



The Dependable Champion For McLaughlin Cars

The extra long shell places the spark down into the cylinder instead of in a pocket in the cylinder head as does the ordinary plug.

All new Fords, Overlands, Maxwells and Studebakers are factory equipped with

Champion "Minute" Spark Plug Cleaner

Cleans a set of plugs perfectly in a few minutes without taking them apart or even getting your hands dirty. All you have to do is half fill the tube with gasoline, screw in the plug and shake for a minute. Sells everywhere for \$1.00

Champion Dependable Spark Plugs

No matter what car you own there is a Champion Plug that will make your motor produce the greatest amount of energy for each drop of gasoline used.

The patented asbestos-lined copper gaskets on the shoulders of Champion porcelains insure dependability and long life at any speed.

Ask any dealer for Spark Plugs with "Champion" on the porcelains—it guarantees "Absolute satisfaction to the user or free repair or replacement will be made".

Champion Spark Plug Co., of Canada, Limited Windsor, Ontario

Champion Plug For McLaughlin Cars Price, \$1.00

much gasoline as he could out of the heavier fractions of petroleum by various processes of "cracking."

But the invention by Dr. Rudolf Diesel of a new form of engine using crude petroleum instead of gasoline makes distillation unnecessary. A vessel equipped with Diesel engines can go four times as far on the same fuel as one using a coal burning steam engine. It was the Diesel engine that made the big U-boats possible, and recently the Germans have adapted this power to big airplanes.

But all these new engines depend upon the oil wells for their fuel, and these are being rapidly exhausted. It would seem that man, having learned at last how to utilize this incomparable source of energy, might have to give it up in a few years, that his new toys, the automobile, the motor boat, the aeroplane and the submarine, would soon be taken from him and he would have to go back to slow-coach days of coal and steam. But perhaps not. It is possible to make synthetic petroleum by the distillation of wood, and the Diesel engine can be run on any of the vegetable oils.—The Independent.

Forest Fires.

There was a time in the memory of living men when the inhabitants of some of our Canadian cities took pride in having their city wrapped in a pall of smoke at certain seasons of the year, because, they said it indicated activity in lumbering. To-day cities and provinces are just beginning to take pride in the absence of forest fires. The trees may be cut down and marketed and a new crop started without any fires developing. This is shown in a bulletin just issued by the Forestry Branch of the Department of the Interior entitled, "Forest Fires in Canada 1914-15-16." This is the first successful attempt to get systematic statistics as to the losses suffered by Canada through forest fires. It shows the danger seasons and the causes of fires, and shows also how fires may be so combatted that the loss in the area equipped and patrolled will be almost negligible. Diagrams illustrate the causes of fire, the extent of our losses, and the character of the timber burned. The publication of these statistics will tend to arouse Canadians to the evil of helping our national enemies by allowing fires to destroy wealth which is required to prosecute the war. The Bulletin may be had free on application to the Director of Forestry, Ottawa.

Questions and Answers. Veterinary.

Fatality in Pigs.

Sow farrowed 11 pigs. In a few days one took diarrhoea and died. When 3 weeks old three swelled in their joints and became crippled. Two of these died. When 4 weeks old the dam became sick and there are swollen purple blotches on her. She was fed on chopped oats, a little bran and alfalfa grass. J. C.

Ans.—The diarrhoea and the swollen joints with crippling indicate the presence of a germ in the premises in which the litter was born and raised. The sow may have also become infected and the present condition caused in that way. It will be well to change both sow and living young to fresh quarters and allow free run on grass daily, and thoroughly disinfect the present premises before introducing the pigs again. V.

Lump on Leg.

1. Horse that I want to show this fall has a lump on his hind leg. The lump is on the inside of the leg just below the joint. It is about 1/2 inch in thickness and 1 1/2 inches long. It is as hard as bone and does not involve the joint. 2. Would this be considered a blemish in the show ring? E. B.

Ans.—1. This is probably the result of a blow or severe bruise which caused a thickening of the periosteum (the fibrous covering of the bone). It is very hard to reduce. It may be reduced in time by rubbing with smart friction once daily with a liniment made of 4 drams each of iodine and iodide of potassium and 4 ozs. each of alcohol and glycerine, but it is not probable that you can materially reduce it in time for the fall fairs. 2. Yes. V.

WOOL

Farmers who ship their wool direct to us get better prices than farmers who sell to the general store.

ASK ANY FARMER! who has sold his wool both ways, and note what he says—or, better still, write us for our prices; they will show you how much you lose by selling to the General Store.

We pay the highest prices of any firm in the country and are the largest wool dealers in Canada. Payment is remitted the same day wool is received. Ship us your wool to-day—you will be more than pleased if you do, and are assured of a square deal from us. 2

H. V. ANDREWS
13 CHURCH ST., TORONTO

Shropshires and Clydesdales

Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbrogie Heir 18299. Write quick, don't wait. W. H. PUGH, Myrtle Station, R. R., Ontario

Cloverdale Shropshires and Berkshires—40 shearing rams, 70 shearing ewes; an exceptionally choice lot, true to type and well grown, nearly all sired by the show ram, Nock 16 imp. In Berkshires, the usual strong offering, including sows just bred. C. J. LANG, BURKETON, ONT.

Newcastle Herd of Tamworths and Shorthorns Boars ready for service. Some bred and ready to breed; 2 splendid sows carrying their 2nd and 3rd litters. Boars and sows not akin ready to wean. Mostly descendants of Colwill's Choice, 3-year champion at Toronto Industrial, and Imp. Cholder-ton Golden Secret. A few nice Shorthorn heifers in calf, deep-milking strain. Young cows with calves at foot. Long-distance phone. A. A. COLWILL, Proprietor, R.R. No. 2, Newcastle, Ont

TAMWORTHS

Young sows bred for Sept. farrow and a nice lot of young boars for sale. Write: John W. Todd, R. R. No. 1, Corinth, Ontario

Morrison Tamworths and Shorthorns—Bred from the prizewinning herds of England. Tamworths, both sexes; boars from 2 to 12 months. Shorthorn bulls, from 5 to 10 months old, reds and roans—dandies. CHAS. CURRIE, Morrison, Ontario

I have a choice offering of **Sows, 3 to 5 months old** a few boars 3 months old and a good year-old hog. Priced to sell. G. W. Miners R. R. No. 3, Exeter, Ont.

When writing please mention "Advocate"

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We have an unusually choice lot of shearing rams of both breeds to offer as flock headers and for show purposes. Inspection and correspondence invited.

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OXFORD DOWN SHEEP

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Although we have sold our farm at Arkell we are still in the sheep business, stronger than ever, having secured other land expressly for sheep.

PRESENT OFFERING:—100 yearling rams and 50 yearling ewes. Orders taken for ram and ewe lambs for later delivery. All bred from our own importations. Prices reasonable. Communicate to—Henry Arkell & Son, (Phone at present under name of T. Reg. Arkell) 70 Beatty Ave., Toronto, Ont

Lakeview Yorkshires If you want a brood sow or a stock boar of the greatest strain of the breed, (Cinderella), bred from prizewinners for generations back, write me. John Duck, Port Credit, Ont.

PROSPECT HILL BERKSHIRES Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. John Weir & Son, Paris, Ont., R.R. 1

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From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO Langford Station on Brantford and Hamilton Radial

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Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock, all ages for sale. Visitors welcome. For further particulars write: CULBERT MALOTT, No. 3, Wheatley, Ont.

A choice lot of

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My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age. ADAM THOMPSON, R. R. No. 1, STRATFORD, ONT. Shakespeare Station, G.T.R.

Featherston's Yorkshires—The Pine Grove Herd I have the choicest lot of young sows of breeding age that were ever on the farm. A few are already bred. Also have 10 young litters. Prices reasonable. J. K. FEATHERSTON, STREETSVILLE, ONT.

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We have some promising young stock from imported dam and sire of both sexes for sale. Large Blacks are greatly approved in England and will be a coming popular breed in Canada, and good for crossing. We also offer some young bulls from milking Shorthorns, imported stock. LYNNORE STOCK FARM F. WALLACE COCKSHUTT, BRANTFORD, ONT.