DEPARTMENT OF TRADE AND COMMENCE



# A FACT A DAY ABOUT CANADA

FROM THE

## DOMINION BUREAU OF STATISTICS

ELEVENTH SERIES

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#### No. 244, Fri. June 1, 1945 -- Electric Fencers

The use of electric fences for pastures is becoming more widely adopted on the farms of Canada. Live stock, as a rule, need little training to keep away from them. Observations show that the animals learn very quickly and do not approach a fence even when it is not charged. At the Dominion Experimental Station at Swift Current, Saskatchewan, a 13-plate wet battery was used on an electric fence that was used throughout the summer months last year for pasturing cattle. The cattle were well controlled, no harm was done to the cattle or the attendant, and the battery was still charged at the end of the season.

These fences have many advantages but care is necessary in establishing the equipment. Among the advantages are reduction in cost in erecting temporary fences, reduction in expenditure for wire, posts, and gates, reduction of injury to live stock; the adaptation in the West to winding coulees or temporary pasture areas otherwise impractical to fence, and the enclosure in the fields of untillable lands that otherwise might be wasted.

As a rule, one or two wires are sufficient to carry the electric current. One wire is sufficient for horses and cattle. Two wires are considered preferable for pigs and sheep. The wire can be supported by porcelain insulators on two-inch square stakes set in the ground 30 to 40 feet apart.

Figures compiled by the Dominion Bureau of Statistics definitely indicate quite an expansion in demand for these electric fencers during the past few years. In 1939, for instance, they were produced to the value of \$60,000; by the end of 1943 the value had risen to \$340,000, or nearly six times the 1939 valuation.

## No. 245. Sat. June 2, 1945 -- Care of the Feet

Few people realize the work that the feet are obliged to perform. They not only support the body when standing, but lift and propel it forward when walking or running. The foot is a perfect piece of mechanism, consisting of a longitudinal arch extending from the heel to the ball of the foot and a transverse arch extending from the ball of the foot to a point just back of the little toe. These arches act somewhat in the nature of springs, which absorb the shock of the weight of the body when standing or moving. The arches are constantly changing shape to adjust themselves to the weight placed upon them. The muscles and ligaments which are attached to the bones help raise and lower the arches in making this adjustment. It is obvious, therefore, that the arches of the feet should have full play and should not be impeded by footwear that is too tight or too short, or that in any way impedes the full play of the bones, muscles and ligaments.

The size of the shoe is of primary importance. It should not be tight and should be large enough to contain the foot with comfort when the individual is standing or walking. The toes should not touch the end or the cap of the boot or shoe, but should have free movement. The shape of the boot or shoe should correspond to that of the foot. The thinness or thickness of the soles depend upon the nature of the work demanded of the shoe. The upper part of the shoe should not bind the longitudinal arch of the foot or restrict it in any way. The heel of the shoe should be comparatively low. The use of rubber heels is to be commended because they absorb shock. The material of which the shoe is composed should not be impervious to air. Great care should be exercised in the selection of shoes. What applies to the shoe also applies to the sock or stocking. It should be loose and comfortable. It should not bind.

The records of the Dominion Bureau of Statistics reveal that the production of leather footwear in Canada reached a new high point in 1943 when 33,928,000 pairs were made. There were 15,852,000 pairs of footwear for women, 10,418,000 for men, 4,021,000 for misses and children, 1,493,000 for boys and youths, and 2,143,000 for babies and infants.

### No. 246. Sun. June 3, 1945 - Violent Deaths in Canada in 1943

The number of deaths from external violence in Canada in 1943 was 8,274 as compared with 8,171 in 1942 and 8,442 in 1941. The rate per 100,000 population was 70.1 in 1943 as against 70.2 in 1942 and 73.5 in 1941. Over the period 1926 to 1943 the highest death rate recorded from external violence was 73.5 in 1941. Suicides numbered 758 in 1943 as compared with 839 in 1942 and 896 in 1941. There were 125 homicides in 1943 as compared with 113 in 1942 and 130 in 1941.

The number of accidental deaths in 1943 was 7,385 and the rate was 62.6 per 100,000, as compared with 7,202 and a rate of 61.9 in 1942, and 7,409 deaths with a rate of 64.5 in 1941. The rate from these causes attained its highest level in 1941 at 64.5 per 100,000. Of the accidental deaths, 3,024 or 41 per cent occurred in public places, 2,456 or 33 per cent in homes, and 1,864 or 25 per cent in industry in 1943. Deaths in public places in 1937 formed 49 per cent of the total with 33 per cent in homes and 17 per cent in industry.

There were 1,826 deaths due to land transportation accidents in 1943, forming 25 per cent of total fatal accidents, as compared with 1,871 deaths in 1942 or 26 per cent of the total and 2,285 deaths or 31 per cent in 1941. Of the land transportation accidents in 1943, deaths from motor vehicles accidents accounted for 1,437 deaths or 19 per cent of all fatal accidents. In 1942 there were 1,409 deaths, forming 20 per cent of the total as against 1,852 deaths or 25 per cent in 1941. The death rate from this cause was 12.2 per 100,000 population as compared with 12.1 in 1942 and 16.1 in 1941.

There was a slight increase in the number of deaths due to air transport accidents in 1943 over 1942, with 623 deaths in 1943, 589 in 1942 and 357 in 1941, forming eight, eight and five per cent of all accidents for 1943, 1942 and 1941, respectively. Of these deaths, 595 in 1943, 562 in 1942 and 303 in 1941 were non-civilians.

In 1943 there were 1,016 deaths from drownings, with a rate of 8.6 per 100,-000 population as compared with 991 deaths and a rate of 8.5 in 1942 and 1,018 deaths and a rate of 8.9 in 1941. Deaths in mines and quarries in 1943 totalled 146, or two per cent of the total as compared with 188, or two per cent in 1942, and 199 deaths and three per cent in 1941.

### No. 247. Mon. June 4, 1945 ... Asbestos

Asbestos of commerce consists mostly of the three varieties known as chrysotile, amosite, and crocidolite or blue asbestos, chrysotile being by far the most important and most widely used. Three other varieties, namely fibrous actinolite, fibrous tremolite, and anthophyllite, have only a limited field of usefulness. The asbestos produced in Canada is practically all of the chrysotile variety and comes almost entirely from areas of serpentinized rock in the Eastern Townships, Quebec. The Canadian debosits are the largest known in the world.

Small deposits of chrysotile asbestos are known in other parts of Quebec and also in Ontario and British Columbia, and several of them have been worked from time to time. The asbestos from some of these deposits has a very low content of iron and is entirely free from magnesite, and should be suitable for use in making insulation for electrical machinery. No amosite or crocidolite has been found in Canada.

Asbestos is used for a great variety of purposes, the principal products including cloth, brake linings, clutch facings, packings, insulation, mill-board, siding, shingles, roofing, tile, and pipes. The post-war outlook for the asbestos industry appears to be good. Throughout the war Canadian producers were able to sell their entire output in spite of the loss of overseas markets, and with the coming of peace overseas markets will again be open to Canadian fibre. Development of new asbestos products has been rapid in recent years. Of particular significance are the developments in asbestos-cement products which require the short grades of fibre, the marketing of which formerly constituted a problem. In 1944 an asbestos fabric reinforced with glass fibre was developed which has greater strength than the straight asbestos cloth and is being used for covering.

Canadian production of asbestos in 1944 totalled 419,000 short tons valued at \$20,620,000 compared with 467,000 tons worth \$24,409,000 in 1943. The mineral in 1944 came, as in recent years, entirely from deposits located in the Province of Quebec.

## No. 248. Tues. June 5, 1945 - The Pollock

Belonging to the family of fishes known by the scientists as Gadidae, the pollock is thus in the same group as the cod, haddock, hake, and cusk, and several other species which are not so well known as these. On the European side of the water it may sometimes be known as the saithe or the coalfish but in North America the common name is pollock, though occasionally the spelling "pollack" may be used. The pollock is a North Atlantic fish but another species in the same group, the wall-eyed pollock, occurs on some parts of North America's Pacific coast and a third, the northern pollock, is present in Arctic waters of America and Asia. Neither of the latter species is of any importance.

Whether the pollcck is vain or not is something man does not know but it might be excused vanity for it is a good-looking fish, with well-shaped body. Although listed among the 'ground-fish', or botton-feeding fish, which make their meals off small crustaceans and little fish found on bottom areas, the pollock also looks for food in the middle depths of the sea. More than that, unlike codfish, for instance, pollock frequently come to the surface in large schools, apparently following schools of small fish in order to feed upon them. It is this habit of coming to the top of the water, by the way, which brings pollock within ready reach of sport fishermen.

Pollock are taken in commercial fishing on both sides of the North Atlantic. In Europe, to quote one writer, they range "at least as far south as the coast of France" but another authority says they are not abundant "south of the English Channel". Their ranges in North American waters is Maritime Provinces southward to the State of New York, although there is at least one record of pollock fry being found in Davis Strait. In the Canadian fisheries, pollock are taken only in waters of Nova Scotia and New Brunswick, with the greatest part of the catch being landed by Nove Scotia fishermen. In 1943, for instance, the total catch was slightly more than 14,960,000 pounds, with the Nova Scotians landing over 12,500,000 pounds and the New Brunswick fishermen something under 2,440,000 pounds. Most of the annual production comes from inshore waters.

In the Dominion's fisheries pollock are taken mainly by hook-and-line fishing (with hand-lines the gear used in these operations) although some are caught with purse-seines and some are taken by steam trawlers - vessels which each drag a big net-like contrivance along the sea bottom by mechanical power. An interesting point in connection with the hook-and-line fishing is that much of it is done at night when lights are used to attract the fish.

Most of the Canadian pollock catch is utilized in the dried fish industry - that is, it is prepared for market as dried salt fish and dried boneless fish - but many of the fish are sold fresh and frozen, whether filletted or otherwise. Small quantities are smoked and a few of the fish are canned.

Canada's sales of fresh and frozen pollock are ordinarily all made on the domestic market and in the United States although the frozen fish supplied to Great Eritain by the Dominion during the latter years of the war in Europe included fairly large quantities of pollock fillets. The West Indies and other southern markets have always taken the great bulk of the Canadian production of dried pollock but the United States is also a buyer of substantial quantities.

#### No. 249. Wed. June 6, 1945 -- Thornless Gooseberries

The most disagreeable operation in the growing of gooseberries is harvesting. The thorns on the branches are cruelly sharp and, unless gloves are worn, the hands and arms are likely to be severely lacerated. To breed gooseberries whose bushes are not armed with thorns would be a wonderful help to the pickers. A program directed towards this end was instituted a number of years ago at the Central Experimental Farms, Ottawa. The thornless character was obtained from a spineless plant of the species Ribes oxyacanthoides, a native of Canada from east to west.

The fruit of this plant was too small to be of any commercial value itself, so it was crossed with a garden variety having good sized fruit, but thorny branches, in the hope of combining the thornlessness of the wild gooseberry with the fruit size of the standard sort. The seedling from this cross were all thorny and bore small fruit, but by self pollinating some of them, and growing the resultant seed, a few plants without thorns were obtained. Although thornless, this fruit was still too small so the best of them were again crossed with an ordinary thorny garden variety.

Among the seedlings resulting from this cross, one was found which had no thorns and had fruit of commercial size. This seedling was named Spinefree and plants of it were distributed to experimental stations and growers all over Canada for further testing. Spinefree has not performed too well. It is very variable in its cropping, occasionally bearing heavily, but more often producing only a light crop. Its size also left something to be desired. Therefore, in 1927 Spinefree was crossed with the large fruited but thorny variety Clark. This cross produced several thornless seedlings, the best of which are equal to most of the commonly grown varieties in size of fruit and yield and they have the great advantage of being easy to pick.

These seedlings have not yet been named. They are being propagated in order that they may be tested in other parts of the country. They have done well at Ottawa, but that is no guarantee that they will be satisfactory in other districts. If they should prove to be widely adopted, the grower of gooseberries will benefit from this work.

## No. 250. Thurs. June 7, 1945 -- Marine Plants -- I

Land crops depend upon soil fertility and upon climate, but in the sea fertility and climate are associated with water, which is neither as stationary as soil nor as freely movable as the air above the soil. Consequently the differences in the fisheries as a whole are not so localized as the differences in land crops and yet are much more localized than the climatic differences on land.

Many people are familiar with such marine plants as the seaweeds that grow along shore or on shallow water bottom. Perhaps a good many people, however, do not realize that these plant growths also include minute, microscopic organisms that are present in enormous numbers at certain seasons of the year in the upper layers of the water and are of the greatest importance as food for the youngest fish fry and for the smaller animals, such as 'shrimp' and 'red feed', that in their turn form the chief food of so many fishes.

These plants grow only in the upper layers of the water, as they require light as the sun's rays are unable to penetrate very far into the water. They are liable to grow only during the half of the year roughly from April to September when the sun is highest in the heavens and remains up for the longest time each day. They require not only light but also various inorganic salts, of which some are in such small quantities in the sea-water as to be exhausted rather quickly. When any of these necessary salts becomes exhausted the plants can no longer grow and the water becomes barren.

## No. 251. Fri. June 8, 1945 - Marine Plants - 2

The important fisheries of the ocean are situated in those regions where there is a good supply of rich water for the growth of marine plants. In the Atlantic Ocean tropical and Arctic waters are comparatively barren, while in temperate and boreal latitudes extensive fisheries are located.

Both tropic and Arctic waters are comparatively stagnant, but in between we have tropic water going north and Arctic water going south with vertical movements and mixing, proceeding in some localities on a tremendous scale. The tropic and Arctic waters, although comparatively barren for plant growth, as they arrive in temperate latitudes contain quantities of otherwise useless animals that die when there is much change in temperature, then decompose and re-fertilize the waters for plant growth. The chief mixing region is off the tip of the Grand Bank, where 'Gulf Stream' and Labrador current commingle very freely, causing wholesale destruction among their inhabitants. The greater part of this mixed and refertilized water, together with unmixed tropic water, drifts across to the coasts of northern Europe, where the progressive cooling that takes place causes the surface water, made barren by plant growth, to become heavier, sink, and be replaced steadily by richer water from below. The exceptional nature of the fisheries of the North Sea and adjacent waters is well known and is to be considered the result of this process. On the other hand, much of the water resulting from the commingling of Labrador current and 'Gulf Stream' works over and along the banks off the Newfoundland, Canadian and New England coasts and produces perhaps even greater richness of fisheries there,

The coastal waters in temperate latitudes go through considerable changes in temperature throughout the course of the year. When the surface water warms in spring and summer it becomes lighter and can be replaced by water from beneath only with considerable difficulty. When it cools in autumn and winter it becomes heavier, sinks down, and is automatically replaced by water from beneath. By spring

the surface water has been throughly renewed from the depths, and, when the sun is sufficiently high, it shows an extremely rich growth of plant life. When some of the necessary salts are exhausted plant growth ceases and a barren state comes on, to disappear only when the autumn cooling brings up unexhausted water from below, and then only if there is still sufficient light.

If, however, by some means the deep water is continually brought to the surface during the summer, there will be a steady growth of plant life and food for fishes will be much more abundant. Currents flowing over shoals and through irregular passages bring up water from below, and thus renew the water for plankton production.

#### No. 252. Sat. June 9, 1945 -- Walnut Trees

The ten or more known species of walnut are widely distributed throughout North and South America, southern Europe, northern Africa, and Asia. Four species are native to North America and two species, namely the black walnut and the butternut, are found in Eastern Canada. No walnuts occur west of Ontario in Canada. The wood of the walnuts is very valuable, but of small commercial importance in Canada because of the limited supply. The Circassian walnut wood is yielded by the English or Persian walnut which also produces the European walnut of commerce.

The black walnut is large, 50 to 90 feet in height and two to five feet in diameter. It requires deep, rich, well-drained loam and is found growing singly or mixed with other hardwoods. It occurs naturally in Canada only in Southern Ontario, bordering lakes Ontario, Erie, and St. Clair, and is now very scarce. Where protected from cold winds, it has been grown considerably north of its natural limits. It is very tolerant of shade and under good conditions grows rapidly. The wood of black walnut has a rich brown colour, is soft and easily worked, and is extensively used in the manufacture of fine furniture, interior finish, and gun stocks. The nut has a good market value.

In Canada the butternut is found from New Brunswick up the valley of the St. Lawrence and throughout the hardwood region in Ontario, east and south of Georgian Bay. It prefers rich, well-drained loam and is found solitary or in small groups associated with other hardwood species. It is a medium-sized tree 40 to 50 feet in height and one to three feet in diameter. The wood of the butternut is soft and weak, and is lighter in weight and colour than that of the black walnut, otherwise the two woods are similar in grain and texture. In Canada it is used for boat-building and interior finish.

## No. 253. Sun. June 10, 1945 -- Cedar Trees

There are four known species of cedar trees, of which two are native to Canada and the United States. The other two are native to China and Japan, but are sometimes planted on this continent for decorative purposes. Many ornamental varieties have been produced by nurserymen. True cedars (Cedrus) are not native on this hemisphere.

The two native species differ widely in range; one is confined to British Columbia, and the other does not extend west of Manitoba. The bark of all species is thin and shreddy. The wood is highly aromatic and is much used on account of its lightness and durability.

The Eastern white cedar is usually found in swamps and moist situations, but will grow readily on the thin soil of limestone ridges. It occurs in pure stands of considerable size, but also grows mixed with spruce, tamarack, black ash, and alder. The wood of this species is very light, soft, comparatively weak, brittle, fine, and even—and straight—grained. It is pleasantly aromatic, resistant to moisture and changes in temperature and easy to work. This wood is the lightest in weight of the Canadian timbers and is one of the most durable of woods against decay. It is particularly valuable for poles, posts, fence—posts, shingles, boat—building, and, in fact, in any situation where timber is exposed to decay without great mechanical wear. Its decay—resisting qualities make it valuable for railway ties on branch lines where the traffic is not heavy, and for tanks, cisterns, green—house construction, and other similar uses. Suitably treated, it may be used for pencils.

The Western red cedar is also found in moist soils - where it is found on comparatively dry sites it is stunted. It occurs singly or in scattered patches. No pure stand of any size is found. It is a very large tree, growing to a height of 175 feet or more, and the diameter of the trunk reaches four to eight feet or more.

Western red cedar is one of the most important timber trees of British Columbia. The wood is aromatic, very light in weight, and is very resistant to decay. In this last respect it is probably unsurpassed among the commercial softwoods. Its size gives it an advantage over the eastern species in the amount of long clear lumber which it furnishes. The light weight of the timber gives it high insulating value and its straight grain, uniformity and very slight shrinkage give it easy working qualities and stability for interior woodwork. The wood takes paint well. It is suitable for all uses in which wood is subjected to decay except where strength is of prime importance. It is especially prized for mudesills, poles, piling, greenhouses, house siding, and similar uses. More shingles are made from this wood than from any other tree in Canada. When properly treated, Western red cedar is also used for lead pencils.

## No. 254. Mon. June 11, 1945 - Farm Woodlots and the War Effort

The use of the products of Canadian forests and farmers' woodlots for direct war purposes may be less obvious than in some other cases but they are many and varied. Woodpulp alone is used extensively in the production of high explosives, such as cordite and gun cotton, replacing cotton linters at about half the cost. From the same wood, cellulose surgical dressings and hospital wadding are made to heal the wounds of soldiers. The somealled "dissolving" pulps are also transformed into rayon, celanese, cellophane, and pulpebased plastics, from which are produced synthetic yarns for tires and parachutes, gaseimpervious clothing, impervious wrappings for intricate machines, wrappings for parishable drugs, chemicals and food, housings for radio aircraft, artillery and naval instruments, and other articles, replacing cotton, silk and metals.

Paperboard is used in containers for shell cases, ammunition, gun barrels, machine parts, blood plasma, food and medical supplies, in place of metal and wood. Building board or wallboard replaces lumber in the construction of barracks, hospitals and other temporary buildings, and for the finishing of ships, ambulances, and aircraft. Certain paper products are component parts of sea and land mines, of radio equipment, of shells and other weapons of war. Multi-wall draft paper sacks have replaced jute sacks to some extent. It takes three acres of blueprint paper to put into production a single bomber type of aircraft, and the armed forces and the munition industries require much paper for administrative use.

## No. 255. Tues. June 12, 1945 -- Royal Canadian Navy

At the outbreak of war, Royal Canadian Navy strength consisted of 1,774 men. By D-Day the R.C.N. could supply more than 10,000 officers and men for invasion activities. At the same time the Canadian navy was doing virtually 100 per cent of close escort duty on all north Atlantic trade convoys between North America and the United Kingdom as well as forming 30 per cent of the support forces in the Atlantic With a strength of more than 95,000 at the end of the European war, the R.C.N. had expanded more than 52-fold in little more than five and a half years, according to the Wartime Information Board.

There were only 17 ships ready for duty and two naval bases in the country in September 1939, but training divisions were speedily opened and volunteers enlisted as soon as training l'acilities could accommodate them. At first only elementary training was given in Canada. Men went to the United Kingdom for basic training, special courses and their first sea duties. Throughout the war enlistments in the navy have been well in excess of actual needs and, with the exception of certain trades, recruiting was materially reduced during 1944.

By 1944 the two naval bases at Halifax, Nova Scotia, and Esquimalt, British Columbia, were greatly expanded and improved and 12 new bases had been developed on the east and west coasts of Canada and in Newfoundland and Bermuda. In addition to the erection and equipment of buildings, construction of docks, marine railways and repair shops, the R.C.N. had to provide trained men to man these new bases.

The R.C.N. set up a signals school at St. Hyacinthe, Quebec, believed to be the largest training centre of its kind in the British Commonwealth and Empire, if not in the world. Toward the end of the European phase of the war it was accommodating 3,200 naval personnel including members of the Women's Royal Canadian Naval Service.

By the end of 1942 Canadian naval strength stood at 49,260, of whom 17,719 or close to 36 per cent were at sea. Two years later this percentage had grown to more than 42.5. Part of the altered balance between shore and sea personnel was attributable to the Women's Royal Canadian Naval Service. "Wren" enlistments numbered more than 6,600 up to the time recruiting stopped on February 7, 1945. Throughout Canada's 50 naval bases and establishments they served in more than 30 different types of jobs. Wrens were also posted to the United States, United Kingdom and Newfoundland.

# No. 256. Wed. June 13, 1945 ... Main Function of Royal Canadian Navy

Main function of the Royal Canadian Navy during the European war was protection of the North Atlantic convoy route. Six days after war began, Canada's first convoy steamed out to sea, escorted into the open Atlantic by two of Canada's six destroyers. Canadian escort ships -- which numbered 254 at the end of the European war -- have been on constant duty ever since. They have escorted 23,343 merchant ships carrying 181,643,180 tons of cargo to the United Kingdom, including the war's largest convoy of 167 ships carrying 1,000,000 tons.

With the Atlantic lifeline's growing importance to the very existence of the United Kingdom and its allies, the R.C.N. was given increasing responsibility for Atlantic work. After Pearl Harbour and the entry of the United States into the war, Canada's part of Atlantic convoy never fell below 40 per cent and was often as high as 48 per cent in 1944. From the late summer of 1944 until Germany collapsed,

the R.C.N. provided more than 80 per cent of close convoy escort. At the same time Canadian ships took over all trade convoying between North American and Newfoundland ports.

Because convoy work was the first duty of the R.C.N. its main numerical strength consisted of small vessels, corvettes, frigates and minesweepers. With the addition of destroyers, aircraft carriers and a cruiser, the R.C.N.'s offensive strength was greatly increased and Canadian naval personnel were given the opportunity of serving on Canadian offensive warships. At the end of March, 1945, the R.C.N. consisted of 939 ships, of which 373 were combat ships. These ships have sunk or helped to sink at least 68 enemy surface vessels of various types, have damaged 41 others and captured two. In addition they have helped sink 23 enemy submarines and probably sunk eight others. With the exception of a small number of men, R.C.N. sea personnel now serve on Canadian ships. At March 31, 1945, there were 654 Canadians serving with the Royal Navy, not including Canadians on motor torpedo boats whose crews are changeable.

A considerable number of R.C.N. seamen also serve on merchant ships, manning some of the heavier guns on board. With the growing strength and importance of Canada's merchant navy, an increasing number of R.C.N. personnel on shore are concerned with operations of merchant shipping as distinct from navy activities.

Men of the Canadian navy serve as Royal Canadian Navy, the permanent core of the organization; Royal Canadian Naval Reserve, persons who have followed the sea as a profession; or Royal Canadian Naval Volunteer Reserve, volunteers whose occupations were not concerned with the sea. Although a considerable number of navy men have joined the permanent navy, approximately 80 per cent of the present navy strength is R.C.N.V.R.

During the European phase of the war the Royal Canadian Navy lost a total of 24 warships, with casualties of 2,300. Almost all the prisoners of war were taken by the Germans, and most of them when the Tribal class destroyer, H.M.C.S. Athabaskan, was sunk in April, 1944.

## No, 257, Thurs, June 14, 1945 - Canadian Army

The Canadian Army comprises general service personnel who enlist voluntarily for service anywhere in the world as well as men called up for compulsory service under the National Resources Mobilization Act. Of 663,769, the total net number of men taken into the army up to the end of 1944, fewer than 16 per cent had failed to volunteer for general service. The bulk of Canada's army forces in World War I also served voluntarily as conscription was not introduced until August, 1917.

In June 1940, the Canadian Parliament passed the National Resources Mobilization Act by which a system of call-up for compulsory military training was begun. N.R.M.A. men were called up for military training and service in Canada and its territorial waters. By order-in-council it was provided that they might be despatched to areas outside Canada should the need arise. At any time during the call-up process or subsequent training, N.R.M.A. personnel might volunteer for duty with any branch of the armed services (so long as the navy and air force were recruiting men). By the end of 1944 a total of 153,115 had been enrolled under the N.R.M.A., but, of these, 48,256 or more than 31.5 per cent had volunteered for general service. With the end of the war in Europe the system of military call-ups ceased.

Largest of the three women's services, the Canadian Women's Army Corps had an enlistment of 20,020 by the end of 1944. When the Women's Division of the R.C.A.F. began demobilizing some of its personnel, a policy of transferring such "W.D.'s" to the C.W.A.C. was initiated. Peak year for recruiting was 1943 when 7,880 enlisted. Women enlisted in the nursing service of the Royal Canadian Army Medical Corps numbered 3,361 to the end of 1944.

From the early days of the war a considerable proportion of Canada's total army strength has been serving outside the country. The first contingent of the First Division landed in the United Kingdom on December 17, 1939. At the year's end more than 24 per cent of the total army strength was outside Canada. By December 31, 1940, this percentage had risen to nearly 34 and at the end of 1944 to 59 per cent.

Until the European continent was invaded, the army in Canada had necessarily to concentrate on training men and providing defence forces for this country so long as there was any threat of attack. By September 1943, however, the changing picture of the war made it possible to free more men for overseas service and to reduce the number of operational troops at home. Part of the defence of Canada could be left to a reserve army composed of close to 100,000 men who had undergone part-time military training to be ready in the event that the continent was invaded. By the end of 1943 a total of 255,000 personnel are nearly 53 per cent of the army strength were serving outside Canada. By then 2,000 women were stationed in the United Kingdom, Newfoundland and the United States. Canadian nursing sisters were also in North Africa, Sicily and Italy. After the invasion of France, they moved into hospitals in northwest Europe.

After the collapse of France and British evacuation of Dunkirk, the Canadians in the United Kingdom were among the few adequately equipped troops ready to meet an invasion there. During the next few years Canadian armed strength was built up and by January, 1943, two Canadian corps were organized. At this time total army strength outside Canada was more than 190,000.

## No. 258 Fri. June 15, 1945 -- Canadian Army Activity

Continuous Canadian army activity on the continent of Europe began on July 10, 1943, with the invasion of Sicily. The Canadian First Division and First Armored Brigade were given a vital position in the line of battle. On September 3 Italy was invaded, and again the Canadians formed part of the striking force on the mainland. In November a further large contingent of Canadians arrived, and the First Canadian Corps was subsequently organized. It fought under Canadian command as part of the British Eighth Army.

By June 6, 1944, Canadian forces were of sufficient strength and were so highly trained that the Third Division formed part of the allied landing forces in Normandy. Other Canadian forces followed later, and in August, 1944, it was announced that the First Canadian Army was in action in France. Canadians in it consisted of the Second, Third and Fourth Divisions which were formed into the Second Canadian Corps, and the Second Armoured Brigade.

Until late in 1944, voluntary enlistments were sufficient to fill all the needs of the Canadian Army Overseas. In the bitter campaign in France and Belgium during the summer and early autumn Canadian infantry casualties had been heavier than anticipated. In order to replenish the reinforcements with adequate numbers of trained soldiers an order-in-council was passed on November 23, 1944, by which authority was given to send overseas up to 16,000 of the men serving under the

National Resources Mobilization Act. These were to be in addition to the full normal quota of general service reinforcements. Troop movements began during the Christmas period, and by V-E Day 13,000 N.R.M.A. men had been sent overseas, and another 3,000 had proceeded overseas after having volunteered for general service.

On April 23, 1945, it was announced that all Canadian army formations were fighting as part of the First Canadian Army in north-western Europe, that is, that the troops that had fought in Italy had been moved to join the forces in the north-west. The total included First Canadian Army headquarters and army troops; two corps headquarters and corps troops; three infantry divisions; two armored brigades. When the European war came to an end there were also approximately 75,000 fully trained Canadian soldiers in the United Kingdom.

In addition to First Canadian Army forces, Canada provided the First Canadian Parachute Battalion, part of the British Sixth Airborne Division which dropped into battle in Normandy early on D-day and again over the Rhine on March 23 to 24, 1945. Canadians also formed part of the United States-Canada Special Service force which was in action at Kiska, the Anzio beachhead, the drive on Rome and off the south coast of France.

Canadian Army units have from time to time been stationed in Newfoundland, Labrador, Iceland, Alaska, Gibraltar and islands adjacent to the West Indies and east coast of the United States. Close to 2,000 Canadians were engaged in the fighting at Hong Kong in December, 1941. Canada sent a contingent, largely consisting of N.R.M.A. men, to the Aleutians to help United States forces re-occupy the island of Kiska in August, 1943.

## No. 259. Sat. June 16, 1945 - Canadian Army Casualties

To the end of May, 1944, just before the invasion, total Canadian Army casualties numbered 21,689 — slightly fewer than the number of army killed 12 months later. The first heavy casualties suffered were 2,000 at Hong Kong on December 25, 1941. These were all killed or taken prisoner. During that year, raids along the enemy-held coast accounted for most of the other casualties.

In 1942 heavy toll was taken at Dieppe where Canadians made up five-sixths of the attacking forces. More than 3,350 Canadians were killed, wounded or taken prisoner.

By the end of 1943 the conquest of Sicily was complete, and Canadian casualties there numbered 2,400. With the invasion of Italy and subsequent heavy fighting, Canadian casualties in that theatre up to the fall of Rome on June 5, 1944, numbered 11,340, of whom 2,268 were killed.

After the invasion of Normandy, Canadian Army casualties mounted quickly. By the end of July, 1944, the heavy fighting around Caen and Carpiquet especially had driven the total casualty figure up to 33,239, of whom more than 9,000 were killed. The drive past Falaise and up the Channel coast in August accounted for 2,328 killed and 6,314 wounded (including Italy). October was the month of bitter fighting for the Scheldt estuary and 1,753 were killed and 5,570 wounded (including Italy).

After October, casualties were not so heavy as before. Lowest army monthly totals recorded were 1,998 in November during the lull which followed the Scheldt battle and 2,068 in January, 1945, when Canadian activity was limited on the Netherlands front. In March, 1945, the army was on the offensive between the Maas and

Rhine Rivers and across the Rhine at the end of the month. Casualties rose to 4,585 for the month.

During their 20 months of action in the Italian theatre, the Canadians suffered 26,152 casualties among nearly 100,000 personnel despatched to Sicily and Italy. More than 5,300 were dead.

## No. 260. Sun. June 17, 1945 ... Major Contributions of R.C.A.F.

In September, 1939, the strength of the Royal Canadian Air Force was 4,061 officers and airmen. This had risen by the end of December, 1943, to a peak strength of 206,350. Throughout the war the R.C.A.F. was recruited entirely from volunteers in a regulated but ever-increasing stream so long as the necessity prevailed. Enlistments reached a peak in 1941 and from that point intake decreased, slowly at first, until in October, 1944, enlistments ceased.

The major contribution of the R.C.A.F. to the victory of the United Nations was the development and administration of the British Commonwealth Air Training Plan. This agreement, signed at Ottawa on December 17, 1939, by representatives of the governments of the United Kingdom, Australia, Canada and New Zealand, entrusted to the R.C.A.F. the task of converting Canada into what the Late President Roosevelt once called "the airdrome of Democracy" where air crew drawn from all parts of the British Commonwealth and Empire -- and from many of the Nazi-occupied lands of Europe -- could be trained and sent overseas in an ever-growing stream.

The original plan called for the construction of 74 training schools across Canada, the last of which came into full operation in December, 1941, six months ahead of schedule. When the plan was at its peak there were 154 air and ground training schools in operation - more than twice the original estimate. In addition to flying schools and ground schools there were many other ancillary units necessary for the training of personnel. In all about 360 units, operating from 231 sites, were set up during the lifetime of the plan and at the end of 1943, the time of maximum expansion, 104,113 service and civilian personnel were employed on the staff with 15,000 more in training for staff positions. Canadians comprised about 71 per cent of the staff. Two types of schools, the elementary flying training and the air observer, were operated by civilian flying clubs and civilian companies, respectively, under direct R.C.A.F. supervision. Many of the instructors and staff pilots at these schools were graduates of the B.C.A.T.P. on leave without pay from the R.C.A.F.

When the first agreement was signed it was planned that Canada's share of the cost would be \$531,000,000 of a total cost of \$823,000,000. With the extension of the B.C.A.T.P. and other additional responsibilities undertaken during the course of the war, Canada's share in the financing had risen to more than \$1,281,000,000 when the plan came to an end. These figures covered only the training plan in Canada.

## No. 261. Mon. June 18, 1945 - B.C.A.T.P.

The first air crew graduates of the B.C.A.T.P. began arriving in the United Kingdom in November, 1940. Early in 1941 it was evident that even the most optimistic estimates for output in 1942 were going to be exceeded a year ahead of schedule. By 1943 Canada alone was supplying air crew in excess of the original estimates for the entire plan.

By spring of 1944 the trained air crew reserve had reached such proportions that it was possible to begin reduction of the B.C.A.T.P., and on March 31, 1945, with victory in Europe in sight, the plan was terminated. The B.C.A.T.P. had trained and graduated 131,553 air crew, of whom approximately 38 per cent were pilots, 23 per cent navigators, 12 per cent air bombers, 25.5 per cent wireless operator air gunners and air gunners and 1.5 per cent flight engineers. The R.C.A.F. provided 72,835 or more than 55 per cent of the graduates, the Royal Air Force 32 per cent, and the Royal Australian Air Force and Royal New Zealand Air Force the remainder. In addition to nations of the four signatory countries, the B.C.A.T.P. trained Belgians, Czechs, Free French, Mexicans, Netherlanders, Newfoundlanders, Poles and men from the United States and West Indies. In addition the Royal Norwegian Air Force trained its personnel in Canada in close co-operation with the R.C.A.F.

At first virtually all the Canadians trained as ground crew were required to staff B.C.A.T.P. schools and airfields across Canada and could not be spared to man Canadian squadrons overseas, whose ground crew was almost entirely found by the R.A.F. Production of ground crew increased from 5,917 in 1940 to 20,046 in 1941, about 10 per cent of whom proceeded overseas as the beginning of a force which had increased to 35,369 by the conclusion of the European phase of the war. Included in these latter figures were approximately 5,000 radar specialists despatched overseas for service with the R.A.F.

When recruiting ceased in October, 1944, it was decided to release for service in the army and navy 4,200 who had not begun air crew training. Men already in training continued their courses and on graduation were placed on the air force reserve and allowed to return to civilian life, subject to recall.

When the B.C.A.T.P. came to an end, all training schools were not closed, for a limited number were retained to train additional air crew for the Royal Air Force on a contract basis. In addition a shadow training scheme was retained in a state of readiness to provide for any emergency, while certain operational training units were also retained chiefly for Canadian requirements. These were carried on as R.C.A.F. commitments after the end of March, 1945.

The Women's Division of the R.C.A.F., which had been organized in July, 1941, had a peak strength at December 31, 1943, of 15,153. The first contingent of any women's forces to arrive overseas was a draft of the Women's Division in 1942. Enlisted primarily to assist in the gigantic training plan, members of the Women's Divisions were trained in more than 50 different trades and released thousands of men for combat duty.

# No. 262, Tues, June 19, 1945 - Overseas Air Operations - I

Because of its heavy commitments in the development and administration of the E.C.A.T.P. the participation of the R.C.A.F. in air operations overseas was at first necessarily limited. In February, 1940, an army co-operation squadron arrived in the United Kingdom to work with the First Canadian Division. In June another army co-operation and a fighter squadron also went overseas. It was a long time before the army co-operation squadrons were able to fulfill their functions in support of Canadian forces in the field, but the fighter squadron went into action in the Battle of Britain (August-October, 1940) and destroyed 31 enemy aircraft for a loss of three R.C.A.F. pilots.

By the end of 1940 the early graduates of the B.C.A.T.P. had begun to proceed overseas and new R.C.A.F. squadrons were formed to reinforce the original three

already in the United Kingdom, Eventually more than 45 squadrons were formed in Britain from personnel of the R.C.A.F. trained under the B.C.A.T.P. The new squadrons took their place with units of the R.A.F. in each of the four commands -- bomber, fighter, coastal and transport.

The first R.C.A.F. bomber operation was in June, 1941. During the ensuing year and a half Canadian heavy bomber squadrons had increased to such an extent that they were formed into a separate R.C.A.F. group and began operations as a formation within bomber command on January 1, 1943. During that year the group made 7,355 sorties and dropped 13,630 tons of bombs for a loss of 340 aircraft. In 1944 the scale of operations showed a marked increase while the ratio of losses steadily declined. The number of sorties jumped to 25,353 and the tonnage showed an even greater ratio of increase to 86,216 tons. The bomb total for August, 1944, alone was but little short of the total for all of 1943. During the first four months of 1945 the group flew 7,893 sorties and dropped 25,432 tons. In addition to the squadrons in the R.C.A.F. bomber group there was a Canadian squadron in the Pathfinder force of bomber command which had a noteworthy part in marking targets for the successive waves of bombers.

The original R.C.A.F. day fighter squadron was joined in 1941 by six additional units, and early in 1944 by six more which went from Canada after periods of service on the east and west coasts. In 1942 an all-Canadian fighter wing was formed in the United Kingdom from three Spitfire squadrons. Subsequently three more R.C.A.F. wings were set up, two with Spitfire aircraft and the third with Typhoons. A later reorganization of the wings reduced the number to three. For three years prior to the spring of 1944 the major duty of the fighter squadrons was escort to formations of day bombers of the R.A.F. and United States Army Air Force which struck at airfields, railroad centres and factories in enemy-occupied territory across the English Channel and North Sea. As a change from high flying escort missions, the fighters also engaged in low-level ground strafes. Another less welcome duty of the fighter squadrons was convoy patrol to guard shipping in British coastal waters.

## No. 263. Wed. June 20, 1945 ... Overseas Air Operations - 2

In the spring of 1944 the R.C.A.F. fighter wings added a new role to their varied activities and became fighter-bombers. In the weeks immediately preceding D-day they had an important part in dive-bombing "rocket" sites, bridges, freight yards and radar posts. From D-Day onward the R.C.A.F. fighter and fighter-bomber wings of the Second Tactical Air Force were the spearhead of attack, covering the invasion beaches, dive-bombing enemy strong points and taking a heavy toll of the German army's transport and fighting vehicles.

A fighter-reconnaissance wing of the R.C.A.F., equipped with Mustangs and Spitfires, gathered tactical information in preparation for the opening of the western front and continued to supply information for British forces as they fought their way forward from the beachhead.

In addition to the day fighter units, the R.C.A.F. also contributed squadrons for the night defence of Britain and the intruder campaign against the German air force. Three night fighter squadrons equipped with Beaufighters and Mosquitos, formed part of the air defence of the United Kingdom from the autumn of 1941 to the spring of 1944 and won an impressive number of victories. During the invasion of Normandy they spread a protective shield over the convoys and beaches and assisted in the defeat of the flying bomb menace. One intruder Mosquito squadron was credited with 169 enemy aircraft destroyed and 82 flying bombs blown up in the air or on the sea.

Coastal command, which shared with the Royal Navy the duty of guarding Britain's shipping and destroying that of the enemy, also had its quota of R.C.A.F. units. Sunderland squadrons spent thousands of hours sweeping over the seas in search of U-boats or shepherding convoys to port. On many occasions they were rewarded by unmistakable evidence of a kill; in many other attacks the Nazi submarine was certainly damaged although there was no clear proof of destruction. A Canso squadron, which moved from Canada to Iceland, also scored several successes.

In the Bay of Biscay the Sunderland squadrons were joined by a Wellington unit of the R.C.A.F., equipped with Leigh lights, which patrolled over the bay by night on guard against U-boats attempting to slip through the aerial blockade.

#### No. 264. Thurs, June 21, 1945 - Overseas Air Operations - 3

For many months, from late in 1941 until the spring of 1942, a Canadian squadron equipped with Hudsons was the leading "strike" unit in coastal command, famed for its mast-high attacks on German convoys in Netherlands coastal waters. In one month the "Demons" attacked and destroyed or damaged 83,000 tons of enemy shipping. Later another unit flying Albacores and Wellingtons was successful in many bomb attacks on enemy merchant vessels, flakships and U-boats. To the north yet another coastal unit of the R.C.A.F. sent its Beaufighters, carrying rocket projectiles, to strike at convoys off the Norwegian coast. In operations after D-day this squadron assisted in the destruction of the last German naval vessels in the Bay of Biscay.

While these units were sharing in the work of the R.A.F. based in the United Kingdom, a fighter squadron of the R.C.A.F. was accompanying the Eighth Army in its triumphant advance from El Alamein to Cape Bon, across to Sicily and from the heel of the Italian peninsula to the valley of the Po. The Canadian Spitfires did particularly good work over Anzio and Cassino, and then, when the Luftwaffe withdrew from the daylight skies of Italy, the Spitfires became fighter-bombers.

Farther east in the wide expanses of the Indian Ocean another squadron of the R.C.A.F. escorted convoys, carried freight, hunted submarines and aided in the rescue of shipwrecked mariners. It was a Catalina from this squadron which early in 1942 detected the approach of a Japanese invasion force and by its sighting report warned the defences of Ceylon in time to repulse the enemy.

In the last months of the war in Europe the R.C.A.F. formed several transport squadrons, one of which had a part in conveying troops and supplies to the Canadian forces in the Netherlands and Germany, while on the other side of the world other squadrons were doing similar work in Burma.

A sketch of the work of R.C.A.F. units only at home and overseas does not tell the full story, however, of the R.C.A.F. is participation in the war. For every Canadian air crew serving in an R.C.A.F. squadron there were many flying with R.A.F. units in every command and in every theatre of war. R.C.A.F. pilots, navigators, wireless operators and air gunners were in every squadron of bomber, fighter and coastal command. They had a hand in the smashing of the Mohne and Eder dams and in the sinking of the Tirpitz. Canadian pilots fought in the long Battle of Malta; they accompanied an R.A.F. mission to Russia; Canadians flew over the Western Desert and accompanied the allied forces in the invasion of North Africa; they have participated in air battles and bombing expeditions over the jungles of Burma. By the hundreds they are in transport command, ferrying aircraft across the Atlantic, over Africa, along the Persian Gulf and wherever aircraft bearing the roundels of the

R.A.F. are to be found. The full extent of their contribution cannot yet be estimated, but there has been no major operation of the R.A.F. in which Canada was not represented.

## No. 265. Fri. June 22, 1945 -- Canada's Merchant Marine

From a strength of 1,460 merchant seamen who manned Canada's pre-war foreign-going merchant shipping, merchant navy personnel during the war increased in number to 8,350. To the end of March 1945, the number of Canadian seamen reported dead or missing was 1,054 -- 674 from Canadian ships and 380 from allied ships -- and the number who had been held captive was 189 -- 128 from Canadian ships and 61 from allied ships. All casualties therefore totalled 1,243.

To provide personnel for the expanding merchant fleet there was a general upgrading of the experienced personnel, training centres were established, and former merchant navy officers and seamen were encouraged to return to sea. Assistance was given to those who attended existing nautical schools, and special training facilities were made available for marine radio officers.

Merchant seamen's manning pools were established in the ports of Halifax, Saint John, Montreal and Vancouver for the accommodation of seamen and to provide reserves of officers and seamen to man new ships and to make up crew deficiencies on ships in convoys. From October 1, 1944, to December 31, 1944, the number of Canadian and United Kingdom merchant seamen accommodated at these manning pools totalled 38,786.

The number of trainees who completed a six-weeks' course in stokehold and engine-room duties at the Marine Engineering Instructional School at Prescott, Ontario, to the end of 1944 totalled 1,039. The number of trainees who completed their 13-weeks' course for deck ratings at St. Margaret's Sea Training School at Hubbards, Nova Scotia, to the end of 1944 totalled 646.

#### No. 266. Sat. June 23, 1945 -- Demand for Seed Potatoes

Inquiries for Canadian field crop and vegetable seeds have come from almost every country of Europe, and since V-E day the office of the Plant Protection Division, Dominion Department of Agriculture has been receiving requests from several parts of the world for Canadian certified seed potatoes. By intensive work, Canadian scientists have improved the quality of most of the imported seeds, so that today Canada, formerly a minor factor in vegetable seed production, is an important producer of virile seed.

In the demand for potato seed, history is repeating itself. Louis XVI of France (1754-1793) offered a prize to any subject who could find a crop that would produce large quantities of food on a small area. A man named Parmentier came forward with the potato and demonstrated that huge quantities of food could be produced from one acre.

From the 1944 crop, Canada exported about three and one-half million bushels of certified seed to the United States, Uruguay, South Africa, Cuba, Venezuela, Bermuda, West Indies, France, Dominican Republic, Newfoundland, and even to Iceland. Most of the Canadian certified seed potatoes exported are grown in the Maritime provinces.

According to the records of the Dominion Bureau of Statistics, Canadian farmers produced a total of 40,409,000 cwt. of potatoes in 1944, a figure which exceeded the average for the years 1938 to 1942 by slightly more than 10,000,000 cwt. The financial return to the growers in 1944 was \$70,550,000. The crop in 1944 was raised on 534,900 acres, and the average yield per acre was 92 cwt.

## No. 267. Sun. June 24, 1945 -- The Sapodilla

Many of us, if asked what a sapodilla was, might have difficulty in answering - yet it is a tree from which is obtained a substance much used in Canada in a well known product - namely chewing gum. Chicle, the basis of chewing gum, is obtained from the bark of the sapodilla. The tree, a stately evergreen, with hard durable wood, is grown on the western coast of India, in Bengal, in Ceylon and parts of Africa. It is quite common in the Hawaiin Islands and is abundantly distributed from Brazil to Florida.

In its native countries, tropical parts of America, the sapodilla is most appreciated for its fruit, which is eaten raw and is acknowledged as one of the best of tropical fruits. "Chico sapote" is perhaps the most abundant and best known of the sapodillas. The fruit is about the size of a Japanese persimmon and nearly round. The skin is thin and when fully mature becomes delicate and rusty brown in colour. The flesh is yellowish brown, sweet and melting.

The fruit can be shipped successfully by following the usual care exercised in the harvesting and handling of perishables. The skin is thin and tender, and when fully ripe the fruit is easily injured. If picked when mature but in the hard-ripe stage, it can be transported over fairly long distances, since it does not begin to turn soft for several days. Shipments from the Florida Keys to New York have been quite satisfactory.

As with various other tropical fruits, the distribution of the sapodilla is limited because of its susceptibility to the attacks of certain injurious pests. It is one of the favourite hosts of the Mediterranean and Mexican fruitflies, a susceptibility which in some regions not only renders it unfit for human consumption but precludes the possibility of exporting the fruit to those countries where the pests do not exist.

Until some of these problems can be solved, many people will have to continue to think of the sapodilla in terms of chicle alone, expressed in the form of pepsin, spearmint, or wintergreen flavoured chewing gum. In this form the sapodilla will have stretched itself many times around the globe.

# No. 268. Mon. June 25, 1945 -- Tuberculosis Sanatoria in 1943 -- 1

The number of persons under treatment in the 39 institutions devoted to the care of tuberculous patients during the calendar year 1943 was 22,341, according to a survey conducted by the Dominion Bureau of Statistics. Resident patients on January 1, 1943, totalled 10,101, while 12,240 were admitted during the year. Direct discharges in 1943 totalled 9,003, deaths numbered 2,321, leaving 9,988 resident patients on December 31, 1943.

Of the 12,240 admissions during the year, 8,722 were new cases, 2,568 were readmissions, and 104 were reviews. Of the admissions, 10,215 were found to be suffering from pulmonary tuberculosis, including 242 diagnosed as with childhood type,

2,202 as minimal, 3,832 as moderately advanced and 3,939 as far advanced. A total of 491 had pleurisy. The non-tuberculous totalled 468, while suspects, undiagnosed and all others numbered 578.

The 39 sanatoria in 1943 had a bed accommodation of 9,254. Additional beds in public hospitals for tuberculous patients amounted to 2,065, giving a total of 11,319 beds for tuberculous patients in all institutions. During the five-year period, 1939-1943 inclusive, tuberculosis beds showed an increase of 11.4 per cent. The increase in tuberculosis heds is encouraging but there is still much room for improvement in several of the provinces.

Total revenues of the 39 sanatoria in 1943 amounted to \$8,669,636, of which \$5,701,619 were received from the provincial governments, \$1,112,240 from municipalities and \$580,906 from the Dominion Government. These grants and payments constituted 85.4 per cent of total revenues. Total expenditures amounted to \$8,619,-447.

## No. 269. Tues. June, 26, 1945 - Tuberculosis Sanatoria -- 2

Of the 12,240 patients admitted to tuberculosis sanatoria in 1943, 11,194 were found to have tuberculosis, including 6,045 males or 54 per cent of the total, and 5,149 females or 46 per cent of the total. The heaviest toll of females was found in the age groups 15 to 29, while for males the age groups 20 to 34 had the highest percentage of admissions. It is interesting to note that 70.8 per cent of the total minimal, 66,0 per cent of moderately advanced and 53 per cent of far advanced cases were found in age groups 15 to 34.

A classification of the patients admitted with tuberculosis by previous occupation, shows that the largest number of admissions belonged to the group, homemakers, whose sole occupation is in the home. The number of admissions from this group totalled 2,264, and if the 629 who were living at home and not employed in household duties are added, the total becomes 2,893, or 25.8 per cent of total admissions.

Occupational activities under manufacturing contributed 1,180 or 10.6 per cent of total admissions. Those engaged in agriculture and kindred occupations numbered 910, or 8.1 per cent; personal service, 757 or 6.8 per cent; public administration and defence, 747 or 6.7 per cent; professional services, 505 or 4.5 per cent; transportation 392 or 3.5 per cent; trade, 349 or 3.1 per cent; building and construction, 266 or 2.4 per cent; clerical occupations, 489 or 4.3 per cent; unskilled workers, 675 or six per cent. Students supplied 943 or 8.4 per cent of admissions, and all others contributed 7.4 per cent.

Of the patients discharged in 1943, 73.3 per cent were released on medical advice, and of that number 6,488 or 97 per cent returned to homes where conditions were satisfactory. In 1942, 65.4 per cent were discharged on medical advice and 17.6 per cent against medical advice. Of the tuberculous deaths, 91.5 per cent were pulmonary, with an average days' stay per patient of 320.5 days.

## No. 270. Wed. June, 27, 1945 - Facts of Interest

The tamarack is one of the larch tree family - the only native family of conifers which drops its leaves in the Fall. This tree is found from Labrador to the Rocky Mountains and north to the mouth of the Mackenzie River, where it is found

at the northern limit of tree growth, Tamarack is among the heaviest and strongest of the softwoods of eastern Canada. It is quite durable and for that reason is used for railway ties, posts, and telegraph poles. The wood is valuable for construction purposes, pumps, tanks and vehicle supplies. The production of tamarack lumber in Canada in 1943 amounted to 35,233,000 feet board measure valued at \$888,000, according to figures compiled by the Dominion Bureau of Statistics.

Limestone is the most widely used of all rocks because of the great variety and importance of its industrial uses and because of its widespread occurrence. It is quarried in all provinces of Canada except Prince Edward Island and Saskatchewan, but by far the greater part of the production comes from Ontario and Quebec. The 1943 production of limestone for all purposes, including the manufacture of lime and cement, constituted about 90 per cent of the total production of Canadian stone. Limestone production in Canada was increased during the war years, advancing from 4,150,000 tons in 1939 to 6,265,000 tons in 1943, according to figures compiled by the Dominion Bureau of Statistics.

## No. 271. Thurs. June 28, 1944 Divorces Granted in 1943

There were 3,263 divorces granted in Canada in the calendar year 1943 - 3,171 being granted by the courts of seven provinces, while 90 were granted by the Dominion Parliament to petitioners whose legal domicile was in the Province of Quebec and two in Prince Edward Island. As compared with the figures for 1942, divorces in Canada in 1943 increased by 174, or 5.6 per cent. All provinces with the exception of Prince Edward Island, Manitoba and Saskatchewan recorded significant increases over the preceding year. In Ontario the increase was 58; British Columbia, 53; New Brunswick, 45; Alberta, 38; Quebec, 19; Nova Scotia, three.

The figures reveal that upon the basis of the number of divorces granted to the total population the rate per 100,000 has steadily increased since 1918. In 1918 the rate was 1.4; by 1926 it was 6.4; by 1930 it had risen to 8.6 and in 1936 it reached 14.4. In 1940 the rate was 20.8; in 1941 it was 21.4; in 1942 it was 26.5, and in 1943 it increased to 27.7. During the twenty-five year period there was but one marked halt in the general upward trend, i.e., in 1931 when the rate dropped to 6.8 from the 1930 figure of 8.6. but in 1932 the rate rose again to 9.6.

Considering the provinces individually, British Columbia has always maintained by far the highest divorce rate in Canada. In 1918, the rate stood at 13.7; by 1926 it had risen to 27.6 and to 37.7 in 1930. The upward trend stopped in 1931 when the rate dropped to 30.0, but in 1932 the upward trend was resumed with the rate increasing to 34.7, and by 1940 had risen to 83.7 per 100,000 population. There was, however, a definite halt in the trend for 1941 when the rate dropped to 74.5, but in 1942 it had risen again to 94.7 and the 1943 rate, highest on record, stood at 97.4.

Discounting Prince Edward Island, the Province of Quebec has the lowest provincial divorce rate in Canada. The general trend has been slightly upward from 0.1 per 100,000 population in 1918 to 1.9 in 1940. During the review period there has been a number of minor fluctuations with a peak of 2.6 in 1938. In 1943 the Quebec rate stood at 2.6. It must be remembered, however, that the basis for the granting of divorce decrees in Quebec is not strictly comparable with the rest of Canada.

## No. 272. Fri. June 29, 1945 -- Cash Income from the Sale of Farm Products

Cash income from the sale of farm products in Canada for the first six months of 1945 at \$702 million, was approximately \$62 million less than for the first six months of 1944. Except for a minor amount in Nova Scotia, the three Prairie Provinces accounted for all the decrease in income. The largest decrease of \$51 million occurred in Saskatchewan, followed by substantial decreases of about \$25 million in Alberta and \$14 million in Manitoba. These declines were offset in part by increases in other provinces which in Ontario amounted to nearly \$25 million, with the remainder of the provinces showing minor increases.

The income in the prairies was down chiefly because of reductions in marketings of wheat and hogs during the first half of 1945, compared with the unusually heavy marketings during the first six months of 1944. However, increased marketings, chiefly of cattle and calves and of cats, helped to offset part of the decline.

The increase in income in Ontario was due chiefly to an increase in marketings of cattle and calves and of field crops. There was also a substantial increase in income from the sale of dairy products, while the income from hogs declined, the reduction was not so marked as in the prairies. With prices continuing at about the same level, the steady volume of marketings in the other eastern provinces and British Columbia resulted in only slight changes in income in these provinces.

The prospect of a reduced production of field crops indicates that marketings from this source during the last six months of 1945 will be substantially lower than during the last half of 1944. Income from live stock products may not change greatly as the expected decline in sales of hogs may be offset by heavier marketings of cattle and calves. Thus, with a lower income already established for the first six months of the year, it seems probable that the income of Canadian farmers in 1945 will be moderately below the record year 1944.

#### No. 273. Sat. June 30, 1945 -- Merchandise Export Trade

Canada's merchandise export trade in June -- the first full month after V-E Day -- was featured by a sharp reduction in the export of commodities classified as definite war materials, and a growth in the export of non-war items, especially agricultural products. The total value of merchandise produced in Canada sent abroad in June was \$322,846,000 as compared with \$343,158,000 in June 1944, when military activity in Europe was especially intense. The export of items intended mainly for war purposes declined from \$167,155,000 in June 1944, to \$117,996,000, whereas the value of other articles increased from \$176,003,000 to \$204,850,000. During the first half of 1945, merchandise exports were valued at \$1,718,398,000 as compared with \$1.746,268,000 in the similar period of 1944.

The marked advance in the export of agricultural products in June was of special significance, reflecting as it does the heavy demand for Canadian foodstuffs in Europe. The total value of Canadian farm products exported advanced from \$67,192,000 in June last year to \$99,833,000. Wheat shipments were almost doubled, advancing from \$32,685,000 to \$61,347,000, while the export of wheat flour recorded a substantial increase from \$8,757,000 to \$11,593,000. The combined total of fruits and vegetables advanced from \$1,344,000 to \$1,474,000. Weats declined from \$23,564,-000 to \$13,009,000, while fisher products advanced from \$5,474,000 to \$7,270,000.

In the iron and steel group the total declined from \$86,271,000 in June last year to \$68,614,000, despite a sharp rise in the export of motor vehicles and parts

from \$38,088,000 to \$49,414,000. The decrease in this group was due in large measure to the reduction in the export of guns. The total of wood and paper rose from \$38,829,000 to \$41,193,000. Shipments of newsprint paper rose from \$14,391,000 to \$14,765,000, planks and boards from \$7,078,000 to \$8,397,000, pulpwood from \$1,517,-000 to \$2,275,000, while wood pulp recorded a comparatively small decline from \$9.045,000 to \$8,875,000.

The United States was the principal destination of Canada's exports, the June valuation standing at \$112,278,000 as compared with \$111,226,000 in June 1944, and in the first six months of this year, \$618,192,000 as compared with \$637,764,000. This present to the United Kingdom -- the second largest destination -- were valued at \$94,634,000 as compared with \$127,929,000, and in the six-month period \$578,782,000 as compared with \$652,761,000. The decline in the exports to the United Kingdom reflected a two-fold development -- the lessened need for armament, and the commencement or expansion in the shipment of goods direct to countries which hitherto had been beyond the reach of our merchantmen.

Canadian merchandise is playing a vital part in the rehabilitation of European countries. The exports to Greece in June amounted to \$4,160,000, Netherlands \$2,706,000, Belgium \$4,638,000, Norway \$1,170,000, France \$11,505,000, and Yugoslavia \$225,000. Canada's material contribution to the war against Japan is reflected in the export totals for recent months. Exports to British India in June amounted to \$41,730,000 as compared with \$13,359,000 a year ago, and in the six months ended June, \$165,940,000 as compared with \$70,906,000.



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