AN COURIER.

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LEVEE COMMITTEE WILL NEED ABOUT $1,000.

From what we are able to learn, it will be necessary for the local levee committee, within the next few days, to find ways and means for raising from $800 to $1,000 to cover additional expenses incurred in building the West Hickman levee. This extra money had to be expended in clearing and pulling stumps from the right-of-way and the building of a huge concrete sewer, both of which fell to the local committee's lot. It was only just that we stand the expense of these items, but they were not figured in on the original. Certainly the committee will have little or no difficulty in getting this money, as the amount is so insignificant as compared with the benefits derived. It might also be added that our merchants and business men, who have not been called upon to help with this project, will receive indirect benefits of sufficient magnitude to justify each of them giving a liberal donation to this fund. A year ago we spent more taking care of refugees, to say nothing of lost business, than is now required of us for permanent protection against a reoccurrence of such a disaster. In short, this committee should receive our financial and co-operation in its effort to raise the amount in question. There should be no dabbling, hanging back or "passing." The levee benefits the Courier, although we have property behind it, just as it does every other business man in town. It is hinted that some who subscribed money in the original canvass for funds, are inclined to find excuses for not coming across. If such there be, it seems to us these collections could be made with the minimum amount of trouble. It would be easy to convince a court of eleven or twelve good men that the obligation should not be discharged; more especially in view of fact that no grounds for withholding payment were discovered until after the levee had been completed. The levee is a Godsend to Hickman and every dollar due, as subscription or extra expense, should be paid promptly.

R. V. Putnam has sold his second hand automobile rights and priileges, also part of his equipment, to Leonard Frost.

What Is Needed for Armor Plate Plant

The Courier prints below part of the official information relative to the establishment and location of the government armor plant, which we hope to locate at Hickman. As this subject is now one of vital issue, it should be of more than passing interest to our readers in this immediate vicinity. The following paragraphs are extracts from a document prepared by the Armor Plate Board:

The recommendation of the General Board of the Navy "with especial reference to considerations of safety in time of war," requires that the plant should not be located "east of the Appalachian Mountains, west of the Cascade or Sierra Nevada Mountains, nor within 200 miles of our Canadian or Mexican borders."

For the information of those interested in the location of this Government plant the board finds it desirable to make clear what constitutes an armor plant such as is contemplated by the act of Congress, the requirements for its efficient and economical operation, and the conditions which largely influence decisions in the selection of a site.

The maunfacture of armor plate is a highly specialized branch of the steel industry, and there is no commercial steel of which the same service is required nor in which the same process of manufacture are used. Armor plate is used in the gun turrets, conning towers, and uptakes, but principally in a narrow belt extending just above and below the water line of the ship. The largest plates are about 22 feet long, 10 feet wide, and 18 inches thick, and weigh approximately 45 tons. The ingot from which such a plate is made would weigh about 320,000 pounds.

The plant provided for in the act of Congress contemplates the manufacture of armor from Bessemer pig iron purchased in the open market. If the present processes for manufacturing armor are followed the pig iron will be melted in open hearth furnaces for reducing the amount of carbon and eliminating impurities in the pig iron much as in the commercial furnaces. At the proper time the correct amounts of nickel and chromium are added in order to produce an alloy steel of the proper composition for armor plate. The melts from one or more furnaces are then poured into an ingot preparatory for making the plate.

The problem of making the ingots is complicated by the necessity for using a very large amount of scrap metal produced by waste from the ingots and by cutting of the finished plate to the shape required on the ship.

The ingot after brought to the proper temperature is carried to the heavy hydraulic presses which are used in place of rolls in forming a plate from the irregular mass of steel in the ingot. The press exerts a pressure of 10,000 to 15,000 tons upon an area a few inches wide and several feet long. It thus reduces the thickness and increases the area of the ingot to the proper dimensions of the plate.

The next step is to harden the face of the plate. Two armor plates of the same size are placed face to face with a layer of carbonaceous material between them, confined by a border of fire brick. The two plates are then kept at a temperature in the furnace of about 2,000 degree F. for a period of fourteen to sixteen days. This operation is known as cementation of the plate, and causes carbon from the charcoal to penetrate about 1 inch into the metal which upon being chilled forms a a surface so hard that it would scratch glass. The object of the exceedingly hard surface is to shatter a shell into small pieces and thus make penetration of the armor impossible. The tough backing affords the necessary strength to prevent breaking of the chilled exterior.

Many of the plates must be bent into curved shapes to fit the circular turrets, the conning tower, and the curved sides of the ship.

The plant requires considerable heavy machine work to provide the fastenings for holding them on the ships and for making them fit their proper places in the armor belt. The fact that in some cases as mucch as 70 per cent of the plate must be cut away indicates the importance and great cost of the machining.

An armor plant such as contemplated in the act of Congress, having an annual capacity of not less than 20,000 tons of armor and costing about $11,000,000, is described in the "Report of the Committee to Investigate the Cost of an Armor Plant for the United States," of which Senator Tillman was chairman and which report is published in House Document No. 1620, 63d Congress, 3d session.

The plant estimated for will consist of an electric power plant, a boiler plant, an open hearth plant, a forging and bending shop for heavy plates, a cementing and tempering shop, and a machine shop for finishing armor plate. Aside from these there will be an office building, a laboratory building, and the miscellaneous shops and building necessary for auxiliary purposes.

In the open hearth plant there will be made all the steel from which the armor is fabricated. The raw material used will be pig iron and armor scrap with the necessary nickel, ferrochrome, ferromanganese, etc. There will be five open hearth furnaces, and the 10 accompanying gas producers. The building will be about 700 feet in length.

The forging and bending shop will contain four furnaces for heating the heavy ingots, and 10 furnaces for plate heating, beside the heavy forging presses with intensifier and pumps. The building will be more that 1,100 feet in length.

The cementing and tempering shop will contain 35 furnaces and the cranes for handling heavy plates, and will be in a building over 1,100 feet long.

The machine shop will be equipped with the necessary planers, drilling and milling machinery, and cranes for finishing and handling the heavy plates.

The layout of this plant will cover about 80 acres of land, but for auxiliary and other purposes a total area of about 200 acres will be required.

In general, the larger the size of the armor plate, the more efficient is the protection given to the ship against gun fire. The maximum dimensions of finished plates that have been supplied for the latest dreadnaughts are 22 feet by 10.5 feet by 18 inches thick, and the plate weighs about 45 tons. The average size plate is about 18 feet by 10 feet, weighing 30 to 40 tons. These plates will have to be transported by rail to the shipbuilding plants and navy yards on the Atlantic and Pacific coasts. The roadbeds, bridges, and tunnels over the line of transportation will have to accommodate these weights and dimensions.

The plant will employ from 1,500 to 2,000 workmen and many of them must be skilled as melters, heaters, forge men, machanists, etc. The near communities must be able to absorb this number, together with the corresponding increase in population. The future development of the industries of the plant may materially increase this number.

Standard gauge railroad connections will run from the main transportation lines directly into the plant.

It is estimated that from 400,000 to 600,000 gallons of water will be required per day. This water should be pure, free from sediment, suitable for [illegible] and for use in [illegible]

(Con. [illegible])

Mott Ayres, formerly of Fulton has been elected Democratic County Chairman of Jones County, Mississippi. Great guns and little fishes!

Owners of automobiles and Fords had better secure their 1917 license right away, for the license inspector is headed this way.

Capt. C. B. Hackett has been sick for several days.

Now, Judge [illegible]ar, asks the Democratic voters of Fulton county, for that office for another term—if he merits it; if he has filled the bill to their satisfaction. Well, the proof of the pudding is the tasting; let's see, in a brief way, what has been done during his administration. Of course, he is not due all the credit—nor all the blame, in either case, but here are some of the principal items:

A new $13,000 county jail.

Steel beam, concrete bridges, $6,000.

Concrete culverts, $40,000.

Metal culverts, $12,000.

Flooring for steel bridges, $6,000.

Road machinery, $1,200.

Repairing and painting Court House and outbuildings, $1,200.

Every mile of public road in the county has been dragged each year and about 55 miles of new opened and added to county roads. Roads have also been divided into sections and drag placed on each section, so roads could be dragged at proper time by simply notifying each contractor, thus giving us the best dirt roads in the State. He also installed a system requiring weekly repots of all work done in each section, condition of roads and culverts, all of said reports to be signed by magistrate of said district and county road engineer, and forwarded to county judge's office, where a complete record is kept. The county also assisted in opening the Paducah-Memphis Highway at a cost of about $1,500, and also helped in building and gravveling State Road, east of Hickman, and a short stretch of road near Fulton. There have been fills made in a permanent manner that cost around near $4000, plus a large expense in making the highway wider.

There also has been established a Juvenille Court, which has accomplished a great and much needed work in dealing with delinquent children, and saved the county a considerable expense.

A branch of the County Court was established at Fulton, for the convenience of people in the east [illegible]se big items out of the way, there is nothing to hinder the county from getting out of debt and having a nice balance on hand before another four years. The accomplishments of the past four years have been gigantic, compared with all previous terms. As stated before, the Judge is not the "whole show," but merely the presiding officer of the Fiscal Court, which has charge of the county's affairs, though it must be conceded that his views and suggestions are of considerable weight and respected by the members of the court. As a major portion of the county's money was spent on road work, we believe it was spent in a mighty good cause, and the court is to be commended rather than criticised. Roads cannot be built without spending money — and no county can get very far without passable roads. Give us more roads—and better roads.

Getting back to the Judge's candidacy for re-election. We started to say, thus far he has no opposition, and is not expected to have any—which in itself is a gilt-edge endorsement of his work during the expiring term. It is also a logical conclusion that if his first term has been satisfactory—a second would be even more so, as he is better acquainted with the general run of the duties of the office, etc. The accepted precedent of giving the county judge a second term is also in his favor; but aside from this his record is above reproach and recommends him for a second election. It must be conceded by all that Judge Stahr has never lost sight of the county's interests. He is a man possessing, what we are pleased to term, horse sense, plus legal knowledge and broad-mindedness; impartial, honest, fearless, untrammeled by any set of men, uninfluenced by ulterior motives. As to his political faith, it is only necessary to recall that as a result of his work as county chairman of the Democratic Campaign Committee last fall Fulton county rolled up the biggest Democratic majority in its history. But all of this is generally known—and we are