

\$30,000,000 PLANT TO MAKE OUR NITRATES

Uncle Sam Building World's Greatest Power Dam on Tennessee River to Make Country Independent in War and Peace Upon Nitrates for Powder and Fertilizer.

(By Frederick M. Kerby.)
SHEFFIELD, Ala., Aug. 28.—The United States government will never again have to depend upon Chilean nitrates for the manufacture of its explosives.

One of the greatest of modern power projects, that will furnish the power to take nitrogen from the air and "fix" it by the cyanamid process to make nitric acid and ammonium nitrate for war use, is under way at Mussel Shoals, on the Tennessee river in northern Alabama.

The nitrate plant is the outcome of a ten-years' fight to secure water power development at this point. The government is spending \$30,000,000 to develop the 650,000 available horsepower, and with it produce nitrates from the air.

The once sleepy little town of Sheffield and its sister towns of Florence and Tusculum, look like the site of an army cantonment. Twenty thousand men are at work. Housing structures have already been erected to take care of 19,000, and more are going up as rapidly as lumber and nails and man power can construct them. The muddy waters of the Tennessee river are filled with barges of stone, coal and all kinds of material marked "U. S. government." Long lines of mule teams, their negro drivers nodding in the sunshine move along the river bank.

Two Great Dams Needed

Remarkable progress has been made in the work. Two immense power dams must be constructed to develop the water power. They will not be finished in time for use during the war, unless it should last far longer than is now anticipated.

But work on the process plants has been rushed to completion and they will be operated by steam until the water power is ready. Plant No. 1 has been operating since last October. Its ammonium nitrate shipments are already going to the government powder mill at Hadley's Bend, near Nashville. Eventually it will supply one-half of its output to explosive plants, where it will be mixed with "TNT" and loaded into shells.

Nitrate Plant No. 2 is nearly complete and will begin operation within two months, using power furnished by the Alabama Power company temporarily.

The great power project—the government's life insurance against future wars—calls for the erection of three dams in the Tennessee river. One is a small one for the control of navigation only. The other two are giant structures; the larger, known as Dam No. 2, will be 104 feet high and 4500 feet long. To go with it an 850-foot power house will be constructed. The two buildings together will require 1,200,000 cubic yards of concrete. This is tremendously larger than the great Roosevelt Dam in Arizona, which contains 240,000 cubic yards of concrete, or the Croton Dam in New York, which has 855,000 cubic yards. This dam and power house will develop 189,000 horsepower.

Longest Dam in World

Dam No. 3 is 15 miles up stream from the first dam. It will be 40 feet high, but it will be 8425 feet long—the longest dam in the world, exceeding even the famous Assoman dam in the upper Nile by 25 feet.

The government's estimates of the cost of power development on the whole project show it will be less than 1 1/2 mills per kilowatt-hour. At Niagara Falls, the cost of developing electricity ranges from 1.6 mills to more than 3 mills per kilowatt-hour.

When completed these power plants, and the nitrate plants using the power, will turn out nitric acids and ammonium nitrate not only for explosives, but for dyestuffs and fertilizer. An American dyestuff industry forever independent of Germany will thus be assured.

What this will mean to the American farmers, too, can scarcely be realized. Nitrogen is an essential in soils. Nitrogenous fertilizers have been high in cost because the sole source of supply for the United States has been the Chilean nitrate beds. After the war, with this great plant in government ownership, and the necessity of producing nitric acid and ammonium nitrate for explosives reduced to a minimum, the plant will be able to devote much of its capacity

to the production of fertilizer. This can be sold at cost to farmers.

New Era for South

The power developed here is going to make this part of the south the center of a great electro-chemical and electro-metallurgical industry. Within a 300-mile radius of Mussel Shoals are to be found raw materials for half a dozen such industries. These include Arkansas bauxite, for aluminum manufacture; magnesium from the Tennessee valley beds of magnesian dolomite; potash from the high grade potash deposits of the southern Appalachians; zinc, feldspar, and ferro-phosphorus; calcium carbide from the limestone and coal nearby; chlorine, caustic alkali and sodium, from the salt wells of West Virginia and Louisiana; electrodes from the graphite fields of Alabama; phosphorus fertilizer from the deposits of phosphate rock within 60 miles of Mussel Shoals. It only requires an abundance of cheap power to make these raw materials available.

Because Niagara Falls had the cheap power, bauxite has been shipped all the way from Arkansas there to make aluminum. Graphite had been sent there from Alabama to make electrodes. Similarly the whole electro-chemical industry at the Falls is dependent on the cheap power produced.

When Mussel Shoals produces cheaper power and has the advantage of raw material of its own, it would seem that a new industrial era is opening here for the south.

FORDSON TRACTOR DEMONSTRATION TUESDAY

A practical demonstration of the Fordson tractor was held at the Hamilton Patton ranch Tuesday and was largely attended. It was the first demonstration of the new Ford tractor held in the county and the local agents, C. E. Gates Auto Co., were pleased with its excellent showing, as well as the visitors. It pulled two twelve-inch plows in both dry and wet sticky and in the former, a man rode on the beam of each plow for ballast. It plowed nine-inch furrows, did it easily and cavorted around like a spring lamb.

The Fordson tractor is almost as simple mechanically as the Ford car. In fact, it has virtually the same power plant as the Ford, except that the motor is sturdier and more powerful.

Also, instead of the Ford transmission it has three speeds forward and one speed in reverse, with gear shift lever.

One particular fine feature about the Fordson is the accessibility of the power plant. There is nothing complicated about it, and it can be gotten at in almost any part in a few moments. In fact, the whole power plant, the enclosed so as to be just proof, is right in the open with only the gasoline tank over it.

The spark and throttle levers are virtually the same as on the Ford car.

118,000 HUN PRISONERS.

(Continued on Page Six.)

states, Idaho, Wyoming, Montana and Nevada) now is in training in France and attached to the fifth army corps.

Brigadier General Frederick S. Foltz is temporarily commanding but General Pershing is known to have designated a major general to take command.

RIALTO WHERE EVERYBODY GOES

JEWEL CARMEN IN The Fallen Angel

TONIGHT

ALASKA WONDERS in MOTION

TOMORROW

LATEST CURRENT EVENTS Pershing's Doughboys

J. Montgomery Flagg's "LONESOME GIRL" Comedy.

SENATOR OLLIE M. JAMES OF KENTUCKY, DEMOCRATIC LEADER DEAD IN BALTIMORE HOSPITAL

Brilliant Politician Succumbs After Three Months of Illness of Acute Affection of Kidneys—Prominent in Party Councils in Nation and State and 16 Years in Congress.

BALTIMORE, Md., Aug. 28.—Senator Ollie M. James of Kentucky, died at Johns Hopkins hospital early today of an acute affection of the kidneys.

Senator James had been a patient at the hospital for about three months. Physicians at first believed that he had a good chance to regain his health and an operation was performed. Later his condition became more serious and transfusion of blood was made on several occasions. The senator rallied recently when informed of his renomination to the senate, and for a time held his own but later his condition became grave and he steadily grew worse.

16 Years in Congress

Ollie M. James, one of the leaders of the democratic party and long a dominant figure in Kentucky politics, served five consecutive terms as a member of congress from the First Kentucky district, was elected United States senator by the general assembly in 1912, and was renominated for that office by a large vote at the statewide primary on Aug. 3, last. He was a conspicuous figure, a giant physically, towering above the heads of his associates.

Born in Crittenden county, Kentucky, July 27, 1871, and educated in public and academic schools of that region, James took an early interest in politics and at the close of a legislative session, during which he served as page, he began the study of law in the office of his father, Judge L. H. James, and was admitted to the bar a full year before he had reached his majority.

During the next four years he leaped into political prominence in the western section of the state, and he was not yet twenty-five when he was selected as a delegate to the democratic national convention at Chicago.



OLLIE M. JAMES

in 1896 which nominated William Jennings Bryan for the presidency.

Friend of Bryan

Out of the memorable campaign that followed the Chicago convention grew a close friendship between James and Mr. Bryan that continued thru life, despite the fact that their views were not always in accord.

It was his ringing speeches in defense of the Chicago platform that first attracted nationwide attention to the young Kentuckian and placed him at a single bound into the inner councils of the democratic party of his home state.

Elected in 1902

James' boyhood ambition to serve in congress was realized in 1902, when at the age of 31 he began the first of his five consecutive terms from the First Kentucky district. Shortly after his election to the United States senate by the general assembly, the constitutional amendment providing for election of senators by popular vote, a measure which James had labored to get thru congress, became a law.

His renomination at the state-

wide primary on August 3, after his opponent had virtually eliminated himself by asking his friends to renominate James, came while he was ill at Johns-Hopkins at Baltimore, where he had been confined almost continuously since February 1.

In the dramatic events that led up to and followed the assassination of Governor William Goebel, "Big Ollie" played a conspicuous part and won the praise of the people of his own state. He was a leading figure in the convention which nominated Goebel after a deadlock of more than a week, and supported the latter in the subsequent campaign. When Goebel decided to institute a contest after a certificate of election had been given W. S. Taylor, he asked James to serve as his attorney before the general assembly.

The contest was decided in Goebel's favor, and then he was killed. In the stormy period that followed, James occupied a conspicuous place. Senator James was married Dec. 2, 1903, to Miss Ruth Thomas, daughter of R. Y. Thomas of Marlon, Ky., who survives him. There were no children.

DIED

HOVER—Uriah Hover, a veteran of the Civil war, died at the Soldiers' Home in Roseburg, Friday, August 23d.

Mr. Hover served in Co. C, 33d Wisconsin infantry. He was a native of Pennsylvania and would have been 82 years old had he lived until October 7th.

He is survived by four sons—George A., Oscar, Harry G., and Herbert; 18 grandchildren and five great-grand children. He lived in this valley near Phoenix for 15 years.

Will Hover of Seven Oaks, Bert Hover of Vancouver, Wash.; Mrs. Louisa Hover of Ontario, Cal., and Mrs. Esther Hover of Tacoma, Wash., were all with him at the time of his death.

He died of kidney trouble. His mind was clear and he talked with them up to half an hour before the end came.

ROOT AND HERB MEDICINES

Indian medicine men contend that the roots and herbs of the field furnish a panacea for every ill to which human flesh is heir. Be that as it may, it is interesting to note that the most successful remedy in the world for female ills, Lydia E. Pinkham's Vegetable Compound, was compounded more than forty years ago by Mrs. Lydia E. Pinkham of Lynn, Mass., from the roots and herbs of the field, and today it is recognized from shore to shore as the standard remedy for female ills.

Adv.

35 YOUTHS OFF TO JOIN COLORS AT CAMP LEWIS

Thirty-five more Jackson county young men, most of whom are in the 1918 class, who had been inducted into the military service by the draft board departed early last evening for Camp Lewis. Many relatives and friends of the boys who came from all parts of the county, were at the depot to bid them good-bye.

It was the youngest draft contingent that has yet left for war service, as the majority of the selected men were 21 year olds who registered on June 5th last. They were in fine spirits at the depot as were the assembled crowd of well wishers. Because of the draft board's ruling not to make public the time of departure of draft contingents or the names of the selected men prior to departure, the crowd to bid the boys farewell was not as large as has greeted other

departing bodies of selected men from the city.

The following are the men who left for Camp Lewis last night: J. F. Woodriddle, M. J. Jones, D. R. Baughman, Daniel Watson, W. T. Shann.

Class 1918—W. E. Holmes, F. R. Jenkins, M. A. Doran, H. C. Dooim, E. V. Dahack, J. F. Heath, E. L. Cooper, Roy Myers, Chester Knighton, L. T. Bish, C. C. Bohl, L. I. Stimson, C. L. Magerle, H. W. Groaton, E. W. Oden, Albert McCabe, S. R. McReynolds, W. J. B. Hewett, William Mayfield, T. R. Pankey, W. W. Scott, W. B. Davis, Frank Kendall, A. D. Hatch, John Kemble, Fred Ritzinger.

Also the following who were transferred from other places to be inducted into service by the Jackson county draft board and the places from which they came: H. L. Reed, El Centro, Calif.; Carl R. Beeson, Yakima, Wash.; George E. Watson, Caldwell, Idaho, and F. S. Stockton Thompson, Stockton, Calif.

Belonging in the same contingent are two Jackson county boys who have been living near Camp Lewis for some time and who were ordered by the local board to report for duty direct at that cantonment today.

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