

FOR SALE OR EXCHANGE.

2 ACRES FREEHOLD; three miles from Invercargill; two acres bush, balance grass; good four-roomed house, bathroom, h. and c. water; good garden. Price £1500. Terms arranged. This is cheaper than buying a house in town.

£500 DEPOSIT for a handy little Dairy Farm in the Winton district, consisting of 140 acres freehold; 40 acres bush, 10 acres ploughed, balance stumps and grass. Comfortable three-roomed cottage, three-stall stable, trap shed, etc. Rail and factory three miles by good road. Price for quick sale, £14 per acre.

LOOK AT THIS! 76 Acres, Otatara; About seven acres bush, balance grass. New four-roomed house, 10-stall cowbyre stable, etc. Factory and school 1½ miles. Price £33 10s per acre.

If you wish to sell, purchase or exchange a property in any part of New Zealand, communicate with me.

F. H. TUCKER,

LAND AGENT.

THE SPORTS HARLEY.

THE SPORTS HARLEY.

THE MOTOR EVERYONE IS TALKING ABOUT.

THOROUGHLY up-to-date in every respect. The Harley is an opposed twin of 4½ h.p. with plenty of ground clearance.

Three speed gear-box and clutch running in oil.

Enclosed single drive chain oiled by engine.

Perfect Mechanical Lubrication.

Induction pipe heated by exhaust gases together with dust proof carburettor.

Perfect front and rear springing with wide mudguards. 26 x 3 Tyres.

It is sturdily built and has opened its career by establishing numerous records.

A SAMPLE MACHINE ON VIEW.
INSPECTION INVITED.

WILSON FRASER,

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FOR SALE.

FRUIT AND CONFECTIONERY BUSINESS, including American Soda Fountain, ice cream appliances, fittings, and good stock. Situated in good country town, doing a turnover of over £2000. A very sound and profitable business. Suit returned Digger. Further particulars on application.

BRICK and ROUGH CAST BUNGALOW of five rooms, with electric light, h. and c. water, porcelain bath, wardrobes, tiled hearths and grates, R.P. finish; just completed; ¼-acre on car route. £1100.

MAKAREWA—Four acres, with practically new seven-roomed house, h. and c. water, accret. gas, etc. Two acres in grass. ¼-acre turnips, 1½ acres potatoes. £1500.

Six ROOMS; gas, electric light, bathroom, asphalt paths, ¼-acre. Immediate occupation. £675.

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GENERAL Blacksmiths, Wheelwrights, and Horseshoers.

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All Classes of Repair Work undertaken.

First class Workmanship guaranteed.

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SCIENCE NOTES.

SEARCHLIGHT CONTROL.

It has been found by experience that an observer operating a military searchlight finds it difficult to train the searchlight on the target when he is stationed close to the searchlight itself. The reason for this is that the observer at the lamp is handicapped by the dazzling effect of the bright beams on the eye. On account of this feature of searchlight operation, remote-control schemes have been devised whereby the observer is stationed at a distance of some 500 feet from the searchlight itself and there trains the lamp upon the target by means of electrical control.

THE HOME ZOO.

The zoo for every nursery, with lions which roar, canaries that sing, and ducks that really quack is the latest outcome of gramophone invention. It is the invention of a young Englishman. Another form of the talking toy, is the story-book which tells its own story. These books are full of pictures, and one can be placed on any machine. The animals or birds are of cardboard, and contain, like the books, a flexible disc record. The performance in every case is to a musical accompaniment. Little Po-Peep tells why she has lost her sheep and the mocking-bird mocks or the lion roars in a effective manner. These toys have great educational possibilities, and on the backs of the pictures are short natural history stories.

ONE-PIECE CONCRETE HOUSES.

Some years ago Thomas Edison invented a method of pouring concrete into a single mould and turning out a house. This scheme, much ridiculed at the time, has progressed. Fourteen four-roomed, two-story houses of this type have just been completed at Union, New Jersey, and twenty-five four-room, and fifty six-room, two-story houses are being built at Phillipsburgh New Jersey. The basic idea is that of die casting. Sectional standardised, heavily-built-up wooden forms are so made that they form a mould, as though a pattern house had been moulded inside them and then withdrawn. They are painted with grey lead and oiled before use. This mould is then filled with molten concrete, instead of the molten metal used in metal castings. The forms are then removed and set up for the next house.

A REMARKABLE TREE.

There flourishes in most parts of the Australian continent, especially in Western Australia, a species of Australian grass-tree known as the "blackboy." The peculiar interest of this tree, which grows to a normal height of from seven to ten feet, is the variety of commercial purposes it which it can be put. The tree contains gum in large quantities, and among other by-products extracted under treatment are tars (free from harmful acids), tarpanlin dressings, rope and sanitary tars, lacquers (such as Japan black), steam and refrigerating pipe lagging, paint for ironwork that requires stoving at high temperatures, stains and paints; phenol, benzol, and alcohols, coke, potash, and pyrogenous acid. Not only have all the articles already enumerated been obtained, but a company recently formed to extract them also intends to produce dyes, perfumes, and formalin, and various kinds of varnishes.

MAKING PHOTOPLAYS AT NIGHT.

Most modern cinema studios are provided with mercury-vapour lamps on overhead racks and floor stands, so as to give any kind of illumination desired. The overhead racks are suspended from a steel-beam framework that travels along on the side rails, so as to bring the lamps over any part of the studio floor. While flaming arcs are still used in some studios, the mercury-vapour tubes to day are predominant for many reasons. The luminous element of the latter type of lamp is a luminescent arc, in a highly evacuated tube of glass, formed between a mercury cathode and an anode of mercury or other metal not attacked by it. The large output of actinic radiation from mercury-vapour lamps gives them special advantages in the fields of photography. Although the light from the mercury lamps is a ghastly green, which is most unpleasant and distorts all colour schemes, it is relatively comfortable for the actors, and excellent from the photographic point of view.

It is always chilling in friendly intercourse, to say you have no opinion to give. And if you deliver an opinion at all, it is mere stupidity not to do it with an air of conviction and well-founded knowledge. You make it your own in uttering it, and naturally get fond of it.

GARDEN NOTES.

RHUBARB.

With all the good fruit with which we are blessed, the old-fashioned plebeian rhubarb cannot be passed over, especially during the winter and spring. Every garden, especially any that have to supply a family, should grow a row of it. Probably it is not possible to produce with as little trouble the massive stalks seen in colder districts, but with a little trouble good usable sticks can be produced throughout the winter and spring, when other fruits are scarce. Rich ground and plenty of water during the summer are required. As to how rich to make the soil it seems the only limit is the pocket of the owner, for it simply revels in good fat manure. The best method of dealing with rhubarb is to dig out a trench about eighteen inches deep, and fill it with stable manure. The manure can be in a fairly fresh condition so long as it is not hot. Failing stable manure, use old vegetable refuse. Well tread the manure into the trench, and then add the soil. Put all the soil back, it will mean heaping it up, but this will not matter as it will soon go down. Plant the crowns so that they are, when first put in, about two inches below the surface of the soil. When it has settled down the crown will be on the ground level. Two to three feet should be allowed between the plants, and three to four feet between the rows. The weekly washing water, diluted with clear water to twice its bulk, is admirable for the rhubarb, and can be poured on every week after washing. Even during the winter it is often beneficial to give a soaking of water. Old beds should be heavily mulched with stable manure, and have two ounces of superphosphate to the square yard applied at once. Rhubarb should not be pulled the first season after planting, and once a bed is growing well there is no need to move it for many years provided plenty of manure is applied yearly.

FINENESS OF SOIL.

A gardener should always remember that the productiveness of his soil depends largely upon the fineness of the soil particles. A small plot well tilled can be made to produce as much as a plot twice as large but badly tilled. A little hard cube of soil will have six sides; if this cube is broken the result is twelve sides—two cubes. On each of these sides a small water film can hang, and it is these small water films that dissolve out the particles that form plant food, and it is to these films that the small root hairs travel to take up these small particles of water which contain their food. The result of well working a soil, or tillage as it is called, is to increase these small cubes of soil by making them as small as possible but by so doing increasing their number. The number of food depots is thus increased, and the plant is encouraged in consequence to send out more little root hairs to absorb this food, and we have an increased root system, and naturally an increased plant. Jethro Tull, in 1753, when advocating more extended cultivation, referred to this finely-pulverised soil as "root pasture," and this sums up the case—by increasing the pasturage we can keep more stock. Almost all garden soils contain an almost inexhaustible supply of plant food if only it could be made available, and the only way it can be made ready for the roots is through the dissolving action of these little films of water. Furthermore not only does tillage increase the water-holding capacity of a soil, but it also increases the air-holding capacity, encourage the growth of bacteria, especially such forms as are engaged in the work of nitrification or the changing of the nitrogen of the atmosphere into nitrates, in which form it is available as plant food.

WHAT WISE MEN SAY.

That to-day's decision may determine your destiny.

That it is easy to find remedies for other people's troubles.

That platonic friendship is like carrying matches in an explosive works.

That our ideals are not worth much if we surrender them at the first attack.

That the ignorance that is bliss generally leads to the knowledge that is expensive.

That cleanliness is next to godliness; that is why a woman changes her mind so often.

That to tell a woman you trust her is an even more fatal thing than to tell her you don't.

That when a man finds twenty good reasons for staying away from home you may be sure he has at least one bad one.

That the modern child has as little belief in the fairy tales his mother tells him as she herself has in the ones his father tells her.

MOTORING NOTES.

THE MOTORIST'S TEN COMMANDMENTS.

The Coburg, Ont., Motor Club recently awarded 1st prize to Beulah Garland, aged 11 years, for the best essay on "How Children May Help to Avoid Motor Accidents." The essay was in the form of ten commandments, which are as follows:

- 1.—Thou shalt not play upon the street.
- 2.—Thou shalt not cross the street only at crossings as there thou hast the right of way.
- 3.—Thou shalt look before crossing the street.
- 4.—Remember, after getting out of a car, thou shalt not cross the street behind a car.
- 5.—Thou shalt not get in or out of a car when it is moving.
- 6.—Thou shalt not interfere with cars, as thou mayst put them out of order and cause accidents.
- 7.—Thou shalt not drop nails, glass, or pins upon the road and cause motorists to have blow-outs and perhaps accidents.
- 8.—Thou shalt not light matches near gasoline.
- 9.—Thou shalt keep the motor rules when riding on a bicycle.
- 10.—Thou shalt help old people across the street.

THE CANADIAN FARMER.

"To look at the advertisements of any English motor journal one would think that dukes were more plentiful than farmers—but Henry Ford knew better long ago." This is taken from an article in a Sunday paper. The author of that article had been writing about farmers. He said that a census of motor-cars in the province of Ontario showed that farmers owned 37,758 passenger machines!

A CO-OPERATIVE TRUCK LINE.

Convinced that the time is now ripe for extending the usefulness of the truck in the field of short-haul transportation, 80 men representing business interests in Chicago and cities within a radius of fifty miles west have formed what is believed to be the first co-operative motor truck freight line in the United States. The truck line is giving a freight service much speedier than is possible by any other form of transportation. This is true, especially with shipments of less than carload lots. Frequently freight is placed in the hands of manufacturers within a few hours from time of shipment whereas if consigned by other carriers it might be days in transit. A terminal station or depot, similar to those maintained by railroads, has been established in the heart of Chicago's shipping district. This building is a large one with 25,000 square feet of floor space. All trucks load and unload at shipping platforms arranged in station order.

MOTOR WINE TANKERS.

Old-fashioned methods are more persistent among the wine growers of the South of France than among any other members of the community. But the motor vehicle has now invaded this old-world region, and arrangements are now being made to collect wine from the different growers according to the most modern and rapid methods. A big company of wholesale wine merchants in the South of France has put into service a number of seven-ton lorries fitted with a steel tank having a capacity of 1320 gallons and an engine-driven pump with four suction pipes, two on each side. The lorry is run into the grower's yards, the pipes are dropped into the barrels; in a few minutes these are emptied, and the lorry on its way again. The tank is fitted with an indicator showing the quantity of wine, and has a big manhole for cleaning purposes. This lorry also hauls a two-wheel trailer carrying a tank with a capacity of 660 gallons.

SHORTAGE.

When the paper shortage causes the newspapers to suspend publication, what are we going to do—

About igniting the furnace?

For something to line the shelves in the jam closet?

For another excuse at breakfast, when one is too grouchy to converse with the wife?

In the summer for a fly swatter?

About a substitute wrapper for little Johnny's school lunch?

For a screen to conceal oneself behind when lady enters crowded street car and rather pointedly stands in front of the seat one is occupying?

About something to put under father's feet, when he will insist on taking these afternoon naps on the bedspread?

For something to read.

DIGGER YARNS.

ABOUT GENERAL BIRDWOOD.

("Sydney Mail.")

Birdie was addressing a lot of Diggers on the Somme at a time when things weren't over brilliant with us. Thinking that the boys from the land of the South-east Cross and prickly pear farms wanted cheering up, he said to them, "Now, Aussies, you must 'back up.' You know I have a very warm place in my heart for you chaps." Then from the ranks there sounded in a stentorian voice these words: "Yes; and the hottest part in the line, too, sir."

One day at Gallipoli the General was visiting his snipers, and found one noted sniper resting in his dug-out. Pulling the blanket to one side the General said: "Well, Joe, what is your tally to-day?" Joe remarked "14;" to which the General said, "Better get a wriggle on; Bill over there got 19 to-day." Joe got excited and yelled, "You tell him from me he is a flaming liar." The General departed laughing. Joe's mate, hearing the discussion, came along and said: "You're on pretty good terms with the General, Joe." "What General?" Joe asked. "Birdie," was the reply. Joe, a Queenslander, could only utter, "Jumping Moses!"

Birdie, unlike most Generals, did not care for the trappings usually associated with his high rank. This was especially patent on Gallipoli, where in an old khaki shirt, shorts, and an "Aussie" hat he was a familiar figure in the front line of trenches, more often than not unaccompanied by the usual string of staff-officers. On account of this he was sometimes not recognised. "Togo," our crack shot, was "drawing a bead" on a distant Turk opposite Quinn's when "Birdie" appeared. Tapping "Togo" on the shoulder he said, "Ah, my man; sniping I see. Any luck?" "Togo," taken by surprise, fired; then with wild disgust turned his head, "Missed! Look what ye've done, yer—! go an' —!" And "Birdie" went.

Cigarettes were nowhere to be had, and to the average soldier a cigarette is more to be sought after than riches (when riches avail you not). One morning General Birdwood passed down the front line, yawning and chatting to the boys, a cigarette (whose perfume recalled those happy and mad days of Cairo) between his lips. Envious eyes watched the somnolent and the smoker. At last one autumn-haired Anzac stepped forward. "Say, General, how's it for a cigarette?" he asked. "Righto," replied the Soul of Anzac, handing his case to the delighted soldier. "Hand them round to the boys." A few minutes later the air was filled with cigarette smoke, and, as the song says, "all hearts were joyful," when a surprised and sleepy voice from a nearby dug-out exclaimed, "Strike me pink! Bluet, when the — did you get the fags from? Did you hit old 'Birdie' over the napper and go through him for his smokes? Or what's the name of the bloke you stung?" Bluet rose to the occasion magnificently. Turning to a pal he said, "Better wake Ducky up; that touch of the sun yesterday has been giving him beans." The General passed on, but next morning, when on his usual rounds, he inquired solicitously, though his eyes twinkled, "How is your friend Ducky to-day?"

One day at Gallipoli General Birdwood was having a shave. The barber was very slow. General Birdwood: "Are you ill?" Barber: "Not too good." General: "Well, just keep your hand still and I'll move my head."

The Fourth Brigade were in the line at Guedecourt in January, 1917. Owing to the snow and hard frosts the duckboards were rather tricky to walk on, as they were not perfectly level, by any means. The surrounding country was pitted with shell-holes, and it was a common occurrence for a Digger to "come a gallop" into a shellhole full of icy cold water. "Birdie" was coming down from the line and he happened to be very close to a Digger on his way up to the front line, when suddenly the Digger slipped off the duckboards and landed waist-deep (after breaking the ice) into a shell hole.

Birdie in his ever-pleasant manner asked "What is the matter with you my man?" The Digger climbed out of the shellhole before answering, and replied, "Oh, nothing; but I was just thinking that if we are winning this — war Fritz must be having a — of a time."

The new American census is now being taken by 84,000 enumerators, and the population is expected to reach 112,000,000.