PART II AND JOURNAL JUNIOR

THE MINNEAPOLIS JOURNAL.

SATURDAY EVENING, MAY 25, 1901.

The Story of the Oil Wells of Texas.

Ten years ago Texas annually produced forty-eight barrels of oil. To-day 150,000 barrels of oil are daily flowing from her wells, and Texas has the greatest oil fields in the world.

Beaumont, the present center of operations, is in southeast Texas, on the west bank of the Neches, a tidewater stream navigable to the Gulf of Mexico. It is the nearest gulf coast point to Kansas City and other trans-Mississippi centers. It is the natural gateway to the gulf. There are eight railways radiating from Beaumont and direct water connections with the gulf via Port Arthur and Sabine Pass.

Oil prospecting in Texas was begun as early as 1840; although the researches which led to important discoveries began about 1865. Oil had been known to exist in the region of Sour Lake in Hardin county from the earliest history of this region, and it is said the impetus in prospecting during late years was due to data discovered in the archives of the early missionaries in Mexico.

For eight years the development of this industry has been successfully carried on in Navarro and Anderson counties at Corsicana and Palestine, and from these fields alone over 800,000 barrels of oil were taken in 1899. The wells in this region are not of the flowing type, but the oil is pumped out, as in the Pennsylvania fields. There are 274 wells which are or have been paying producers in this region.

An Advantageous Location.

The advantages of southeast Texas as a location for an oil field are many. Beaumont is nearly the center of a great and growing country. Here is the only oil field with both water and rail transportation. Oil from the Beaumont field will be piped directly to the seaboard via Port Arthur and thence delivered to any port, domestic or foreign. The cost is so small that coal cannot compete. Already a tank line has been constructed to hold nearly half a million barrels and the pipe line is laid to Port Arthur, a distance of seventeen miles. The total cost of this oil laid in vessels at Port Arthur is estimated at 10 cents per barrel, which renders it equivalent, 3½ barrels to a ton of coal, cost 35 cents per "oil ton." A gross ton of oil has double the fuel value of a ton of coal.

The Oil Trust Affected.

The effect of this great and sudden change in the oil supply upon the Standard Oil company has been watched with interest. It was supposed that this monopoly would seek to acquire control. Several conditions render this impossible and at the same time a matter of no such importance to that octopus as has been supposed. The oils of the trust are chiefly illuminating oils, while the Texas oils cannot be refined cheaply enough to compete with the present refined illuminating oils. The percentage of illuminating properties is smaller, and this will prevent Texas oil from pitting with the trust oils. Yet the discovery of this oil field has had its effect upon the market. Pulsations in prices almost unheard of during past years have been frequent. Control by purchase seems impossible. These gushing wells, running from 20,000 to 70,000 barrels per day, are now producing a quarter of a million barrels of oil daily, and wells may be struck anywhere within a radius of miles of the Lucas geyser. Such an enormous territory and the fact that thousands of owners will bore, mean discouragement disheartening to such a scheme. To purchase the entire field at the fabulous sums now asked for the lands, would mean many times the financial power of the trust and nothing short of a complete purchase would render such a plan successful. Control of transportation, which made the Standard Oil company, can never be acquired in Texas. Two seaports are within easy reach, and a river unusually deep and navigable pierces the heart of the oil field.

The history of the California oil fields has been remarkable. Abandoned years ago because of lack of illuminating properties in the oil, experiments of fuel value were taken up about 1896. Thousands have become wealthy from this field, which produced but 11,000 barrels per day in 1900. Contrast this with 250,000 barrels per day in Texas and from six wells as against 1,000 wells in California, and again the immensity of the Texas production is recognized.

Higgins' Reward.

The great Lucas geyser is situated about three miles from Beaumont in Gladys City. In 1892 Patillo Higgins, for the purpose of developing what he believed to be an oil field, organized Gladys City. For years, Higgins pinned his faith on the prospects of oil in the very land where Lucas was later successful. He exhausted every resource in order to realize his hopes, but met with discouragement on all sides. Quicksand barred his progress, and finally ruined his prospects, and the difficulties being insurmountable, he was compelled to abandon his plan. During January and February, Higgins saw others reaping the benefits of what he had worked and sacrificed everything for, but in March a gusher equal to the Lucas was struck on a small piece of land Higgins had saved.

About two years ago, Captain Lucas, a mining engineer and an Austrian by birth, began operations in the region of Gladys City. Captain Lucas is an expert in hydraulic mining and his discoveries in the refinement of the black and heretofore useless salt made him famous before he became known as an oil prospector.

He is a man of unusual build, his height being six feet, four, jovial and generous to a fault. The story of the great Lucas well is best told in the captain's own words:

After roaming from the salt fields of New York to the mines of California, I was attracted to the great possibilities due to the surface indications, as well as to the shallow drillings made by my predecessors. A well was sunk about 300 feet from the present location of the Lucas Geyser. After penetrating deep into the bed of quicksand, the difficulties caused me to abandon this well.

Immediately I began operations near the brink of a small pool, turbulent from escaping natural gases. When the quicksand difficulties presented themselves I had evolved a plan, by means of compressed air, by which the difficulties might be overcome.

At the depth of about 400 feet we encountered an oil-bearing stratum of sand which produced a small amount of oil. I believed the oil supply came from a greater depth. When about 800 feet had been drilled, another and better oil-bearing stratum was struck. Encouraged by the prospects, I pressed on drilling night and day until about Dec. 20, when a stratum of soft rock was struck, a little more than 1,000 feet down. Through this rock, although it had not been penetrated, there was a slight flow of oil. I became convinced I was near the end. I at once set out to lease everything in the vicinity and ordered work stopped. To keep the secret and prevent excitement and a sudden rise in values, occupied my every attention.

My drillers had but a few feet to complete the depth limit of their contract, and it was only through the efforts of my good wife, who besought them to rest until after the holidays and give me relief from my long period of excitement and intense application, that they finally desisted. My lawyers were kept busy acquiring surrounding lands. My efforts were nearly successful when the men returned and demanded prosecution of the work. I could hold them no longer, and on Jan. 7 they resumed operations. Before we had acquired all of the desired lands the drill broke through and the greatest oil well the world has ever known spouted forth like Old Faithful in action.

The morning of Jan. 10 I had driven to Beaumont and loaded down with supplies I started for Gladys City. When about two miles from the well, at 10 o'clock in the morning, my driver, a sharp colored boy, called my attention to a large dark cloud directly ahead. The boy exclaimed that the well was on fire; this was my first impression and the thought was horrible. Filled with excitement and disappointment I hurried on. As we came nearer the black color of the oil became apparent. From that moment the mental strain connected with the harnessing of this great monster was terrible.

When I reached the scene consternation reigned supreme—but within two hours fifty teams were summoned and a levee was hurriedly constructed to confine the escaping oil, now forming a huge lake on the prairie. I knew that I might expect a big thing, but I did not dream of such an elephant.

Fabulous stories filled the press concerning offers for capping the well and not less interesting than the work itself were the letters, telegrams and even cablegrams received. They poured in by the hundrds in all languages and from all places. One woman sent a telegram of 150 words offering to cap the well within twenty-four hours. Letters were received from a thousand Lucases regarding ancestry and possible relationship and from mothers asking permission to name their children for me.

It took forty-eight hours to realize the full force of the proposition with which we had to contend and in the meantime I discovered that there were no supplies at hand. The greatest delay was in securing material from St. Louis. Having operated for years in hydraulic mining I was awake to the great initial pressure which would force a six-inch column of oil nearly 200 feet in the air.

When the oil burst up it carried through the derrick nearly 800 feet of four-inch pipe, with drill and ropes, and laid it in tangled masses on the ground. Realizing that the great difficulties would be met in forcing a valve joint through this column, into which an ax could not be driven, so great was the pressure, I finally determined to operate as follows:

Having placed deep in the ground large timbers, a series of four horizontal rails, two above and two below were placed, two on either side of the column, and at such height that the lower rails were on a level with the top of the pipe, a few feet above the ground. A tramway was thus constructed upon which a large valve would slide and be held from being forced upward by the two upper rails. These rails were securely fastened so as to stand the terrible pressure as the valve was pulled through the column of oil. The outer casing was eight inches in diameter, the inner was six and through the latter the oil was thrown. If the eight-inch valve could be forced through the column without tearing everything to pieces, with the valve open, the oil would clear the aperture easily and thus the valve would be easily connected with the eight-inch casing.

When everything was made secure, four teams were hitched to the valve and with a sudden lunge forward the valve was slid between its bearings, cutting the column of oil. Braces were set to prevent the valve from being carried beyond. The oil was then turned horizontally onto the prairie and connection made with the gauges to test its pressure. Then after securing the eight-inch casing from being pulled out the valves were closed and the great gusher ceased to gush.

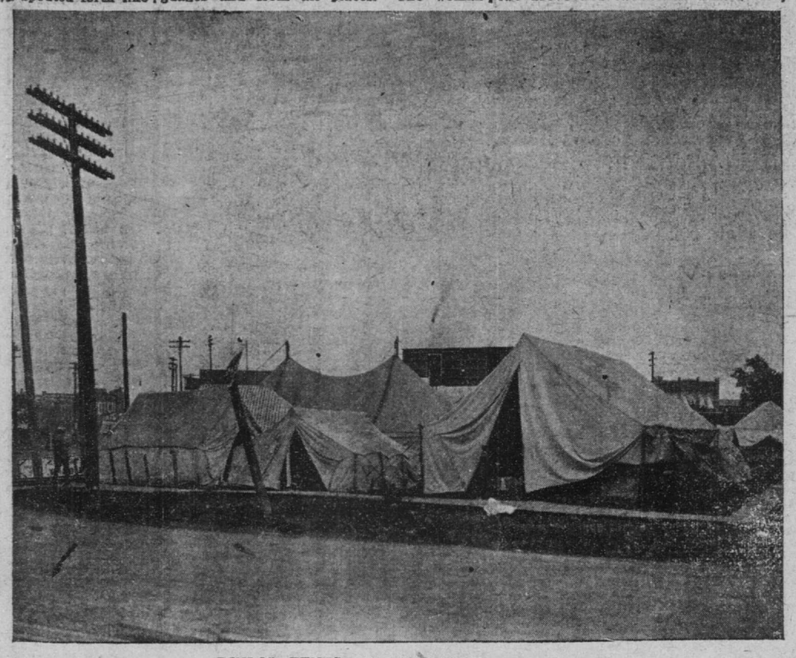
The estimates made by Captain Lucas on the capacity of the well at 70,000 barrels in twenty-four hours has been fully established, the actual tests showing a flow of 35,600 barrels in twelve hours. Mr. Lucas estimated the initial pressure at 300 pounds per square inch and the surface pressure at nearly 200 pounds. The well was capped and successfully shut off eight days after it broke forth and the surrounding country presented a condition novel, indeed, with a lake of oil containing, according to these estimates of its flow, one-half a million barrels.

The oil area includes nearly all of southeast Texas, embracing these counties: Hardin, Jefferson, Jasper, Orange, Chambers, Houston, Angelina, Sabina, Liberty, Polk, Tyler, Nacogoches, Rush, Cherokee, Nevarro and Harris.

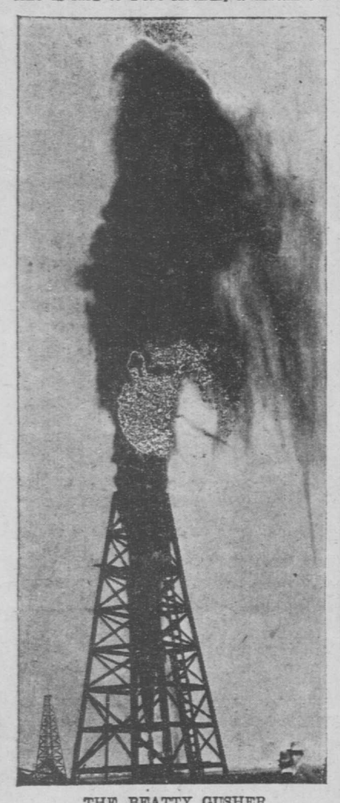
The wildest speculation is going on in Beaumont, and will continue for months to come. Lands which formerly brought $10 per acre have sold as high as $5,000 per acre, and $2,500 is not an uncommon figure.

Imagine a town of 13,000 inhabitants, which was prosperous and steady, but had never felt the effects of a boom or excitement, waking on the morning of Jan. 10 to find itself the center of the greatest oil field in the world! The town went wild with excitement, and now it has spread its fever over the whole country. The hotel lobbies were packed with excited men who discussed the possibilities of the field and examined bottles of oil which had been brought to the city. In a week the town was full of people. They crowded into the streets, occupied every seat at the lunch counters and every chair about the hotels. They squatted on the depot steps. Fakirs took this opportunity to ply their vocations. Derricks sprang up like mushrooms, lands went out of sight. Before there was time for a lull in the excitement the Beatty well broke forth, and since then six other gushers have broken loose. Men, women and children flocked out to see this great oil wonder of the twentieth century spouting 70,000 barrels of oil daily. Three months from the outburst of oil which advertised Beaumont to the world, its population had nearly doubled.

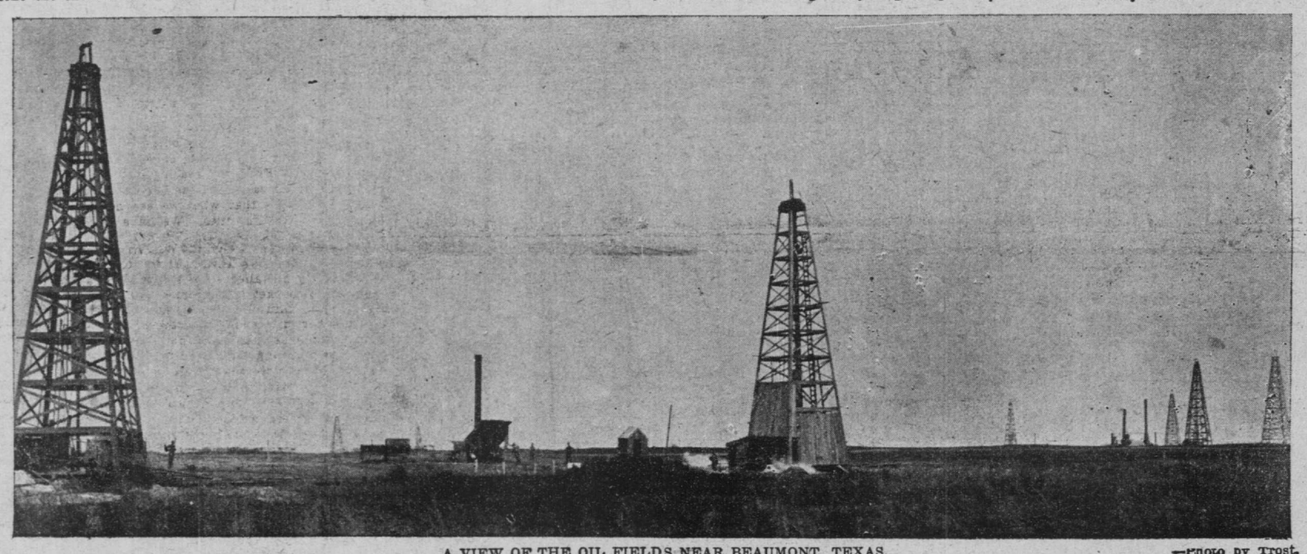
CURBSTONE BROKERS AT BEAUMONT. —Photo by Trost.



DINING TENTS AT BEAUMONT. —Photo by Trost.

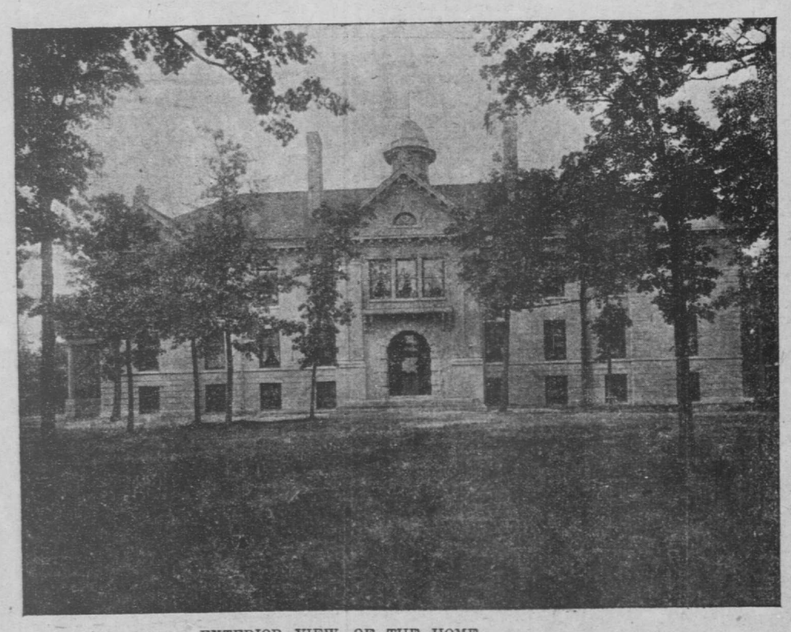


THE BEATTY GUSHER.
Photo by Trost—Copyright, 1901.
This was the second well to "come in." It spouts at the rate of 70,000 barrels a day. The five first wells to come in yield 200,000 barrels a day, or 73,000,000 a year. This is more than the entire oil output of the United States, which in 1900 was 58,000,000 barrels.



A VIEW OF THE OIL FIELDS NEAR BEAUMONT, TEXAS. —Photo by Trost.

VIEWS OF THE NEW JONES-HARRISON HOME. *Photos by A. S. Williams.*



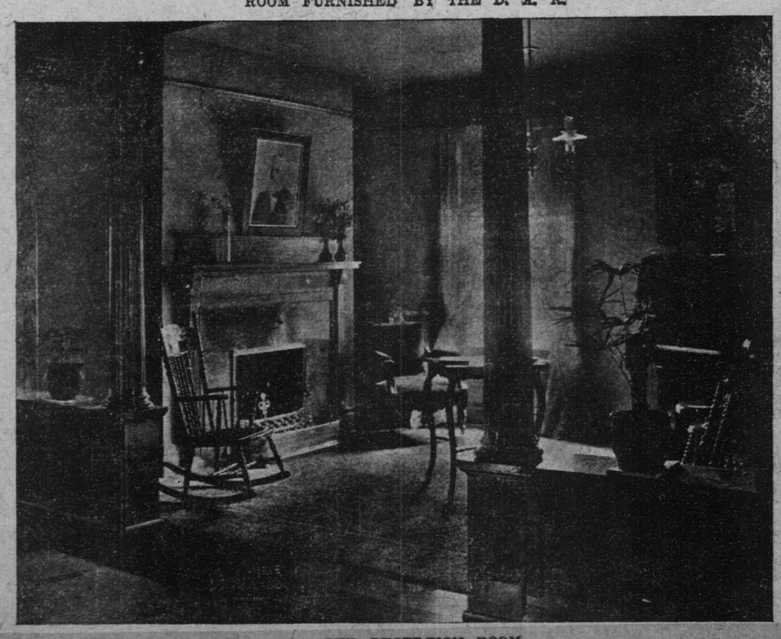
EXTERIOR VIEW OF THE HOME.

THE SUN ROOM.

ROOM FURNISHED BY THE D. A. R.

THE DINING-ROOM.

THE LIBRARY.



THE RECEPTION ROOM.