

AUTOMOBILES, FARM MOTORS AND FARM MACHINERY.

Hints for Tractor Operators.

Old operators need no advice about the disadvantages of letting the engine race when it becomes stuck by the plow in a low spot, but a word in this regard to new owners may be timely and is sure to be appreciated. The more the engine races

in one spot the harder it will be for the tractor to force itself out of the holes which the drivers have dug. As soon as the engine begins to race, lighten the load by raising the bottoms a little. If the engine still cannot free itself, detach it from the gang, run it ahead a few feet on to unbroken surface, and then connect it to the gang by a chain. After the plow has been pulled through the troublesome spot, the two implements can be recoupled and plowing continued at a reduced depth until there is no further danger. On the next round, the careful operator will raise the bottoms slightly as the troublesome spot is approached.

A good system of laying out fields is one in which loss of time in turning is reduced to a minimum and as little unplowed ground as possible is left at the fence corners. The old system of starting at the centre of the field and plowing around and around toward the outside is still in vogue where large outfits are used in large fields. It reduces loss of time to the minimum, but it also leaves a large amount of unplowed ground at the corners.

Plowing the field out in lands is the best system to be used with small outfits. Advise the operator to set a row of stakes around the entire field from twenty to thirty paces from the fence. At each end of the field a guide furrow should be plowed along the line of stakes and a strip the full width of the gang can be plowed along the row of stakes at each side of the field. The centre area should then be plowed out in lands of convenient width, the headlands and side strips being left to be turned last by running the outfit around the centre area. This system will be found applicable to triangular and irregular-shaped fields as well as to rectangular fields, and the next season the soil can be thrown in the opposite direction if desired.

A NEW MOTOR FUEL.

The "Coal Age" says:

"Ethyl alcohol and its derivatives have been extracted successfully and on a commercial scale from coke-oven gas by Ernest Bury, of the Skinningrove Iron and Steel Works, in Great Britain. A perfect motor fuel has been produced, and as the adoption of the internal-combustion engine is rapidly extending, the importance of this development is apparent. The liquid fuel resources of the world are strictly limited, but the consumption of these fuels is growing by leaps and bounds.

"The practical working of Mr. Bury's process at the Skinningrove works, where 5,800 tons of coal are carbonized per week, has revealed an average yield of 1.6 gallons of alcohol per ton of coal carbonized, and as the total weight of coal which was reduced to coke in Great Britain in 1918 was 14,635,000 tons, the application of this process to the whole of this coal would yield 23,416,640 gallons of alcohol representing, at 2s. per gallon, a sum of £2,341,664.

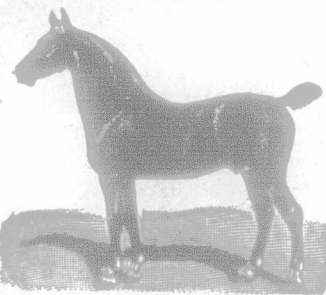
"Having regard to the scarcity of liquid fuel that production in itself is important; it is national suicide for Great Britain or any other country to continue to burn any substance which might be converted into liquid fuel. The recovery of alcohol at the gas works of Great Britain would yield a further 27,000,000 gallons, or taking alcohol and benzol together, the total quantity of liquid fuel available for extraction through the carbonizing of coal would be 114,000,000 gallons, as against a present total consumption of 160,000,000 gallons per annum.

"The process of extraction by contract with sulphuric acid is not a new discovery, but Mr. Bury was the first to establish it as a commercial proposition. The best results are achieved at a temperature of 60 to 80 degrees C., and in his process Mr. Bury carried utilization of the heat from the coke-oven plant to the utmost limit. Ether, chloroform, idioform, acetic and acetone are among the derivatives which were obtained from this coke-oven gas after the benzol had been extracted.

"Skinningrove was the only iron works

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Long-distance 'Phone. A. A. COLWILL, R.R. No. 2, Newcastle.

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We have at present only two young bulls in the stable, but would price within the next few weeks a half dozen or more young cows or heifers bred to our present herd sire, Sunnyside Model. This is a Cruickshank Lovely-bred son of Rightsort (imp.). The families are Killbean Beauty, Misses, Rosemary's, Seaweed, Rosebud, Ballenchin Daisy, etc. 50 head to select from.

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