

THIS CITY BUILT WHILE YOU WAIT

Fourth Largest Town in Alabama Full Grown in One Year.

HAD A MODEL GOVERNMENT

Permanent Settlement Around U. S. Nitrate Plant Presented Unusual Problems.

By GARRET SMITH.

The fourth largest city in Alabama, peopled with 25,000 souls of diverse races and religions, uprooted from far scattered communities in every part of the United States and Canada sprang into being almost overnight around the great new government ammonium nitrate plant down on the open cotton and corn fields at Muscle Shoals on the Tennessee River during the last year of the World War. Here was a problem in city building, municipal government and community welfare that has seldom been equaled and the success of its solution has never been excelled.

The job was in the hands of the Air Nitrates Corporation which had been organized under the direction of the Ordnance Department to build plant and city at Muscle Shoals. Early in January, 1918, this new town and a few temporary buildings and a population of 300. This had jumped by the middle of August to more than 21,000. A population multiplied by 70 in 7 months.

In the management of the new towns and army cantonments that sprang up during the war the old-time evils that attended the growth of mushroom cities have been avoided by the application of modern welfare systems. But nowhere were conditions more difficult than at Muscle Shoals. Here was a malarial region threatened at the same time with other deadly disease epidemics. Transportation was lacking. No nearby labor was available and the general labor shortage was at its most acute stage. Costs of labor and supplies were leaping over night. Furthermore, Muscle Shoals differed from all the other new war towns inasmuch as it was to be permanent.

New Government Devised.

The managers, besides city government, had to handle the entire retail business of the town. A camp supervisor's department was put in charge of the maintenance of all buildings, fire protection and sanitation. The camp supervisor looked after everything from the mending of a lock to the remodeling of groups of buildings or laying sewers or steam mains. For the bachelor contingent a commissary department was necessary.

The business department managed the stores, canteens, motion picture theaters, pool parlors, tailor shops, dry cleaning establishments, barber shops, newsstands, a hotel, a vegetable farm and a hog farm where 1,000 hogs were raised on the wastes from eating places. It maintained a slaughter house where these hogs were put through the regular packing house course. It operated a laundry which cleaned 7,493 pieces a day. Then there was a real estate department that rented and managed the family quarters and a housing department which assigned to quarters everybody excepting the families.

Under separate jurisdiction from its community director was the police.

The health department, in charge of a physician from New York city, started with a small office in one of the temporary buildings, and was soon full grown and splendidly equipped. Conditions were favorable to disease. The winter was the severest on record in northern Alabama. The men were compelled to work either in deep snow or mud above their knees. As a result a pneumonia epidemic developed among the Negroes that spring. Later in the year a typhoid epidemic was threatened. Moreover, the site of the plant was in the heart of the malaria district. But the pneumonia epidemic was checked, the typhoid threat nipped in the bud, and malaria, stamped out.

A Health Record Established

The little first-aid hospital presently grew to a complete modern institution with a nurses' home and a separate dispensary for dental, eye, ear, nose, throat, genito-urinary clinics and a surgical dispensary for first-aid work.

During the eight months when the death rate was not affected by the influenza and pneumonia epidemics the general health rate was 12.4 per thousand per year, which is lower than in most cities in the same latitude and climate, and the pneumonia death rate during the epidemic was lower than in most army cantonments.

Much of the success of the health administration is due to the establishment of the Muscle Shoals sanitary district by the United States Public Health Service.

The education and welfare department also had a vital work to perform. There was a school population of over 1,000. The Secretary of War created the community organization branch of the Ordnance Department which, with advice and aid of some of the greatest school men of the country, prescribed the courses of study and recruited teachers from the best established systems.

GERMANY UNDONE BY OWN WEAPON

Had Sold to America Secret of Making Explosive From Air.

BIG NITRATE PLANT RESULTS.

Built in Eight Months It Convinces Kaiser of His Defeat.

By GARRET SMITH.

One of the most romantic passages in the secret history of the World War is the story of how the Ordnance Department of the United States Army made it possible for America, until then utterly lacking in ammunition and in facilities for making it, to manufacture unlimited quantities of powerful explosives out of air and rock. It was largely the knowledge of this fact that forced Germany to surrender when she did.

The secret was secured from Germany herself. It was an open business transaction between business men, whereby we apparently acquired nothing more military than a process for making a high grade fertilizer known as cyanamid.

Frank Sherman Washburn, head of the group of business men who bought this process, conceived the germ of the idea in the early nineties while in South America as consulting engineer in connection with the production and shipping of Chilean nitrate of soda. Nitrogen compounds are an essential part of all commercial fertilizers. The only available natural nitrate deposits in large quantities are in Chile. This supply was diminishing. Germany, which had been taking about one-third of the Chilean nitrates, was already experimenting with processes for their artificial production. In 1907 Mr. Washburn secured in Germany the American rights of the cyanamid process which had been invented in that country.

Turning Air Into a Weapon.

By this process air, which is a mixture of about four-fifths nitrogen gas and one-fifth oxygen, is placed in containers and subjected to pressure and cold until it turns to a liquid. Then the nitrogen is distilled in much the same manner as alcohol is separated from water. But before this nitrogen can be used as a fertilizer it must be combined with a chemical combination of lime and carbon known as calcium carbide, produced by burning ordinary limestone in big rotary kilns and combining it in the electric furnace with carbon supplied in the form of ordinary coke.

Cyanamid thus produced contains the elements of ammonium nitrate, one of the most powerful of modern explosives. By one process ammonia is extracted from the cyanamid. By another process nitric acid is extracted from another batch of this same cyanamid. Then the ammonia and nitric acid are combined and there you have ammonium nitrate ready for packing into shells with TNT.

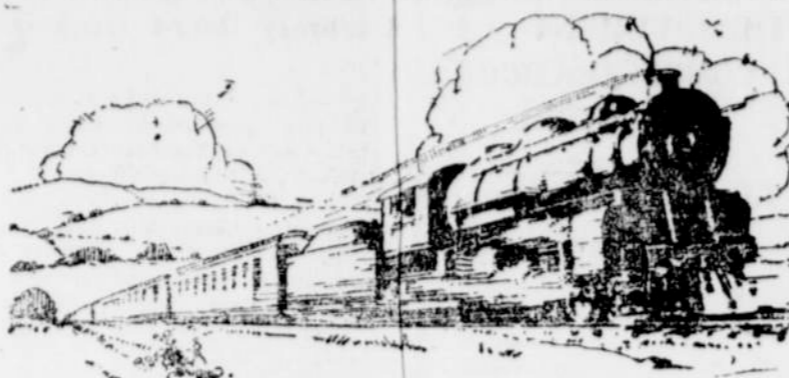
There are three kinds of explosives used for bursting shells in modern warfare—TNT, picric acid and ammonium nitrate. The United States was equally deficient in raw materials and plants for manufacturing all three of these explosives. Under the best of conditions the cost of either TNT or nitric acid is about two and one-half times the cost of ammonium nitrate. But the United States was wholly dependent upon Chilean nitrate of soda as a raw material for ammonium nitrate, with the exception of a small production of nitrogen from the coking of coal. The Chilean supply was 4,500 miles away from New York City by way of the Panama Canal, and the route by way of the Straits of Magellan is nearly twice as long.

A Record Building Operation.

Shortly after the war began in Europe the German government entered into the fixation of air nitrogen for military explosives on a vast scale. It was not, however, until the fall of 1917 that the United States government took it up.

The Ordnance Department asked Mr. Washburn's company to organize a subsidiary corporation, known as the Air Nitrates Corporation, with Mr. Washburn as president, to act as agent of the government for the construction and operation of the air nitrates plant at Muscle Shoals, Alabama. This corporation provided the designs, erected the equipment in the chemical plants and supervised all the other work. It also operated the camp, the town and the plant. Other work is sublet to several of the best known organizations in the United States. Westinghouse Church Kerr Company built the plant buildings, the camp, the permanent city and utilities. The J. G. White Engineering Corporation designed and built the nitrate acid plant. The M. W. Kellogg Company furnished the piping and built the chimneys. On February 16, 1918, ground was broken, and eight months and eight days later the \$60,000,000 Muscle Shoals plant began producing ammonium nitrate. In that brief period 23,000 men had completed the plant and around it, arisen a city of 25,000 inhabitants.

This plant when in full operation was ready to provide 13 per cent of all explosives to be used by all the allies on all the allied fronts during the expected spring drive of 1919.



A vast amount of work now exists to be done which the intervention of war has necessarily delayed and accumulated. The result is that very large capital expenditures need to be made to make up for the interruptions inevitably due to the war, and to prepare the railroads to serve adequately the increased traffic throughout the country.

WALTER D. HINES, Vice-President of Railroads.

Work more—
Produce more—
Save more—

But we can't continue increasing our production unless we continue increasing our railroad facilities.

The farms, mines and factories cannot increase their output beyond the capacity of the railroads to haul their products.

Railroads are now near the peak of their carrying capacity.

Without railroad expansion—more engines, more cars, more tracks, more terminals—there can be little increase in production.

But this country of ours is going to keep right on growing—and the railroads must grow with it.

To command in the investment markets the flow of new capital to expand railroad facilities—and so increase production—there must be public confidence in the future earning power of railroads.

The nation's business can grow only as fast as the railroads grow.

This advertisement is published by the Association of Railway Executives

Those desiring information concerning the railroad situation may obtain literature by writing to the Association of Railway Executives, 61 Broadway, New York.

Mauritius.

Mauritius, the home of the dodo, is in the political limelight, or so it would appear from the announcement that the Bordeaux chamber of commerce has requested the French government to enter into parleyings with Britain with a view to restoring former French supremacy. Since the dodo is extinct, it will be more accurate to speak of Mauritius as once the home of that now almost fabulous creature, Mauritius, was once known as Cerne, a name which it is said to have derived from *ceras*—the dodo, or, more unromantically, the ground-pigeon. Portuguese, French, Dutch, and British have all been connected with the history of Mauritius. It was discovered by the Portuguese. It was French for 100 years and then British. It became British in 1814 but during the French Revolution it had served as a refuge for many emigres to whom the Emerald Isle of the Indian ocean was known as the scene of *Bernardin de St. Pierre's* "Paul et Virginie." In size it equals about the eighteenth part of the area of England and Wales.

Was Variety the Spice of Her Life?

It is commonly thought that a very long series of names is reserved for kings and the sons and daughters of kings. We have frequently exclaimed over the seven names with which King George's eldest son is afflicted, or the former crown prince, for that matter. But probably the longest name in the world is attached to a mere laundryman's daughter. She was born in 1883, and her parents, surely from a sense of the ludicrous, gave her a name for every letter in the alphabet, to-wit: Anna Bertha Cecelia Diana Emily Fanny Gertrude Hypatia Inez Jane Katherine Louisa Maud Nora Ophelia Patience Quince Rebecca Sarah Teresa Elysses Venus Winifred Xenophon Yetty Zeus Pepper. What will Miss Pepper do when it comes to finding new names for her own future family?—Boston Post.

Where to Dodge Tips. In India a native barber can shave a person while asleep without awaking him, as gentle is his touch.

Alias Summons.

IN THE CIRCUIT COURT OF OREGON, FOR JACKSON COUNTY.
Anna Thornburgh, Plaintiff,

D. D. Boyle; G. H. Lyman; C. C. Pierre, Administrators of the estate of D. D. Boyle, Deceased, Et als. Defendants.

To G. H. Lyman, and G. H. Lyman, wife of G. H. Lyman, defendants named in the above entitled suit;

IN THE NAME OF THE STATE OF OREGON: You and each of you are hereby summoned and required to appear in the above entitled court and cause and answer to the complaint of the plaintiff against you, now on file therein, within ten days from the date of the service of this summons upon you, exclusive of the day of such service, if served within the county of Jackson and state of Oregon, or, if served within any other county of Oregon, then within twenty days from the date of such service; or, if served by publication thereof, after the entry of an order for such publication, by said court, then within six weeks from the date of the first publication of this summons; or, if served upon you personally, outside the state of Oregon, after the entry of such order for publication, then within six weeks from the date of such service.

And you are hereby notified that if you fail to appear and answer within the time limited, as above set forth, the plaintiff will apply to the court for the relief demanded in said complaint, which succinctly stated, is; a judgment against you and each of you, in the sum of Five Hundred (\$500.00) Dollars, and eight per cent interest thereon, from April 1, 1917, until paid, and the plaintiff's cost and disbursements in the above entitled suit and Sixty Dollars as attorney's fees; also a decree for the foreclosure of the plaintiff's mortgage, described in said complaint; to-wit: that certain mortgage made, executed and delivered unto Anna Thornburgh by said D. D. Boyle, dated March 29, 1913, and registered as document No. 3324 in the office of the Registrar of Titles in and for said Jackson County, April 2, 1913, and mortgaging Lots 2 and 3 in Block 2 in the Pierce Subdivision, in Township 37 South, Range 1, West of the Willamette Meridian, 13 said Jackson County, to secure the payment of \$500.00 and interest; and requiring and directing the sale of the mortgaged property, as on execution, for the satisfaction of said judgment, and costs and attorney's fees, or so much thereof as the proceeds of sale will satisfy.

By the order of the Honorable F. M. Calkins, Judge of the above entitled court, made and entered October 11, 1919, this summons is ordered published for a period of six successive weeks in the Jacksonville Post, published at Jacksonville in said Jackson County, State of Oregon, and the first publication hereof will be on the 29th day of November, 1919.

B. F. PIATT, Attorney for the Plaintiff.

Notice of Filing Final Account.

IN THE COUNTY COURT OF THE STATE OF OREGON, IN AND FOR THE COUNTY OF JACKSON.

In the Matter of the Estate of Olive R. Bell, Deceased.

Notice is hereby given that the undersigned, executrix of the above named estate, has filed her final account of the administration of said Estate with the Clerk of the County Court of Jackson County, Oregon, and said Court has fixed Saturday, the 17th day of January, 1920, at 10:00 o'clock A. M., as the time, and the Court House in Jacksonville, Oregon, as the place for hearing objections thereto, and the allowance and settlement of said account.

MABEL BROWN, Administratrix of the Estate of Olive R. Bell, Deceased.

Notice of Final Settlement.

Notice is hereby given that the undersigned has filed his final account as administrator of the estate of Lizzie Hoff, deceased, with the County Court of Jackson County, Oregon, and said Court has appointed Saturday, the 14th day of February, 1920, at the hour of ten o'clock in the forenoon as the time and court room of said court as the place for hearing objections thereto and the settlement thereof. All persons interested in said estate are hereby notified to appear at said time and place and show cause why said final account should not be approved by said court and said administrator be discharged from his trust.

Dated January 3rd, 1920.
THEODORE HOFFERT, administrator of the estate of Lizzie Hoff, deceased.

Tassel in Cloth Dressing.

Few people probably have heard of tassel, which is grown for the purpose of cloth dressing. The wild tassel is found in English hedges and copes and bears a purple flower in July. The function of the tassel is to raise the nap of the cloth, although to some extent it has been superseded by the use of wire brushes.

D. W. BAGSHAW, Administrator

W. BAGSHAW

Attorney at Law

NOTARY PUBLIC AND COMMISSIONER

Office in Room 8

JACKSONVILLE.

H. K. HANNA

Lawyer

Office in Jackson County Court House

MEDFORD

OREGON

Notice of Sheriff's Sale.

By virtue of an execution in Foreclosure and Order of Sale duly issued out of and under the seal of the Circuit Court for the State of Oregon, for Jackson County, dated December 29th, 1919, in a certain suit therein, wherein Jackson County Bank, an Oregon Corporation, as Plaintiff, recovered judgement and decree against William Scott, Hannah Scott, H. M. Scott, Rogue River Valley Realty Company, as Defendants, for the sum of Five thousand ninety-six & 88-100 (\$5096.58) Dollars, together with interest thereon at the rate of ten per cent per annum, payable annually from October 8, 1919, until paid, together with attorney's fees in the sum of Five hundred nine & 65-100 (\$509.65) Dollars, and interest thereon at the same rate until paid; the sum of Three thousand seven hundred fifty-four & 40-100 (\$3754.40) Dollars and attorney's fees in the sum of Three hundred seventy-five & 44-100 (\$375.44) Dollars, together with interest on both of said sums at the rate of 8 per cent per annum, payable semi-annually; also for the sum of Six hundred eighty-six & 61-100 (\$686.61) Dollars and attorney's fees in the sum of Sixty-eight & 75-100 (\$68.75) Dollars, together with interest on both of said sums at the rate of 8 per cent per annum, payable semi-annually, until paid; and for \$31.00 costs and disbursements, which judgment was enrolled and docketed in said Court December 29th, 1919.

Notice is hereby given that, pursuant to the terms of said execution, I will on Tuesday, February 10, 1920, at 10 o'clock A. M., at the front door of the Courthouse in the City of Jacksonville, Jackson County, Oregon, offer for sale and sell at public auction for cash to the highest bidder, to satisfy said judgment, with the costs of this sale, subject to redemption as provided by law, all of the right, title and interest that the said defendants, jointly or individually had on April 8th, 1913, or have since acquired, or now have in and to the following described property, situated in Jackson County, State of Oregon, to-wit:

The North half of the north-east quarter and the southwest quarter of the Northeast quarter of Section Twenty-five (25) in Township thirty-five (35) South of Range two (2) West, and Lots five (5), six (6), seven (7) and eight (8) in Section twenty-nine (29); the East half; the southwest quarter; the east half of the northwest quarter; the southwest quarter of the northwest quarter of Section Thirty (30); the north half of the northeast quarter; the southwest quarter of the northeast quarter; the north half of the southwest quarter, and the northwest quarter of Section thirty-one (31); Lots four (4) and five (5) of Section thirty-one (31) and Lot three (3) of Section thirty-two (32), all in Township Thirty-five (35) South of Range One (1) West of the Willamette Meridian, containing 1365.88 acres.

EXCEPT THE FOLLOWING:

Commencing at a point 663.25 feet south and 997.5 feet east of the quarter section corner of the township line between sections 31 and 36, in Township 35, South of Range one, and two west of the Willamette Meridian, in Jackson County, Oregon, which point is in the center of the county road in Section 31, in Twp. 35 South of Range one west of the Willamette Meridian, and running thence north 29 degrees and 59 minutes east 81.9 feet; thence north 33 degrees 40 minutes East 995.2 feet, thence east 2573.12 feet to the west bank of Rogue River; thence South 58 degrees 43 minutes West 454.4 feet thence south 42 degrees 08 minutes West 894.3 feet; thence west 2177.47 feet to the place of beginning, containing 47.74 acres, more or less.

Dated at Jacksonville, Oregon, December 30th, 1919.

C. E. TERRILL,

Sheriff of Jackson County, Oregon.

By FLORA THOMPSON,

Deputy.

Flowers Loved by All.

Flowers seem intended for the solace of ordinary humanity; children love them; quiet, contented, ordinary people love them as they grow; luxurious and disorderly people rejoice in them gathered; they are the cottager's treasure, and in the crowded town mark, as with a little broken fragment of rainbow, the windows of the workers in whose hearts rests the covenant of peace.—Rudkin.