

The Home Side of Life.

HE Brightening up of the Home by artistic Furniture Coverings adds much to the beauty of the House, and makes it keeping with the outdoors.

WE Can assist you very materially in this direction, for not only do we undertake the work of renovating and reholstering Furniture, but we also supply the materials.

OUR STOCKS OF FURNISHINGS in shadow Tissue, Moquette, Corduroy, Velvet, Tapestries, etc., are offered to you in satisfying quantities—new goods in the old qualities that our customers always expect to find here.

WE shall be pleased to make up LOOSE COVERS for you either from materials from our stocks or your own supply.

BROAD, SMALL, AND CO.

BACON PIGS

WANTED IN ANY QUANTITY—PRIME BACON PIGS.

Our Receiving Days:

TUESDAYS AND THURSDAYS.

Tempting Prices for Prime Pork. We Pay Railage.

LANDSAY & CO.

INVERCARGILL AND GORE.

W. DRAKE, DEE STREET.

(Near Club Hotel).

CHOICEST—

FRUIT, and

CONFECTIONERY

ALWAYS OBTAINABLE.

Everybody's Fruit Confectioner.

Dewar's

Imperial

Thomson's

Purity

Soda

MOTORING NOTES.

CARE OF THE REAR AXLE.

The intense mechanical strain undergone by the rear axle calls for the most scrupulous watching to keep it in condition. This is the centre of intense mechanical activity, carrying all the pushes and pulls and jolts and jars of the whole car. The car owner should therefore guard against any rear axle trouble. The safest way is to have the axle examined by an expert as soon as slight trouble develops.

FLUIDITY OF THE OIL.

If the oil in the crankcase is found to be exceptionally thin or light in body it may be that the mixture is too rich, the excess petrol being forced down past the piston rings and into the crankcase, where it mixes with the oil, destroying its lubricating qualities. Incidentally it washes the oil off the cylinder walls. This is most likely to happen when the engine is operated when the temperature is low. The oil level float should be carefully watched, as a great enough quantity of petrol may leak into the crankcase more than to offset the amount of oil used by the engine. The fluidity of the oil should be determined to learn its conditions.

THE STARTING SYSTEM.

The starting motor takes its current from the storage battery through brushes. It sometimes happens that these brushes for various reasons are not making proper contact, and this means more or less failure of the system. When trouble arises in this system these brushes should be carefully examined. Again, one of the cells of the storage battery runs down before the others, which are therefore called upon to do more work than they are able to handle. Also a grain of grit or foreign matter may get between the contact points of a switch and make a world of trouble before it is discovered and dislodged.

HEAVIER MOTOR TRUCKS.

There are fashions in motor trucks as well as in ladies' gowns, and this has caused a writer to remark on the tendency toward change in motor truck design. "Many truck manufacturers," he says, "are abandoning the lighter capacities. In 1919 there is but one manufacturer of a vehicle of less than 1000 pounds capacity. There have been as many as 10. There were four times as many half-tonners in 1916 as are offered this year. Some of the makers who entered the business a year or so ago, intending to concentrate on a single model of half-ton capacity, are now building trucks up to three tons capacity. The story of the 1500-pounder, that bulwark of the department store trade, is the same. What few three-quarter-ton models there are left are being sold in larger quantities than ever, but the business has simply simmered down to a few.

AN ALL-ELECTRIC CAR.

A new all-electric car has just been introduced in the United States, where the use of such cars for both passenger and commercial work is on a much larger scale than elsewhere. So far as can be gathered, the new car embodies the usual motor and storage battery, the points that are new being of a technical nature in connection with the motor. It has a revolving field magnet ring, which is geared through spur wheels to one shaft of the live axle, the armature being geared to the other axle. Thus both members of the motor system rotate instead of only the armature, and as the torque of each member is equal, a differential is dispensed with. It is claimed for this design of motor that it can give twice the output of power as compared with the ordinary type of motor of the same weight.

PETROL CONSUMPTION TRIAL.

The petrol consumption trial arranged by the Auckland Automobile Association was held recently. Fourteen cars entered the contest. Previous to starting on the route selected, the cars were weighed on the weighbridge at Newmarket. Some of the cars carried several passengers, but it was also noticeable that several cars were loaded up to the maximum limit with bars of pig lead in order to increase the weight. Each car had its normal supply of benzine disconnected, and an auxiliary 1-gallon tank was fitted to the car, which was connected to the carburettor with a temporary pipe. As cars weigh so many different weights, the trial run was on the ton mileage basis. This puts any weight of car on the same level practically as any other car. If a car weighs one ton and does thirty miles per gallon the ton mileage basis then becomes 1 x 30—30 ton miles. A car weighing half a ton, in order to equal above result,

would have to travel 60 miles on the gallon of fuel in order to do the same useful work—i.e., transport half a ton for double the distance. It is obvious that increasing the weight of a car allows the engine to work harder and give higher efficiency, due to increased throttle opening. Only half a gallon of benzine was issued to each car, and Mr H. M. Waygood, in an Overland Four, covered 16 miles 704 yards on this quantity, nearly 33 miles per gallon. A Chandler Six, which was weighed and drew 2 tons 8cwt 3qr on the weighbridge, got first place on the ton mileage formula, with a distance covered of 11 miles 743 yards. A Cleveland Six, which was weighted with lead to 1ton 19cwt, covered 13miles 345 yards, being second. In both cases the winning cars were heavily weighted, and undoubtedly the A.A.A. will make it a rule for next contest to limit the load to the passenger seating capacity of the car.

SCIENCE NOTES.

OBSERVATION OF SUNSPOTS.

The frequency of sunspots large enough to be visible to the naked eye is greater than is generally supposed. At a recent meeting of the British Astronomical Association it was stated that members of the Solar Section of the society had observed the sun with the naked eye on 22 days during 1919, and on 126 of these days spots had been seen with the naked eye.

USES OF GLYCERINE.

The diversified uses to which glycerine is put indicate its importance in commerce. Most of the distilled glycerine finds its way into the manufacture of explosives, such as nitroglycerine, dynamite, and the more recently developed high explosives. These are generally a combination of nitroglycerine with gun cotton or nitrocellulose, and the resulting product is known by a great variety of names. Commercially pure glycerine is a well known reagent in pharmacy and medicine, where nitroglycerine itself is sometimes employed. Glycerine enters into a number of technical processes, such as the manufacture of soaps, inks, waterproof paper, and for the production of such plastic masses as printing rollers and other masses used in the art of reproduction. Glycerine is also used in gas meters and tubes which must withstand great cold, and for filling hydraulic jacks. It is one of the important items in sizing textiles and in that treatment of wine, beer, and vinegar known as "sheelizing."

SOAP FROM CLAY.

Soap from clay is the promise made by a group of British chemists who have been working on the utilisation of this plentiful material for a number of years. Stripped of all technical verbiage what this group has discovered is a method of making use of China clay which is found in large quantities both in Britain and the United States, not as an adulterant, but as an ingredient in soap-making. Soap, as most people know, is made now from fat, and fat is becoming scarcer and more expensive every year. China clay is plentiful and cheap. It can be had for the digging and the process of turning it into soap-making material is cheap and easy. It is claimed that it can be used up to 50 per cent. in combination with the usual fatty acids in soap-making, and that the soap thus made lathers as well, is as cleansing and as pleasant to use as soap made in the old way of all fat. The process by which the clay is prepared is simplicity itself. After mining it is purified by a combined washing and chemical process and the resultant finely divided clay after being run into a settling tank is dried and is ready for use. It is a soft soapy substance without a trace of grit.

A NEW ICE CREAM FREEZER.

Hitherto the containers for freezing the cream have been somewhat cumbersome, and often not of the best form for easy cleaning. These drawbacks are eliminated in the apparatus known as the "Auto Vacuum Freezer," which consists of a double cylinder of tinned steel with an air space between the two parts. The ice cream container projects downwards through the top of the inner cylinder, leaving a second space, which, when the apparatus is in operation, is filled with a mixture of salt and ice. The container is fitted with a lid having a cross-bar, the ends of which engage under catches and lock it tightly in position. This inner vessel has a rounded bottom, so that no scraps of cream are left in corners from which they can be scraped out only with difficulty. Such a shape also lends itself

to easy cleansing. At the bottom of the inner cylinder is an opening with a movable door similar to the lid already described, but provided also with a joint ring to make it watertight. When the freezer is to be used it is turned upside-down and a supply of ice and salt is put in between the inner cylinder and the container. After the movable door has been put in place and tightened under the catches, the freezer is reversed, the cream is put into the container, the lid fastened down, and in half-an-hour the ice cream is ready without any further effort.

NIBBLES FROM NEW BOOKS.

If ever the Red Flag is hoisted in England one may safely assume that it will be found to be of a very delicate shade of pink, and even then, after a little while, some of those very people who hoist it will most likely come along and suggest that the flag would be much improved by the addition of some stripes of white and blue.

A man who is tied to an office-stool all day long may in himself enjoy far more complete liberty than that of the idle rich man whose time is all his own. Liberty is an affair of the soul, not of the body.

He knew now that there are moments in which it is a miracle to behave properly, when life becomes simply too cruel to care about. He left that there was a power which sometimes saved people at these moments, but it was not a virtue inherent in themselves. "A Servant of Reality," by Phyllis Bottome.

The German gave it as his opinion that America is bounded on the North by the North Pole, on the South by the South Pole, and on the East and West by the rising and setting of the sun. The Irishman was not to be outdone. Said he: "America is bounded on the North by the Aurora Borealis, on the South by the precessing Equinoxes, on the East by the Garden of Eden, and on the West by the Day of Judgment." "The Better Yarn," By Arthur Greening.

And life—Geoffrey was still young enough to think about life, or at least to talk about it—life, he was ready to maintain, is what you feel and think, not what you do.—"True Love," By Allan Monkhouse.

When Barrie and Galsworthy go, what will the situation be? One or two men who care to write clean plays will be left to fight those giant syndicates who employ young men of the literary underworld to write filth and earn the applause of a rising generation of men and women "about town." So, the point is that to have what she calls a "good time," a girl's got to behave and talk in the new fashion. She must be able to chat about all the latest nonsense in the theatres, and she must be shameless. Then men take her out—young officers chiefly. People talk about a "demand" for rotten stuff. It's not that. It's because the chief purveyors have no ideals. They foist bad things on the public until the public is used to them. Then they say there's a demand for what they supply.—"The Barber of Putney," by J. B. Morton.

Though crimson red is the colour of anger, there is a beautiful soft rose which is the colour of love. "The green-eyed monster" of jealousy history has handed down to us from the ancient seers also the "jaundiced" appearance of envy. A gloomy, grumbling person has a very laden grey atmosphere, and one who has "a fit of the blues" shows he is "off colour" in his dull, maddy-blue aura. But there is a beautiful sky-blue to be seen in the auras of many artists and scientists. Very material, earthly people have generally a deep, dull orange tinge in their astral envelope, and there is a glorious golden yellow surrounding the heads of the spiritually joyful, and highly intellectual. Purple is the colour of power, greatness. Children have an aura of crystal whiteness, which develops colour after the age of seven.—"Ghosts I Have Seen," by Violet Tweedale.

I would rather have a day in the trenches than make a speech. Once I get up on the platform, or whatever it is, I feel better, but in that ten minutes before I go on, I tremble like a blanc-mange in an east wind. All the little things which I have previously decided to say, and which I have repeated to the bedroom looking-glass with enormous success, are of course completely forgotten; instead some lukewarm phrases are exuded through trembling lips and chattering teeth, and, finally, by some miraculous piece of luck I squirt out a lucky, pithy, and, perhaps, pertinent or humorous remark. . . . then sit down in a bath of perspiration.—From "Mud to Mufti," by Bruce Bairnsfather.

CHEAP MEAT.

ONLY PRIME QUALITY,
BEEF AND MUTTON.

AT EVERYBODY'S
BUTCHERY.



A. CUNDALL,
Proprietor.

For several years Manager
City Meat Co.

(Kelvin St. one door from Esk St.)

WHERE DID YOU GET THAT
LOVELY FRUIT?
THAT HANDSOME BOX OF SWEETS?

THOSE BEAUTIFUL PALMS AND
ASPIDISTRAS?

WHY AT—

WELSH'S

FRUITERER AND CONFECTIONER,
TAY STREET.

THEY HAVE ALSO CLEANEST AND
BEST OF FOUNTAIN DRINKS.

A. E. HOBBS,

Proprietor.

Phone—400.

IN STOCK . . .

Chocolate Raspberry, Dates, Almonds,
Ginger, Raisins, Caramels, Montepennant. Also Creams, and a large assortment Boiled Confectionery.

Cadbury's, Fry's Romion's, Court,
Ausbrosk's Fancy Boxes.

Ring 1370 and I will have your Sweets ready for you.

F. C. Jarvis,

"EXCELLA," DEE STREET

Next Bank N.S.W.

Books to Read.

LATEST NOVELS, AT 6/-

"This Marrying" (Margaret Culkinn Banning).

tier" (Joan Sutherland).

"No. 7, Saville Square" (Mr Le Queux).

"Pink Gods and Blue Demons" (Cynthia Stockley).

"Penelope" (Elizabeth Kirkby).

"Desborough of the North-West Front"

"Days of Probation" (Louise Gerard).

(A nursery Novel).

Gardner & Son,

TAY AND KELVIN STREETS,

INVERCARGILL.