Vaccine, Health Preserving Fluid, Saves Millions of Lives

250,000 Vaccinations Made in the City of Toronto Without Loss of Limb or Life-Immune to Onslaughts of Dreaded Smallpox

By JOHN BURKE INGRAM organs are absolutely free from dis-In our last article i told you how ease. If this examination shows any Edward Jenner, one of mankind's diseased condition all the time and greatest benefactors discovered how effort expended up to this point are to prevent smallpox. I told you how wasted because they have to start h one person in ten died of this dis-ease prior to his discovery and how What the doctors have got from in the eighteenth century 60 million the calf is called green virus. From Europeans died from it. I told you it every bit of bacteria has to be rehow the Sovereigns and leaders of moved. It is carefully ground with Europe, how Parliaments and people a mixture of glycerine and carbolic all over the world poured honours acid through a very fine bronze wire upon the great Jenner. Today I gauze. All germs are thereupon should like to tell you just exactly killed. What is left is a creamy what vaccing the results substance which is kent on ice until what vaccination is, how the vaccine substance which is kept on ice unt is secured, how it is administered and a few other about mankind's great safeguard against one of the most horrible diseases that ever afflicted the human race.

race.

In the first place, doctors secure a healthy calf. From the time they select the calf till the moment of its painless death it becomes one of the most favoured of auimais. It leads the life of Riley or whatever the bovine equivalent to the life of Riley may be. It is bathed gently and carefully, it is excellently fed and cared for, kept clean and healthy. Then they vaccinate it with the

Essay Contest Winners for Canada to Supply Own Needs
Province Also Anin Two Years, Says

| 230 In 1929 to 231 in 1939. |
| Accidents reported during December | numbered 4,694, compared with 6,288 | |
| Proceedings the previous year. nounced

Toronto.—Announcement of the winners of the 15 scholarships donated by the T. Eaton Company, Limited, Toronto, to the members of the 1930 butter from New Zealand and Australia will then no longer be one of contario Department of Agriculture, These scholarships of \$100 each are to be applied on a regular course at the Ontario Agricultural College.

One hundred and ninety-eight tried the examination which was held in each county and district of the province under the supervision of the agricultural representatives.

The winners are as follows: Bruce County, George Downey of Tiverton; Kent County, William Keyes of Ridgetown; Wellington, Thomas McClanahana na of Drayton; Middlesex, Cameron McTasgati of Appin; York County, Alexander W. Davidson of Agincount; Ontario, John Dryden of Brooklin; Durham, James Hancock of Courtice; Durham, James Hancock of Courtice of feed encouraged with the corresponding proving of the last considerable and will be producing all the butter she requires within two years and the question of importing all the butter she requires within two years and the question of importing all the butters within two years and the question of importing all the butters within two years and the question of importing all the butter she requires within two years and the question of importing all the butters within two years and the question of importing all the butter she requires within two years and the question of importing all the butter she requires within two years and the question of importing butter from New Zealand and Australia and Australia and Australian two presents of sheep and pigs in this country and a sharp docrease in this number of sweap and pigs in this country and a sharp docrease in this number of cows since the last agricultural census taken in 1922, was revealed by the new census which has just been completed. The Toronto.—Announcement of the win-Ottawa.-Canada will be producing

Agricultural College next September were seeking to make up for the lower in either the associate or desree course. The Ontario Government, it is understood, is cancelling all tuition fees for such winners during the first plying milk for city distribution for wo years of their courses.

Essay Contest Winners 500" Party, the department of agriculture conducted an essay contest open Disease Among Reindeer to all members of the party.

n addition to local prizes offered for the three best essays in each county or district, each of the writers preventing disease among reindeer in of the ten best essays in the province Northern Canada were detailed by Dr. lodging for two weeks while attending one of the short courses at the Ontario of the Toronto Humane Society here. Agricultural College, Guelph, or the Kemptville Agricultural School.

The winners of the prizes are as effort was being made to control it. follows: Glengarry County, Donald Reindeer were not only useful for

day, Mount Forest; Halton, Jack Law- most a necessity for food during Winson, Acton; Lanark, R. Sherwood ter months when districts were cut Lumsden, Smith's Falls; Leeds, Ken- off from supply posts. neth Bolton, Bellamy; Northumber-land, Norman Flindall, Trenton; Perth J. J. Kelso, vice-president, presided. Mervyn Oehm, Stratford; South Simcoe, William J. S. Gran, Stayner, Sudbury, Wallace Mooney, Massey; Waterloo, Sherwood Taylor, Galt.

Six Nations Number 4,588

Brantford—The Six Nations band of Indians new number 4,588, accord-



Edua May Cooper (shown) and Miss Bobbie Trout took off from

For 1930 Accidents Shown By Quebec the Chinese vase and their quota to cal Union. Like impression of gayety. Clear to cal Union. Eros approaches the earth tain times nearer than any other

age of 865 cheques per day. There rendered \$3,972,038.5. To Young Farmers Of Butter Gaining was a decrease in the average number of paw claims in the average number. of new claims in the average number 290 in 1929 to 231 in 1930.

Ontario, John Dryden of Brooklin; as compared with the corresponding material resource. The total forest month in 1929. The mild weather and purple, area is estimated to be 1,151,454. To taste a bit of suct, but formers, Austin Brown of Shelburne; bundas, Phil Strader of Williamsburg; Grenville, Lawrence O'Narra of Odes-later than had been their practice in vention and control (by fire rangers.)

To thank me with their chatter and to conserve forests include fire predate their practice in vention and control (by fire rangers.)

sa; Prince Edward, Gordon Reid of former years despite the lower price aided by watch towers, sirplane pat-Milford; Carleton, James McNeice of butter is bringing. Milford: Carleton, James McNeice of Kars; Fort William, Gladstone Ridler of Rosslyn Village; Rainy River, Ern. ery butter was produced in the Do- etc.), protection against pests, refor- I love the little people est J. Gosselin of Rainy River; Mani-toulin, Raymond Baker of Poplar.

| Set J. Gosselin of Rainy River; Mani-toulin, Raymond Baker of Poplar.

| About 30,000,000 pounds was imported, educational propaganda and Domin-These youths will enter the Ontario Dr. Ruddick thought that the farmers ion and Provincial reserves.

> the most part are faring better than those who are sending their milk to the butter or cheese factories. ----

Ruddick

Now Under Control

eccives free transportation, board and S. Hadwen, Ontario Research Foundaatt. Lancaster; Grey, Wallace Holli- northern transportation, but were al-

ing to the records of the local Indian Office. They, as members of the Six Life is like a book; fools scamper Nations, are entitled to receive anthrough it hastily; the wise man nuities. A few of this number are reads it with attention, because he not resident on the reserve, but the knows he can read it only once. - figure probably represents nearly the actual reserve population.

Then they vaccinate it with the germs of cowpox. This gives the calf a mild case of cowpox. Then what happens? Because the calf is healthy its body begins to fight these germs and it develops what are known as antibodies in order to fight these germs. It is these antibodies that the doctors want to be discovered by the intercation of a fight these germs. It is these antibodies that the doctors want to be discovered by the intercation of a fight these germs. It is these antibodies that the doctors want to be discovered by the intercation of a fight these germs. It is these antibodies that the doctors want to be discovered by the intercation of a fight these germs. It is these antibodies that the doctors want to be discovered by the intercation of a fight the germs. It is these antibodies that the doctors want to be discovered by the intercation of a fight the germs. It is these antibodies that the doctors want to be the germs of cowpox. Then she did in the city I defy anyone to produce existing refueiting endurance records. Big Decrease Shown \$4,210,140 Surplus For 1930 Accidents For 1930 Accidents For 1931 Accidents For 1932 Accidents For 1933 Accidents For 1933 Accidents For 1934 Cooperations records. There is not as much danger from the search of a final the quain by shaped being the first of the produce and the dragon colling around the Chinese vase add their quota to clination. I defy them to produce a sored by the International Association of gayety. Clear similar to produce a close of cowpox. The shaped and the dragon colling around the Chinese vase add their quota to clination. I defy them to produce a sored bowl, and the dragon colling around the Chinese vase add their quota to clination. For a province and the color of the control of the control of the Chinese vase add their quota to clination. For a produce evidence of one single death that has been brought as a word cooperative program and the Chinese vase add their quota to cline to the control of the control of the control of the Chinese v Los Angeles in an attempt to break existing refueling endurance records.

the calf, make sure that its internal sons who were unvaccinated."

336,046,05 medical aid.

Taking a basis of 300 working days, this would show average daily benefits awarded of \$24,743, requiring an average of \$85 cheques per day.

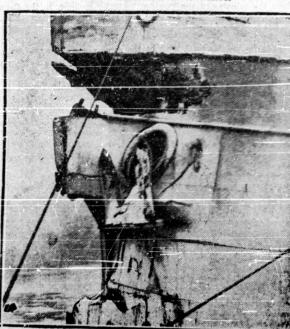
There rendered \$3.372.03.5 of the province was that obtained from the liquor law operations, which brough \$8,590,701.76. The gasoline tax dargent among the revenues of the Province was that obtained from the liquor law operations, which brough \$8,590,701.76. The gasoline tax dargent among their own flower bed; they seem to calculations. The naval observations which the liquor law operations, which brough \$8,590,701.76. The gasoline tax dargent among their own flower bed; they seem to calculations. The naval observations which the liquor law operations, which the bowl for a glimpse of fish or lock they seem to be whispering secrets or, filled with the liquor law operations, which the bowl for a glimpse of fish or lock they seem to be whispering secrets or, filled with the liquor law operations, which the bowl for a glimpse of fish or lock they seem to be whispering secrets or, filled with the liquor law operations, which the bowl for a glimpse of fish or lock they seem to be whispering secrets or, filled with the liquor law operations, which the bowl for a glimpse of fish or lock they seem to be whispering secrets or, filled with the liquor law operations, which the liquor law operations, which the liquor law operations and the liquor law operations. The naval observations are larged to the liquor law operations, which the liquor law operations are larged to the liquor law operations. ----

> January numbered 4,694, compared with 6,283 There's not a singing robin

ir December the previous year. In all the northern land, But a grey gull preens its plumage Beside the hoarse-voiced strand.

-Lillian E. Andrews in "The New Outlook."

45 Lives Lost in Collision



Forty-five people lost their lives when Finnish ship Oberon collided with S.S. Arcturns and sank within three minutes, between Denmark and Sweden. Above is view of damaged Arcturus bow.

Why Silk Stockings When Wet Are More Chilly Than Wo

Girls who expect to get their legs | away faster than the warm blood wet in winter storms should wear wool the rest of the body can supply stockings rather than silk ones. Not only will the stockings themselves be less likely to suffer but possible harm be one of the commonest cause

to the health of the wet-legged wear-er is less. To prove this two students of the National Training School of silk stockings and wool ones, as Cookery and Domestic Subjects, of monstrated in the London exhibit London, England, recently set up as a the visible faster cooling of a therm part of the School's Annual Exhibit a eter inside rain-wetted silk hose demonstration of the scietific relations that water evaporates much me between rain, stockings and legs. rapidly from silk than from wool 70 Every ounce of water which evapor-ates from any surface, including a tightly to the water with which silk-clad leg, carries away with it a are wetted and give it up slowly definite amount of heat. Unless the the heat loss from a leg covered wearer of a pair of wet stockings a wet woollen stocking is spread stands in front of a fire to supply this a longer time so that the circuest the heat energy must come from blood is able to keep up with the legs themselves. If this evapora- out important chilling either of tion is too rapid the heat will be taken wet legs or of the whole body.

Pansies are always smiling. They are to the garden what children are to the home-full of liveliness, and abounding in a spontaneous joy which is unquenchable. Rain may fall, and skies be at times gray, but measure the solar system is en the pansies smile on and blossom ed in the tiny planet Eros, which only the brighter for a friendly show-er. Perhaps it is this which imparts earth on Jan. 29. so great a sense of sunshine and Astronomical cameras erfulness to this charming group, separated observatories are now h curved porcelain of the Oriental in a world co-operative program

Pansies

from infaction from vaccination as antibodies that the doctors want to be developed in the blood of human beings; they produce a reaction which enables the human blood to successfully fight smallpox germs, so the Philippines without loss of it is for in the Social Hygiene Council, the process of preparing the vaccinated invariably contractably contractably contractably contractably contractably contraction who deed within a short period after their calf is ready the doctors chlorofin, there was an annual death with the vaccine reserved in was a papeared. (This process of washing by the way, sometimes of washing by the way, sometimes takes a couple of hours so thorough Castalian to the loop of washing by the way, sometimes takes a couple of hours so thorough the state of the calf, make sure that its internal sons who were unvaccinated."

Total Revenue for Province below that particular part of the stands on the finite of the plant was an annual dead of the philippines without loss of the province of the stands on the finite of the stands on the finite of the plant was annual dead that the philippines without loss of the loop of the washing by the way, sometimes takes a couple of hours so thorough the washing by the way, sometimes takes a couple of hours so thorough the washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing by the way to the calf, in the plant washing to tern of the Persian mat on which surable celestial body, except

Surely the craftsman, who with his object in the solar system. ty, adorned bowl or vase, who shaped and hammered the curiously handled tween the earth and the sun. Astra bell, would, with the Oriental's deep love for blossoms rejoice to see his bowl filled with these smiling, radiant English flowers; making a happy as far. This can, after a fashion. casion when East and West meet.



Wifey: "George, for goodness sake tacks. take that knife out of baby's mouth." Hubby: "Oh, let him have it, my ar. Perhaps he's trying to cut When a strong brain is weight with a true heart, it seems to me in balancing a bubble against a well

Small son--"If you don't give me a of gold. penny I will go and see Johnny Jones who has measles, and then I shall have them."

Stranger: "What do you do for a great regret at not being able to h living?" Rastus: "Nuthin', suh." his sermons. Desiring to be sympat Stranger: "Well, that's a pleasant ctic, he said with unnecessary said opposition, I must say. No worries attached depreciation: "You don't miss much

ha home Convenient place unless it is conveni-

families through Colonial figures.

Damage to the church was discovered ed when experts were checking it cracks caused by traffic vibrations.
Immediate action is planned to re-

is an old tradition that plants are ciate the warmth of the situation. It is indeed a pleasure to have the earli-Plants in Sleeping Rooms

the plants. Poison plants or tially which induce hay fever should. Lewis.

me convenient never be brought into the house. Other place unless it is convenient any room, day or night.

any room, day or night.

Care For Candy

When he says it with chocolates, one feels like leaving them around, in an open dish where we may enjoy the kitchen convenient for the keeper? If you take millions of steps and must reach, stoop, and hift unnecessarily or more is good exercise, it tends to make yer-fatigued. Over fatigue makes yer-fatigued. Over fatigue

were to be moved to a more protected of the place they would behave in the same manner. a very curly fibre with a scaley ture. These scales stand up carlier if placed in a sunny, protected arlier if placed in a sunny, protected when moist and warm and lie flat when cold and dry. This peculiar tabit is what makes it mat and also makes it easy for the manufacturer all respond to the added warmth of a all respond to the added warmth of a wood material is usually adulterated winds. The jasmine (Jasminum nudiwith cotton fibres. Such goods wear well, better than all wool, but it is not where it is possible to grow it. A vicar was visiting one of his possible as well, and will show the soil

To plant a border which will give the earliest possible effect, choose for parishioners, an old woman afflict. There is not enough wool in the build to supply the depend and the building. At each end a group of tall id to supply the demand and it is evergreens will give added protection uch adulterated, and is used over al over again. The best wool rags building tall, slim specimens of pussy-

are picked to pieces and recpun, usual-tr mixed with new wool or cotton. Such material does not wear as well as wool goods.

me goods is made by the use of of catkin. Among the pussy-willows a "shoddy," short fibre clippings from the mills, which are worked into the surface of felted cloth. After a time these short fibres work out and are found on the inside of coat linings and leave the surface threadbare.

well as annuals that withstand frost, like alyzsum, petunias, and verbenas.

These late-flowering plants will appre-



capital of a State that runs into 13 degrees of latitude—buge enough to hold a dozen small European countries. At the zenith of Brazil's historic rubber boom, before the Far East ruined her monopoly, Para grew fabulously rich on 'black gold'. Abundant survivals of the wild, oil-field-like the property of the rubber boom. ravagance of the rubber boom period are seen in sumptuous govern-ment palaces and paintings, luxurious clubs and rows of private mansions

capital of a State that runs into 15

built a generation ago.

"Meantime, 309 year-old Portuguese Para sits by the Tocantins and lives on the jungle. Long-horned ox teams haul crated automobiles from the docks — docks with their cranes, chains, anchors, tankers, naked men shoveling Brazil nuts, and big whart rats nimbly crawling up dripping hawsers—while a mail plane tabes off from the Evangelist's meaning. The Baptism of Jesus, he tells us in his Baptism of Jesus, he tells us in his Baptism of Jesus, he tells us in his

Sunday School Lesson

January 25. Lesson IV—Jesus Tempted—Luke 4: 1-13. Golden Text—In that he himself hath suffered being tempted, he is to suc-cour them that are tempted.—He-

advantage, or it might be to actain messiaship, his kingship, by dealing first with economic problems. The Romans knew well that any ruler could win popularity if he would give the people "bread and circuses" for

The temptation to win world-empire The temptation to win world-empire by worshipping the devil suggests that he was tempted to use worldly means to achieve spiritual results. Propaganda, war, party-spirit, brihes, have too often been used by Christians to serve the cause of the charch, but Jesus would not bribe nor cajole, nor force men into the kingdom: they force men into the kingdom; they must enter with their eyes open, be-cause they understand and love.

cause they understand and love.

The Jews demanded of him some "sign from heaven," some miraculous proof of his claims, but if they would not believe Moses and the prophets (Luke 16: 31), if they were not able to judge of the authority of John (Mark 11: 27-33), he would not east himself down from the Tenmle, nor himself down from the Temple, nor do any such miracle to prove his

Then the devil left him "for a time," "till his opportunity." The verse rhaps, looks forward to Gethsem

"Luke omits in his narrative the ministry of angels mentioned by the other two synoptists, a sweet postlude we should have missed much, had it been wanting; but he gives us instead the retreat of the adversary: 'He departed from him for a season.' How long a season it was we do not know, but a brief one it must have been, for again and again in the story of the gospels we see the dark shadow of tha evil one; while in Gethsemane the 'prince of this world' cometh, but to find 'nothing in me.' And what was the horror of great darkness, that strange eclipse of soul Jesus suffered upon Calvary, but the same fearful presence, intercepting for a time even the Father's smile?" presence, intercepting for a time even the Father's smile" Friend (who has been admiring

baby): "Can he walk yet?" Extremely Rich Mother: "Not yet, but of course there will never be any real necessity for him to do much walk-

When you learn to do without the hings you can't afford you are a suc-

LATEST GOOD-WILL SHIP

Here is the C.N.S. Prince Robert, new liner, which has been described as the last word in shipbuilding, and two views of her interior. She has been described as architecturally faster than the Bremen and she will be a credit to Canada when she takes the Canadian trade and pleasure party from Halifax, sailing February 21, on a 49-day cruise to South American ports, spending 11 days at Buenos Aires, where Canada will have payilion on the grounds of the British Empire Trade Exhibition to be opened by the Prince of Wales, March 14. Lower left, smoking room, showing Canadian moose head. Lower right, a cabin, typical of the modern art put into this new unit of the Canadain merchant marine. It is expected that 200 members will take the cruise. Senators, members of Parliament, a representative of the Dominion Government, professional men, manufacturers and many who are merely pleasure tourists are among those who have already reserved space. The party will also include a representative of Sir Heary Thornton, president of the Canadian National System.

to it?" Rastus: "Nawsuh. 'Ceptin' I "So they tell me!' was the unexpects mought lose it." reply. New Theory Advanced of How The Sun Renews Its Yout That our sun renews its youth | differs. He imagines the release every ten million years or so in a atomic energy inside the sun to be

bath of fire, like the mythological pen only at long intervals and phenix imagined to rise anew from what is really a kind of explosion the ashes of its funeral pyre, is the making the sun for a few days belief of Dr. Hugo von Zeipel, of the weeks far hotter than usual and lat Astronomical Observatory at Upsala, Sweden, expressed in a monograph burst of atomic explosion ceases Sweden, expressed in a monograph recently honored with the A. Cressy the sun gradually decreases in the sun gradually decreases in the sun gradually decreases in the sun gradually decreases. It has long been known to scientific men that been known to scientific men that neither combustion like that of fuelt nor any other ordinary source of heat can possibly supply the sun with the enormous energy which it pours out continually into space as light and heat. Most scientists believe that the sun is kept going by some kind of atomic energy, a secret which earthly laboratories have not yet learned. The usual idea is that this atomic energy is set free more or less uniformly inside the sun, so that each day's output of light and heat is balanced approximately by each day's supply of new energy from atoms. This is where Dr. you Zeipel's theory

edy the damage and stop further a

er parishioners, an old woman afflicts

with deafness, who expressed he

A TRUE HEART

h will stretch.

est and latest flowers.

The different exposures may also be asset to secure succession of bloom. The different exposures may also be asset to secure succession of bloom. The different exposures may also be asset to secure succession of bloom. Lily-of-the-valley, for instance, will remain for a longer period if several beds of them are planted in exposed beds of them are planted in exposed beds of them are planted in exposed as well as protected spots. This peramines are opened even slightly, the effect would be nil.

In the winter, a good reason why ants should not be in the sleeping the proposed of the world.

"Though the product a product of the specific strength of the specific stren

ints should not be in the sleeping oms is because the windows should opened at night and this would vary in certain characteristics, essentially they are the same."—Sinclair tially they are the same."—Sinclair tially they are the same."

eave the surface threadbare.

Wool goods should be sponged and ressed before being made up. This they sit from spotting and shrinking uevenly. In doing this pressing, sep the iron moving or it will leave the process of the surface and control of the surface and control of the surface and chrysenthemums, as mark. Do not press hard or the late asters, and chrysenthemums, as

During the day, plants est and latest flowers.