys and perfumes and toilet goods and special drugs such as vitamins--where the high value and light weight make possible selling the finished product hundreds and thousands of miles distant. With this study of "why" factors of industry must be included study of subordinate factors or collateral factors--such as size of plant, product characteristics, qualitative and quantitative market characteristics, fuel-power-water factors, sequence-process-manufacturing and distribution steps, freight-value-weight-handling characteristics, ingredients and by-products, sub-contracting and special sub-processing possibilities, industrial durable goods, consumer durable goods, and consumer shopping and convenience goods characteristics, and special plant, special equipment and special personnel requirements. Each area can be surveyed against a check list of such "why" factors to determine where a new industry might be needed and another might not. On the "why" factors the need for specialty trained industrial engineers and other technical experts of the chemical and physical sciences will become apparent.

"How?" The fourth question--How shall new industry be developed and helped? Here the real work begins. With "What", "Where", and "Why" answered the sales program will become part of a completely integrated plan--completely correlated on every level--regional "Magic Circle" level, state level, economic area level, and county and city level. The "How" steps will be planned in definite well ordered sequence--the location steps, the land acquisition steps, the building acquisition steps, the organizational steps, the financial steps, the

management steps, the selling and distribution and advertising steps, the counseling and advising and reviewing steps and so forth. Every community will set aside "all purpose" or special purpose industrial sites. Every community of any size will endeavor to make available a general purpose warehouse type of manufacturing plant built so that a new industry can start in a small plant section at reasonable rent and expand or contract in such space depending on the circumstances. Equity capital sources will be organized on all levels locally, statewide and regionally much as Lloyds of London might operate--equity capital takers knowing that they might lose but only proportionately and might win very profitably also proportionately. Senior financing sequences will be anticipated through assistance of local insurance companies, banking credit pools and local investment bankers. Industrial engineering advice and counsel will be available at every step in building plant or acquiring equipment or developing procedures or processes. Industrial research will be available from research foundations and bureaus of business research utilizing promising young men and young women who will find attractive opportunities if the new industries should succeed. Schools of business will assist with market, management, credit and other business and commercial surveys under competent staff members assisted by outstanding students, giving new industry valuable assistance, and giving young men and young women practical experience and valuable contacts with attractive opportunities in new industry and commerce. A few years of such step by step thinking and practical teamwork and the "Magic Circle" will become industry conscious and the results inevitable.

"How Much?" This brings up the last question-- "how much industry?" Each of the above questions as answered by studies and surveys and various forms of assistance will bring out the answers to the last question. The first question will give the

general outline of the size of the overall picture. Oklahoma, it will be found, has right now a half billion dollar deficit per annum in industrial and consumer products consumed by the state. This can be subdivided by industries. This in turn can be further subdivided by exact number of plants; next into number of workers, into numbers of technical personnel, amounts of senior and equity capital requirements, types of plants and equipment, and on and on. The second question will bring out the "where" of such items--where, what size plants and what number of workers and what volume of capital and so forth. The third question will bring out the "why" factors that must be provided in what volume for each community and area and state and the "Magic Circle" as a whole. The fourth question will point out the amount of organization and training and assistance that will be required.

* * * * *

OKLAHOMA LEADS NATION IN GROWTH OF GLASS INDUSTRY

"Of the 22 states in which glass products are converted from raw materials to finished products Oklahoma appears to have moved ahead during the year at a pace unexcelled by similar activity in any other state."

"The glass manufacturing industry in the United States is completing its banner year in 1947 when production is considered. Approximately 250,000,000 square feet of polished plate glass will be manufactured.At least 20,000,000 boxes of window glass each containing 50 square feet will be made. ...Approximately 117,000,000 gross of glass containers will be manufactured...."

(From National Glass Budget, December 27, 1947)

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