FARM PROBLEMS

Conducted by Prof. Henry G. Bell, Dept. of Chemistry, Ontario Agricultural College, Guelph

superphosphate usually involves the 11 out of the 15 tests acid phosphate grinding of this rock to a definite fine-made substantial gains over raw rock ness and treatment of it with sul-phosphate. In all but 4 of the tests phuric acid. This treatment produces 2-12-6 was a materially heavier yielder soluble forms of phosphoric acid thu raw rock phosphate, which constitute available phosphate 6 tests on barley show. soluble forms of phosphoric acid the raw rock phosphate.

which constitute available phosphate
under the regulations of the Dominion yield for unfertilized of 25.9 bus, per
Fertilizer Act. The 53% tri-culcicacre; raw rock phosphate 34.7; acid
phosphate is ground much more finely
phosphate is ground much more finely
phosphate 35.6 and 2-12-5 38.9 bus, per
and destroyed \$500,000 fishing propacre. phosphate is ground much more nuch phosphate is ground much more nuch phosphate used acre.

Than the ordinary rock phosphate used acre.

7 tests on fall wheat in various phosphate used acre. than the ordinary rock prospute used for the manufacture of superphose for the manufacture of superphose principle. The object of the superfine parts of the province showed an avergrinding of the 33% raw rock phose age yield for no fertilizer of 22.8 bus.

regulations of the Dominion Fertilizer acre.

Act. the 33% raw rock phosphate shows an availability of fact to 1.5%. tato growing sections in New Ontario Superphosphate, which has a total content varying between 17 and 15% no fertilizer of 312 bus, per acre; raw phosphoric acid (P205) shows an rock phosphate 372 bus, acid phosphate acre. regulations of the Dominion Fertilizer acre availability of 16% under the author- phate 414.3 bus. Certain of the soils

phosphate with a mixed fertilizer such tioned to some extent under such con as 2-12-6, first, because less than 2% ditions. It is the opinion of this sta as 242-6, first, because less taan 256 tations, it is the opinion of this state in the 25% total phosphoric acid of tion, based on work previously concaw rock phosphate is available while, cutd with more coarsely ground raw 1256 phosphoric acid and 657 potash is be looked for in succeeding years due available; second, because raw rock to the unused portion of the rock phosphotocycle acid phase to the comming available as time goes the comming available as time goes phosphate carries phosphoric acid responsibilities of lime, while 2:12-6 carries nitrogen and potash in addition to 12% this station up to date and at the available phosphoric acid. This is price you indicate per ton we cannot recommend the purchase and use of how the three materials compare:

20% raw rock phosphate as a source of available phosphoric acid, in view

Plantfood

Rock Phosphate-Nitrogen, 0: Phosgen, 0; Phosphoric Acid, 16; Potash, plant food than the latter—two value 0; or in 1 ton 320 lbs. 2-12-6—Nitronen, 2; Phosphoric Acid, 12; Potash, phosphoric acid carried by raw rook 6; or in 1 ton, 40 lbs. Nit., 240 lbs. Phos. Ac., 120 lbs. Potash.

Thus a ton of 2:12-5 fertilizer contions and answers:

L.G.—There is a fertilizer on the market and is making its first appearance in this district this year, called of mirrogen and 120 lbs, of potash.

market and is making its first appearance in this district this year, called Tennessee Rock Phosphate, 23% total phosphoric acid. Is it a safe fertilizer to use, as some people gire it a had name, or have you had any experience with it? Would you think it as good buying it at \$20,00 a ton as a 2-12-5 mixed fertilizer at the same price? I farm 100 acres of land and sow fertilizer on everything i sow. Even at that I don't know everything about fertilizer yet and I am ready and willing to learn all I can.

Answer,—Ilaw rock phosphate is found in Tennessee and Florida. The grade you mention contains 23% tricalcie-phosphate. Grades containing a higher percentage of tri-calcie-phosphate. Grades containing a higher percentage of tri-calcie-phosphate. The manufacture of superphosphate usually involves the grinding of this rock to a definite fine-passe and treatment of it with sul-

phate is to increase its availability. per acre; raw rock phosphate 31; acid When subjected to tests provided by phosphate 40.7; 2-12-6 45.2 bus. per per acre; raw rock phosphate 31; acid

availability of 16% under the author, phate 414.0 nms. Certain of the solid ized tests. Therefore the comparison on which these potato tests were conformal ability between these two maducted showed a strong degree of terials is as 1.8 to 16. It is difficult to compare raw lock of the raw rock phosphate has func

of available phosphoric acid, in view of prevailing prices quoted for superphosphate. As to a comparison phoric Acid, 1.8; Potash, 0; or in 1 2-12-5 with raw rock phosphate, the ton, 35 lbs. Superphosphate—Nkro-former carries so much more available. former carries so much more available able plant foods in addition to the phosphoric acid carried by raw phosphate an! 2-12-6 alike parison is impossible.

Canada to Stage Do Drivers Ignore Rifle Matches? Road Sign Warnings

- Under the heading "A Canadian Bisley, the Montreal Star makes the following observations: Sportsmen everywhere will commend the scheme to establish a Canadian Bisley Meet on the Connaught Ranges this coming summer. It is proposed to hold one competition in which teams representing Western Canada, Eastern Canada, and the National Rifle As-This will be known as "The Canada," and will be known as "The Canada," and will be conducted along the same lines as the competition for the famous Kolapore Cup at Bisley. Another competition, to be known as "The Empire," will be based upon the conditions governing the Mackinnon Cup competition at Bisley, and will open to marksmen from all over

the Empire. By thus augmenting the annual Donion of Canada rifle matches, the D.C.R.A. is providing greater facilities for Canadian marksmen to improve their shooting, and at the same time with the necessity of correcting them. is doing something vital for the cause of sport in Canada. demands nerve, self-control, endur ance, the ability to lose gracefully, and a very keen sense of sportsman ship. These qualities the Bisley Meet has encouraged and developed for many years past.

Canada, by virtue of her pre-emin-ent position so many times at Bisnent position so many times at Bisley, is surely entitled to have a
modest Bisley of her own. It is not
too much to expect that the proposal
will be received sympathetically in
other parts of the Empire. It man,
letter parts of the Canadian
lette eventually be a series of Empire Bisleys, held from year to year in the self-Governing Dominions in rotation. Such a scheme would have many attractions, and would serve to stimulate still further interest in one of the finest of sports.

Advice to the Rich

London Morning Post. There is at the present moment a widely held belief that the private individual can help the unemployment situation by spending less and saving more than We think that this belief is mistaken. Not, indeed, that we de preciate the virtue of thrift; if there had been more to it in the period since the War the country would have been more prosperous than it has been. But additional thrift at a time of depression like the present merely adds to the capital surplus for which there is no immediate use spending, on the other hand, by those whose incomes are unimpaired, will belp to keep the markets active and promote employment. Ou advice, therefore, is that those who can should spend, not extravagantly, but

In submarines the United States Navy is strongest with \$5; France The harder the pull the more likely comes next with \$2 then Japan with it is to slip. So keep the throttle comes next with \$2 then Japan with 67, and Creat Pritain fourth with 53.

more often he passes a car going up a hill without mishap, the more careless e gets. Education of drivers and pedestrians rather than guards and safety devices

will eventually reduce the number of traffic accidents to a minimum, says Dr. A. R. Lauer, associate professor of psychology at Iowa State College. Studies have indicated that safety deices eliminate only about 20 per cent. of accidents.

Dr. Lauer urges the education of the public, and especially school children, in safety habits. Drivers, he says, need to be acquainted with their dangerous driving habits and impressed Apparatus to test the ability of drivers to respond quickly to various driving situations and to avoid acci-dents is being constructed, under the professor's guidance.

Foreign Decorations

be the beginning of what will accept orders and decorations award ed by foreign Governments. This is a strangely anomalous position. Some people suggest that British people suggest that British littles should once more be permitted in Canada, which would mean "Sirs" appearing again among us in appreciable quantities; whilst others want the total abolition of all foreign want the total abolition of all foreign titles, since we are not allowed Brit-ish ones, as long as we remain part of the Empire. One of these days the clestion will have to be settled for good and all in the Commons, and we may then expect a really exciting debate.

Wicked Boy!

A boy of twelve was sent to Mr. Kelso to be provided with a foster home and when the young lady clerk in questioning him about his life ask ed him if he ever used bad words, he reflected a little and replied, "Well, I once said 'devil,' but that was because another boy dared me to."

For Slipping Gears

If the car shows a tendency to slip out of second or high gear when pulling, temporary relief can be at-tained by driving slowly and keeping the hand on the gear shift lever. The harder the pull the more likely

Fresh Salmon On Sale In Newfoundland

Out of Season Fish, Streets Bare of Snow, Indicate Shift in Arctic Current

St. Johns, N.F.-Many hundred pounds of Atlantic salman fresh from nets of local fishermen have been on sale here, creating a situation uni-que in Newfoundland. Streets are as bare of snow as in October. Grass is green and plants are growing out of 6 ors. Mere mildness of weath-ed might be attributed to a freak of nature, but the presence of salmon in quantity in these waters indicates that ocean currents have something to do with it.

Salmon are caught here in May and June on their way to ascend rivers for spawning, and sometimes in November on their way out. Being found in shore waters at this sea. son would indicate that the Arctic carrent, which is usually supposed to wash these shores, has been deflected and some offshoot of the Guit Stream is sweeping near these coasts. Last season codfish and bait fishes failed to appear in the south coast waters of Newfoundland. Local opinion is that the earth

erty in the Burin area and smashed a score of telegraph cables, were re sponsible for some change in ocean currents. At any ate, the warmes summer in Newfoundland history followed last season, and now the unseasonable presence of shoals salmon and mild weather would indiexistence of some unusual

During all the month the of large flocks of robins in various parts of Avalon Peninsula has been most marked. The whole situation most unusual and is puzzling to the residents.

Vancouver Sets January Record

Highest Average Temperature

struction in one of the huge liners of the Dollar Line and sailings from New York to Manila, via California, Hawaii, Japanese and Chinese ports

Lloyd George at 68



Barely showing his age, Lloyd George, national figure in English politics, is seen (above), on his sixty-eighth birthday, spent on his

Sunday School Lesson

February 22. Lesson VIII—Jesus
Bearing the Good Tidings—Luke
8: 1-15. Golden Text—He went
throughout every city and village,
preaching and shewing the glad
tidings of the kingdom of God.—
Luke 8: 1. Luke 8: 1.

ANALYSIS.

I. MINISTERING WOMEN, Luke S: 1-3. II. PARABLES, Luke 8: 4-9. III. SOWER AND SOILS, Luke S: 11-15.

III. SOWER AND SOILS, Luke 8: 140.

III. SOWER AND SOILS, Luke 8: 140.

III. SOWER AND SOILS, Luke 8: 141.

I. MINISTERING WOMEN, Luke 8: 140.

If the church interpretation of the sun initistering women; no doubt their rames were familiar in the Early Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been on the south-west coast of the Sea of Church. Magdala seems to have been to the south-west coast of the Sea of Church. Magdala seems to have the south-west coast of the Sea of Church. Magdala seems to have the south-west coast of the Sea of Church. Magdala seems to have the south-west coast of the Sea of Church. Magdala seems to have the south-west coast of the Sea of Church and the south-west coast of the Sea of Church. The tea of the preaching and the coast of the Sea of Church. The tea of the preaching the mil Highest Average Temperature
Recorded in Last 25
Years
Vancouver.—The month just past was the warmest January on record in Vancouver, it was announced recently by E. B. Shearman, official weather observer.

Not only was the mean (average) temperature of 42.1 degrees highest is nearest competitor, 40.05 degrees in January, 1914, but the maximum of 58 degrees on the 18th was the highest thermometer reading recorded in the 25 years during which official records have been kept.

The average temperature in the 25 years period has been 35.4 degrees. January also came close to setting a rain record with 11.24 inches, which was exceeded only in 1925, when January 9 was the coldest day, the thermometer recording 29.1 degrees in the early morning.

STEAMER GARAGEGS
Molorists will soon be able to go down to the sea in automobiles. A sea-going garage is now under construction in one of the huge liners of the Dollar Line and sailings from New York to Manila, via California.

H. MINISTERING WOMEN, Luke 8: 1-2.

I. MINISTERING WOMEN, Luke

Vs. 4-15. Still, today, if an Oriental New York to Manila, via California, Hawaii, Japanese and Chinese ports will begin this summer.

This garage will provide first-class seven-league boots for motorists, for it will be possible to motor in California one day, and a week later drive through the streets of Hong Kong or Shaughai in their own car.

The garage will be conveniently located so that motorists will be able to drive their cars abroad through the side without difficulty.

Space for more than 190 cars will be provided.

Vs. 4-15. Still, today, if an Oriental teacher is asked a religious question, it is likely that he will answer with a parable is, as it was in Jesus' time, a familiar method of conveying truth. It is a device for teaching, not for concealing truth. It is a device for teaching, not for concealing truth. It is a device for teaching, not for concealing truth. It is not to the history of the province, Alberta Oil Wells, in December, 1930, protect that historical and moral probability that Jesus used parables in order to hide his meaning from the whole year ended December 31, 1931, just released 1,433,814, as compared with 993,1-2 for 1929.

The year's production according to the various fields was as follows: Prophet meant that the result rather than the intention of his preaching was the hardening of men's hearts, Isa. 6: 9, 10.

But the worklose method of its preaching to the various fields was as follows: Naptha from Turner Valley, 50,315 barrels; Isa. 6: 9, 10.

But the will answer with a parable is, as it was the will answer with a parable; is is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a parable; it is likely that he will answer with a fedication. State of the history of the province, Alberta oil

taken as dark and mysterious allegories which required skillful and learned interpretation. But if the disciples themselves could not understand the parables of Jesus, much less could the common people; then what would have been the use of preaching which neody, unde stood? We are bound to assure, therefore, that the parables of Jesus represent the simplest form into which he could put his teaching, and that its maining would be plain at least to the more spiritually minded of those who heard him. But every preacher who bases his sermon upon a parable of Jesus explains the parable, and says, in effect, "Jesus meant so and so." The Early Church did not draw any very clear line of distinction between "Jesus said" and "Jesus meant."

HIL SOWER AND SOILS, Luke S: 11-15.

Alberta Wells Set

tions. The percentage of unemployed trade unionists in that month were:

A woman writes to say the domestic servant is not the only one who likes change. The taxidriver asks for it, the simple parables of Jesus were crude from Ribstone, 1,873 barrels; heavy crude from Ribstone, 53,917 barrels; heavy c

Typhoid Fever Death Rate Highest in Rural Communities

By John Burke Ingram
"Well, John," said Mrs. Henry as
they watched their three children walk

50, the wandering is justified, because typhoid fever furnishes an outstanding example of bad health-manage. so, the wandering is justified, because typhold ferer furnishes an outstanding example of bad health-management in rural areas. In big, congested cities where you would expect to find most typhold, you actually find the least, and in rural Canada, where you would expect the fresh air and sunlight to keep this disease dowin, you actually find a death-rate from typhoid ferer that is not merely as high, but many times higher, than the rate for a city like Hamilton, or Toronto. And the fact that these valuable rural lives are being wasted emphasizes our great national need—a system of full-time rural health units—full-time medical.

efore it has had time to be thorough belined vi

Well, John," said Mra. Henry as they watched their three children walk down the road to the school-house half a mile away, "we may not have all the conveniences that city people have, but at least we have the saiffaction of knowing that our youngstera are being brought up in the healthy, open countryside, and not in some congested, disease-ridden city!"

How about that loving, staunch speech of Mrs. Henry's! What do you think of it? Do you still believe that the country is a "healther" place to live in than the city? Because if you do, you're wrong! Once upon a time cities were disease ridden, and the cities were disease ridden, and tho country was by comparison free from sickness. But for years medical sclence has been learning more and more about the art of keeping people well, and most large Canadian cities, with their efficient public health departments, can show a cleaner bill of health than can the average rural area.

When I started to write this article, I intended to tell you something about typhoid fever. Perhaps I have wandering is justified, because typhoid fever furnishes an outstand-typhoid fever furnishes an outstand-transfer. Jobbid tever. Fernaps 1 have but if lactory as sugnow were lered a little from my subject, but if freedom from typhold germs is coa-

national need—a system of full-time rutal health units—full-time medical departments of health, similar to those which Quebec is rapidly organizing in all parts of that province.

Typhoid fever is a germ-produced disease. Cities have conquered it largely by keeping the typhoid germs from being swallowed by their citizens. Typhoid germs live and multiply and thrir: in milk and in water. Canadian cities kill the germs before their citizens drink the milk and the water, by chlorinating the water and pasteurizing the milk.

One should remember in considering contamination I am understating the case. The cow herself

	Per Ce
United States	
Germany	
Great Britain	10
Australia	90
Hungary	10
Denmark	15
Norway	120
Canada	
Total registered un	semployed in Ge
any was 3,977,000,	and in Factord 9
06,963.	Ligiting 2

an hour on the beach speedway here, expressed such a desire while mak-ing preparations for his return trip to England.

"It is my very great ambition to be able to drive a car at that speed," he declared as he opened and read hundreds of cablegrams and tele-grams, received from all parts of the world, congratulating him on his rec-ord-breaking achievement in his huge Bluebird racing car.

"I have said that I am not satis-fied with my present record of 245. That is true, but I do not contem-plate any more record trials soon. There is plenty more speed in my Bluebird, but these trials are beastly expensive.
"Perhaps, if I can find some mil-

lionaire who will help finance such an undertaking, I shall shoot for tha 300-mile mark within the next few years. There is nothing I should like better to do. I should say that at present it is my greatest ambition." Campbell would make no definite predictions as to when he thought an automobile speed of 300 miles hour would be attained, but inti-mated it would be within the next three or four years.

Campbell declared he would have

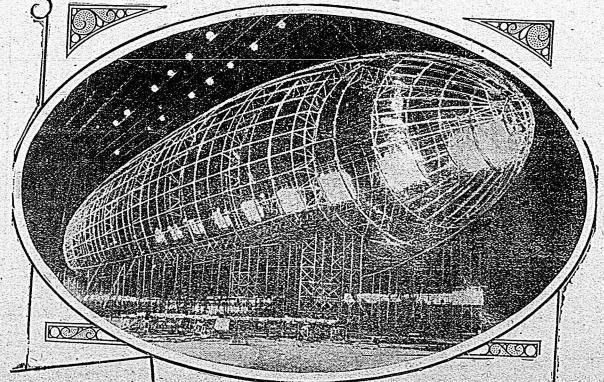
no fear in trying for a speed of 300 miles an hour, provided he had a cart that was absolutely stable and a

course that was perfect.
"I am what you call a fatalist. I believe that I am not going to get mine until I am supposed to. When that time comes I shall be ready to meet it. But why talk of that now. I have no fear. I absolutely get no sensation of the!! while traveling at so fast a speed."

250 Canadians

Buenos Aires.-It was announced here recently that a dilegation of 250 Canadian business my; and industrialists, headed by a delegate named by the Canadian Government, will arrive in Buenos Aires March 13 on board the liner Prince Robert. The Canadian visitors will stay here until March 23, visiting the British Trade Exhibition and the principal centres in Argentina.

The Record! Come-to-Grief Airman: "I was trycome-to-Grief Airman; I was ay-ing to make a record."
Farmer: "Well, you've made it. You be the first man in these parts who climbed down a tree without having to climb up it first."



Gigantic Dirigible Under Construction

World's largest dirigible, which is now being constructed at Akron, Ohlo, is rapidly nearing completion, the huge 70-foot ness having recently been put in place. Only tail assembly is yet to be added, and then the task of putting on the outer fabric covering will begin