Much interest has been evidenced in the new Boy Scout Catalogue of Official Uniforms and Equipment which has just been issued and a copy of which has been mailed to every Lone Scout in this province. It is certainly an attractive publication, and features a large variety of articles of interest to Scouts of all ages.

A notable feature is the remarkable reduction in the prices of uniforms and we also notice that there are quite a number of new books and other items listed.

Lone Scouts will not find any mention of the special Lone Scout Mauve Neckerchief in the catalogue as this color has been reserved for the exclusive use of Lonies in Canada. When ordering uniform, however, Lone Scouts should be careful to specify that they require the "Special Mauve Lone Scout Neckerchief."

**Sir Ernest Shackleton's Scout**

The scientific staff of the Antarctic research ship Discoverer II., now in the far South Seas, includes J. W. S. Marr of Aberdeen, a Scout selected to accompany Sir Ernest Shackleton on his last expedition to the South Pole in the Quest. Scout Marr also accompanied the Algarson expedition to the Antarctic, and has since qualified for several university scientific degrees. He has made good.

Many Lone Scouts will envy the opportunities which have come to Scout Marr, and we would remind them that it was only because he worked hard to qualify himself as a good All-round Scout that he was selected in the first place.

**A Cenotaph Flag For New Zealand**

A white ensign from the Cenotaph in Whitehall, London, was presented to the Scouts of New Zealand by Lord Baden-Powell, and placed for keeping in Christ Church Cathedral, Auckland. A similar flag, presented to Canadian Scouts at the last world Scout Jamboree, occupies an honoured place at Dominion Scout Headquarters,Ottawa. Dominion Headquarters at Ottawa have a number of interesting souvenirs from Overseas, including a beautiful Totem Pole, which Lord Baden Powell presented to the Canadian Contingent which attended the Jamboree in England in 1929. This totem pole was on exhibit at the Scout Booth at the Canadian National Exhibition last summer.

**Next World Gathering of Boyhood**

The dates for the next world gathering of Boy Scouts have been announced as August 1 to 13, of next year. The jamboree will be held in Hungary. It is expected that Canada will be represented by a contingent.

**Hobbies**

During the winter months it is often hard for a Lone Scout to find much to do to amuse himself, during spare time, especially if he is not a member of a Lone Patrol.

Patrols can organize Winter Hikes, Skiing Parties, Snow Fights and Skating Sports and have a lot of fun, but it isn't so interesting to do these things all alone.

We suggest therefore, that all the Lonies, whether members of Patrols or not, should have a hobby. You will find that almost every successful man has a hobby of some sort or another, with which to relax his mind, during his spare moments.

In the winter months it is nice to have an indoor occupation, such as Fretwork, Wood Carving, Collecting Stamps or Autographs, etc., making rugs or bead work, straw plaiting, etc., some of which hobbies can be made into very profitable occupations.

A suggestion has been already made to you that you enter the Fisher Body Craftsmen's Guild coach building competition.

"Lone E" also has a number of autographs of famous people, and foreign stamps which we would be glad to send to any Lone Scouts who apply for same, to the Lone Scout Department, The Boy Scouts Association, 330 Bay Street, Toronto 2, from which address, also, full particulars may be obtained of how to become a Lone Scout.

—"Lone E"

## African Farmer Trains Baboons As Farm Hands

Capt Town.—Rivaling the wildest jungle "yarns" in strangeness comes the thoroughly authentic news, as told in the Christian Science Monitor, of three baboons captured by a farmer in the Brits district and put to work weeding his land.

Baboons abound in hundreds in the mountain fastnesses along the Magaliesberg range, and farmers are sometimes obliged to set traps to rid themselves of the prowlers. Mr. Jan Englebrecht, of Bokfontein, caught three of the wild creatures at various seasons.

The first of these he called Japie. By the exercise of the greatest care and kindness, Japie was soon taught to lead the oxen on the land, and later even was to be seen at the head of his team walking down the village street.

Some time after, Mr. Englebrecht caught two young baboons and these, by the time they reached the age of 12 months, were proficient weeders of his farm land.

Mr. Englebrecht asserts positively that Hennie and Kaffer, as he has named the two baboons, are each of them equal to three natives for weeding.

It is a comparatively easy matter to instill knowledge into their small heads, he affirms, provided gentleness and patience are employed. In teaching them to weed, they were taken to the fields and a particular weed was pulled up and showed to them. They would sit with solemn faces watching the actions of their teachers.

Then the weed would be taken into their two small hands. It was first carefully examined, then smelled, and immediately the willing weeders set to work to clear the land of that particular plant.

Their speed and thoroughness are said to be marvelous. If perchance they were set to work to uproot a particularly stubborn patch of grass they would pitch in with a will and refuse to stop until the last vestige of a root was removed.

Mr. Englebrecht's lonely farm is often visited by nature scientists and other inquiring folk anxious to see and speak for themselves to this strange phenomenon.

## The Use of Words

The proper force of words lies not in the words themselves, but in their application. A word may be a fine-sounding word, of an unusual length, and very imposing form its learning and novelty, and yet in the connection in which it is introduced may be quite pointless and irrelevant. It is not pomp or pretension, but the adaptation of the expression to the idea that clinches a writer's meaning:—as it is not the size or glossiness of the materials, but their being fitted each to its place, that gives strength to the arch; or as the pegs and nails are as necessary to the support of the building as the larger timbers, and more so than the mere showy, unsubstantial ornaments.—From "On Familiar Style," by William Hazlitt.

## Memories of Canada

From a New Year card sent to former pupils in the Dominion by Miss Mary Tweedie, Headmistress of Edinburgh Ladies' College, one of the twelve British Headmistresses who toured Canada last summer.

We've wandered—here in Europe,
In Norway and in France
In Germany, and Italy
The lands of old romance;
But we never met the vigor
Nor the eager spirit found
That wrapped up round so gaily
On the fair Canadian ground;
The snow-peaked hills and prairies,
The mighty waters' roar
The land of orchard blossom,
And far Vancouver's shore,
The tall, upstanding forests
And the tales of men of yore,
Fill our hearts with dreams of beauty
And our minds with nature's lore;
And the people are our kinsmen,
Showing us a kinsmen's love
Which we render in full measure
To that land where still we'd rove.

Edinburgh. —Mary Tweedie.

## Brazil Hopes to Restore Democratic Rule in Fall

Rio De Janeiro.—After fourteen months of a dictatorial government under Provisional President Getulia Vargas, Brazilians are hoping to return to a constitutional regime before the end of 1932.

It appears likely that the new enrollment of voters and the constitutional convention will have passed in time for the country to return to a Democratic government on October 24, 1932, two years to a day from the overthrow of President Washington Luis Pereira de Souza.

The provisional government is credited with being both idealistic and practical. Many economies in administration have been made. Like other one-crop countries, Brazil has suffered greatly through the drop in the world price of coffee, the greater part of which is exported to the United States. This price drop and the fall in the value of the milreis, from nine to sixteen to the dollar, has affected adversely the income not only of the coffee growers but also of the federal government.

## Fossilized Apples Unearthed in Alberta

Olds, Alta.—While fossilized palm leaves figs and fig leaves have been uncovered in southern Alberta, as proof that around 70,000,000 years ago this part of the West was a tropical land where the dinosaurs roamed, yet it was not until last month that petrified apples have been unearthed.

This discovery was made by a farmer digging a well in the Olds district, who unearthed petrified apples on a petrified branch of the ancient tree. The Calgary museum has been notified of the discovery and the well has been refilled with earth to await further excavation work by experts in this branch of research.

## German Bobsledders Crash Second Time

Germany's bobsledders had their second serious accident on the Olympic slide when the four-man team crashed through a dangerous zig-zag curve. Captain Grau (at wheel) suffered fractures of shoulder, hip and skull and Albert Brehme (standing) injured spine and skull.

## Women's Ability to Meet Change Called "Amazing"

New York. — Women are meeting every economic adjustment demanded of them with a gallantry and understanding as amazing as it is admirable, Miss Anne Morgan, president of the American Woman's Assaciation, said in a radio talk over Station WJZ of the National Broadcasting Company

"While they are waiting for the new opportunities which must come," said Miss Morgan, "they must adapt themseves to the needs of the moment. So we have an actress and a home economics expert selling books, an art director acting as companion, a concert singer teaching French and Spanish and translating manuscripts for a publishing house. Accountants are serving as hostesses in tea rooms.

"Many women who had worked up from stenographers and secretaries to all sorts of executive and responsible positions are returning for the time being to the typewriter. One member has devoted herself with such energy to her hobby that she has equipped herself in the past year to make it her primary profession."

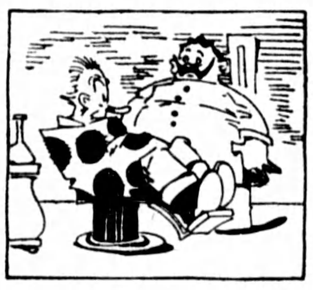
Women are making these adjustments for two reasons, according to Miss Morgan, first, because they need the money, and second, because they know that they must keep themselves active and interested, so that when the opportunity comes to return to work for which they are fitted, they will go back with the same alertness, energy and self-respect which previously made them capable of carrying responsibility.

## Teachers Seek World Amity

Mexico City.—The National League of Schoolmasters has organized an affiliated association called Fraternidad Internacional to cultivate closer relations with the schoolmasters of other countries, especially Hispanic nations. One will be to combat teaching of history in such a form as to cultivate international animosity.

## Colonization in Quebec

Le Progres du Saguenay, Chicoutimi (Ind.): The first phase of the colonization movement is ended; the embryonic stage has given place to the stage of adolescence and full development. We do not think that we are straying far from the truth when we say that next autumn half of our colonists will be able to live comfortably on the revenue of their own lands. Some of them are going to sow 25 40, and 50 bushels of grain; others as much as 75 or 80. Add to this the precious produce of the garden, the farm-yard, the spinning wheel and the loom, and you will have to admit that these people, suddenly becoming little kings in their own domains, would regard it as an insult to accept any of our unemployment relief money. Are they not better off than the majority of our farmers and practically all of our industrial workers? Can one deny that the scheme has been a great success and has proved a very practical way of solving, among other problems, the terrible question of unemployment?



Barber — "I'm forty-five years old."

Customer—"How old were you when you began to give me this hair-cut?"

## Goats!

The goat's not my favorite mammal.
Mr. Gandhi dotes on it I know;
It's milk is nutritious
And doubtless delicious,
But I don't like the critter's B. O.

—W. P. in the Boston Transcript.

## Looks a Winner

Mrs. Eva Seeley and her lead dog Gripp, who are participating in the New England sled dog races at New Hampshire. If she wins, she will take her dogs to Lake Placid for the Olympic races.

# Latest Notes of Science

New Supply Sources — How Infinitesimal is Measured

Last week came the news that in "towsagis" the Russians have discovered a plant which will yield a rubber-milk with industrial possibilities.

After years of investigation and study Edison reached the conclusion that there are at least 1,500 plants that can be milked for rubber with some hope of commercial success. Probably ten times that number of plants contain gums of some sort. Considering the fact that the whole world has been combed for trees, vines and shrubs that will yield rubber in commercial quantities and of industrial quality, it seems highly improbable that towsagis is a species new to botany.

* * *

**Measuring the Infinitesimal**

Before the annual meeting of the American Institute of Electrical Engineers, C. W. LaPierre described a new application of the marvelously sensitice photo-electric cell. He has made it the principal element in an instrument so sensitive that it can measure a millionth of an inch.

And yet Mr. La Pierrie's advice is positively coarse compared with the ultra-measurer of Professor R. Whiddington, an English scientist. Imagine a steel rod one-half an inch in diameter and twelve inches long. Imagine this rod held horizontally, with one of its ends in a vise and a fly on the opposite end. The weight of the fly will bend the rod and Whiddington's electical instrument can meausre the amount of the bending, provided that it is as much as one five-hundred millionth of an inch.

In automobile building it is an ordinary performance to caliper the ten thousandth part of an inch. In a few machine shops, where scientific instruments are made. Millionths of an inch are measured. The Bureau of Standards has a balance so delicate that the man who weighs with it must stand at a distance lest the heat of his body vitiate the readings. The late Professor Rowland's machine for ruling hundreds of thousands of lines on a square inch of surface to make what is called a diffraction grating is so delicate that it must be locked up when it starts working. The bolometer invented by Professor Langley to explore the invisible infra-red portion of the spectrum is able to detect the heat of a candle a mile away.

Probably the record for minute measurement is held by Professor Arthur H. Compton. He has determined the length of waves in X-rays to the five hundredth part of the diameter of a single atom. This means the hundred thousandth part of the millionth of an inch. A double X-ray spectrometer is te measuring instrument he uses.

* * *

**Again the Cosmic Rays**

Before an audience of a hundred scientists, among whom was Dr. Einstein, Dr. Millikan at Pasadena announced his intention of renewing the cosmic ray studies that he began ten years ago. Apparently this investigation is to be conducted independently of Dr. Compton's, which is to be world-wide in its scope.

Millikan, it will be remembered, believes that the cosmic rays result from the creation of matter in outer space. It must have been a dramatic moment in Pasadena when he turned to Einstein and acknowledged his debt to relativity. According to relativity, mass and energy are different forms of the same thing. Mass can be converted into energy. That is what happens when hydrogen is changed into helium. The conversion is not quite complete. A little mass is left over, and all this, according to the relativity theory, must be dissipated as energy. In the cosmic rays Millikan sees the excess energy.

Probably this question will never be settled until somebody actually transforms hydrogen into helium and obtains cosmic rays as a by-product. Meanwhile, Millikan proposes to gather more evidence to support his views. In 1922 he sent up sounding balloons to nearly ten miles at Kelly Field, Texas—ballons laden with sensitive instruments that noted the little electric shocks experienced when they were exposed to cosmic rays Millikan was able to show that the higher his balloons went the stronger were the rays. Now he wants to go higher than Piccard climbed in his record-breaking ascent.

Just as visible light consists of a gamut running from violet to red, so there are cosmic rays of different "colors." Some of these cosmic ray "colors" cannot penetrate our atmosphere. By sending up balloons to heights of fifteen or twenty miles it may be possible to discover them. They wil lthrow light on the origin of the rays.

As matters stand, Millikan has made out a case for his theory. It it can be substantiated by still stronger evidence, it will be necessary to rewrite all the books on physics that have been printed in the last twenty years. Should it turn out that matter is in the process of creation as electrons and protons coalesce in outer space, all our beautiful theories of the evolution of the stars and the universe must be cast aside for totally new ones.

* * *

**How Bright Is the Sun?**

Our notions of the relative brightness of sun, moon and stars are qualitative rather than quantitative. We know that to us the sun is brighter than any other celestial body but not how much brighter. In the new edition of its Meteorological Tables just issued by the Smithsonian Institution, Dr. Herbert H. Kimball of the Weather Bureau gives the information we want in terms of foot-candles—the amount of illumination received from a standard candle a foot away.

It is not very impressive to learn that the noonday sun has an intensity of 9,600 foot-candles at the surface of the earth, that the illumination from the full moon at its zenith is only two-hundredths of a foot-candle, and that starlight amounts to only eight hundred thousandths of a foot-candle. We are more reconciled to the figures if we express them in a different way. The sun seems to shine more brightly when we say that it gives 465,000 times as much light as the full moon overhead and that it is 120,000,000 times brighter than all the stars on a fine night. — W. K. in "The N.Y. Times."

## Planning Safety Week; Has Fewer Accidental Deaths

London—Safety Week will be celebrated in London this year from May 2 to 8. The National Safety Congress will meet here at the same time.

During the first nine months of 1931 there were 438 fewer deaths in the corresponding period of 1930, caused by accidents recorded than the total number reported being 3,631 against 4,069. The reducing in the number of deaths was 10 per cent., while the decrease in the amount of traffic on the road was only 2¼ per cent.

## King George to Have Dial Phones

London—King George has followed the Prince of Wales as a user of the dial telephone. St. James's Palace, where the Prince lives, has already recently been changed over and from now on Buckingham Palace will also have dial telephones. During the absence of the Court from London, postoffice engineers have been at Buckingham Palace effecting transformation from the old Victoria exchange to the new automatic Whitehall exchange.

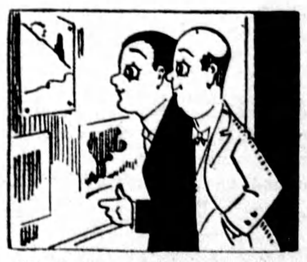
## Canada's Northern Population

In its more northerly areas of Canada the white population is, as yet, small, but it is ever increasng. According to the Department of the Interior in the areas north of the timber line are several bands of North American Indians, while the islands and northern coast lines are the home of the Canadian Eskimo. Within the Northwest Territories the latest census shows the population to be roughly 1,000 whites, 4,500 Indians, and 7,000 Eskimos.

## Coffee Beans Transformed Into Coke in Brazil

Rio De Janiero.—The Brazilian Government, after having dumped several million sacks of inferior grade coffee into the Atlantic Ocean, both here and at Santos now believes it has found a medium of use for the bean.

Although experiments with coffee pressed into briquettes and used as fuel in locomotives of the national railways were not successful, it has now been learned that the same briquettes can be made into fairly combustible coke. Tests made so far with the coke have been entirely satisfactory, although further experiments will be made before coffee-coke production on a large scale will be tried.



"That picture is one I painted to keep the wolf from the door."

"Indeed! Then why don't you hang it on the knob where the wolf can see it?"

## Russia Leads World In Sheep Production

Soviet Russia leads the countries of the world in the number of its sheep. There are about 124,000,000 sheep in Russia. Australia, with 105,000,000, ranks second; United States, with 46,000,000, third, and Argentina, with 40,000,000, fourth.

A man seldom makes money last if his father made it first.