

### Tanks and Planes as New Branches of Old Artillery

#### Montgomery's Fire Power Range of Some Guns.

(By Percy Ghent)  
That God is on the side of the battalions with the bigger cannon, is a statement commonly attributed to Napoleon I, though who actually did make it has never been definitely established. Nor is the point of origin important. What is important about the statement is its truth, especially when it is translated in a more technical form such as "Victory goes to the fighters with superior fire-power."

History shows that modern battles are generally won by artillery. It was once the custom to reserve artillery as the last line of defense. Napoleon massed his big guns in the first line of battle. That so-called "revolution" of artillery tactics won most of his battles. At Leipzig, say the historians, Bonaparte looked grave when he saw the enemy ranging long rows of cannon against him. "At last they are learning," he said. And Leipzig was one of the battles he did not win. Each time Montgomery has put Rommel to flight, a smashing cannonade from 500 or more heavy guns has been the first and deadliest punch of the fight.

#### Broader View of Artillery

Better battalions with more powerful guns will bring ultimate triumph to the United Nations in this war. In other words, artillery will be the deciding factor. But we had to read a striking book by Willy Ley on Shells and Shooting before it was realized how much is embraced by the term "artillery." Many military strategists, and particularly those far away from the actual conflict, have their own pronounced and often one-sided notions about the way the war should be conducted. Those who read Victory Through Air Power will recall that the author asserted time and again that the day of artillery is over, that the bombing plane is now supreme, and ships of war in general and battleships in particular have become obsolete and ineffective with the advent of fighting ships of the sky. Other experts pin their faith on tanks, tanks in their thousands, as the one sure way of delivering the knock-out blow to our enemies. What they forget, as Ley points out, is that bombing planes and tanks do not supersede ground artillery but supplement it. They are indeed branches of artillery in that they vastly increase the mobility in the other of fire-power. And fire-power, technically considered, means the total weight of metal and explosives that can be hurled against the foe — the function of artillery.

#### Montgomery's Fire Power

If, then, the idea of artillery is broadened to include other means of increasing fire power, the bombing plane becomes a flying gun of spectacular range, tanks highly mobile field-pieces, and battleships floating batteries. And when these big guns of land, sea and air are considered under the convenient term of artillery as aiding and supplementing each other, the whole picture of offensive warfare becomes simpler and clearer, and the absurdity of over-stressing or belittling the importance of any branch is apparent. Montgomery seems to have found them all very useful. Where-

### THE "CABLE PARADE"



CANADIAN NATIONAL Telegraphs men and women call it the "cable parade," because it develops each time general leave is granted to airmen receiving instruction at one of the larger training centres in Canada. Young men from many parts of the Empire are trained here under the Commonwealth plan. On arriving at their depot or on the eve of furlough they storm the nearest telegraph and cable offices to send messages to the folks at home. The upper photograph shows the staff doing capacity business at one of the 1,976 Canadian National Telegraph offices while (below) other airmen outside await their turn to file messages.

ever Rommel and his Africa Korps elected to make a stand on the long retreat from the gates of Alexandria to the rear exit at Tunis, Montgomery's big guns have prodded the German and Italian hordes into flight again; his tanks and planes have pursued and harassed them, and shells from ships at sea have been dropped among them as reminders of the warm welcome prepared in that direction. But whether represented by shells shooting over the sandy miles of the African desert, the watery miles of the Dover Straits, or by block-busters dropped on Berlin, it is all artillery in the final analysis; a revolution in artillery tactics such as Napoleon never dreamed of.

#### Gun Range of 79 Miles

In the long story of big guns, from the quaint entries in the "Memorie-böcke" of the City of Ghent in 1313 to the thundering barrages among Tunisian hills in 1943, nothing ever stirred popular imagination so much as the monster cannon that fitfully bombarded Paris in 1918. It, or more correctly they — for it has been established despite German denial that there were at least two of them — became known everywhere as "Big Bertha." Bertha, however, while also a product of Krupp's, was a different lady. Ley calls it the Paris Gun. It had a calibre of 8.2 inches, and the barrel, built in sections, was 120 feet long. This giant was cunningly hidden in the Forest of Crepy. First of the shells fired left the muzzle at 7:09 a.m. on the 23rd of March and landed in a Paris street 79 miles way, 3 minutes and 19 seconds later. At that distance of course, no particular target could be selected. It was counted a triumph that by mathematical calculations which determined the length of barrel, its angle pointed skyward, and the weight of powder behind the shot; it was known in advance that the shell would certainly strike Paris at one point or another.

#### Paris Gun "Almost Taken"

When the shells left the muzzle of the Paris gun which was pointed at a 54-degree angle, they had a velocity of approximately one mile per second. This speed was quickly reduced by air resistance. Less than two minutes later they had climbed to the peak of trajectory, forty miles away from the muzzle and at the amazing height of thirty miles above the ground. It was the sustained high speed through the stratosphere where there is practically no air resistance, that made the extreme range of the famous gun — or guns — possible. At intervals from March to August, 1918, the shells crashed into Paris. All told, 367 of them dropped in the city. Total loss of life was just over 300 persons. Many were killed or injured when one of the shells struck the Church of St. Gervais during service on Good Friday, caving in part of the roof and killing and wounding 150 people. The Evening Telegram's staff correspondent was in Paris that day, waiting for a pass into the United States Army area, and heard the explosion. A shell would drop about every 20 minutes. Apart from the destruction at that church material damage was surprisingly light; but the moral effect on the citizens of the big city was tremendous. It has been estimated that about half a million of them moved into rural haunts westward, and out of the range of the shells. When the great German retreat began later the Paris Gun came near to capture by pursuing Allied troops. Only by the margin of an hour or two did the Huns get away with the monster — 154 tons of gun and 26 tons of cradle.

### C.I.L. Making Ferocious Trouble-Maker for Tanks

It's touch and go for enemy tank treads when they meet the Hawkins grenade, a pint sized newcomer to the family of anti-tank mines which is described by John Harwood-Jones in the March issue of C-I-L Oval. Now being made in Canada at the rate of hundreds of thousands a month, the Hawkins grenade is about the size of a can of fly spray and can be "planted" quickly by scraping a shallow hole with the hand and covering the land mine loosely with sand. The deton-

## Beauty and You

by PATRICIA LINDSAY

#### Groom According to Your Job and Show Good Taste

Girls and women who are engaged in work these days (and who of us are not?) should be certain to groom in keeping with the jobs they are doing.

First of all, be precise about your hair. Straggly ends, an unkempt hair-do, a dandruff-shedding scalp, produce an impression of sloppiness which is out of key with any job, minor or major. If your hair is an awkward length, cut it shorter for the sake of efficiency and good looks. Anyhow it is really unsafe to have long hair which might fall into and clog up delicate machinery or get caught in any moving office or factory equipment.

Be precise about your hands. Rough hands, chipped nails and untrimmed cuticles are hands which do not do a good job. Keep your nails short, enough for efficiency and tinted in a neutral shade.

Be precise about your skin. Scrub your skin clean with a complexion brush and granular washing preparation, and use a good lubricating cream at least once a day to protect and beautify your skin. You may give your skin added protection by wearing a foundation beneath your daily make-up. Apply your make-up carefully before coming to work so that you can forget about your face while you are working.

Be precise about the measurements of your figure. See that you are well proportioned and that you eat enough for energy. Watch your posture while you work and practice relaxing exercises when you find yourself tensed or keyed-up. A long warm bath also relaxes and if the bath is softened and fragrant it helps still more.

If you will follow a planned program of beauty, you can remain lovely and beautifully groomed just as if you were a lady of leisure.

The war is producing a new race of American women—a fighting, working, determined race. It is these women who are changing the beauty patterns of America. For this group new beauty modes and more efficient beauty products for nominal cost are being created.

Their faces are kept young, their figures attractive, their energy up to par. And when work is done, at the end of the day, after an hour of relaxing, no one could tell that these women have done a man's sized job.

(Released by The Bell Syndicate, Inc.)



Fascinating illusions can be created with a steady hand, a lip stick brush and the right shade of lip covering. In a Self-Make-Over class, this girl learns expert application.

### Princess Alice Appreciates Club Bearing Her Name

#### Timmins Club Now the Proud Possessor of Letter and Photograph from Her Royal Highness.

Monday afternoon the Princess Alice club held a general meeting in the Grill room of the Empire Hotel. The president of the Club, Mrs. J. W. Thomson, conducted the meeting and the secretary, Mrs. O. Kenne, read the reports.

The meeting was an especially interesting one for the members as Mrs. J. Barry, honorary president, presented the club with a beautiful photograph of H.R.H. the Princess Alice, which had been sent by Her Royal Highness, accompanied by a letter expressing her pleasure at the good work done by the Princess Alice Club in Timmins.

It was decided that a delegate be appointed to attend meetings to which the Club was asked to send a representative and Mrs. W. E. Ecclestone was named to act in this capacity.

Mrs. W. Alexander reported that at a Wartime Prices and Trade Board committee meeting which she had attended, an invitation had been extended to all members of the Club who were interested in these meetings to attend.

The various committees in charge of the dance which the Club is holding on Friday, April 30th, gave their reports on the work which has been accomplished and all members were pleased with the progress which has made.

The Red Cross were in need of work to be done on an emergency surgical supply quota and Mrs. F. Woodbury was asked to look after this matter.

At the close of the meeting the members had a social half hour.

these underweights could put on "some" weight; if they would go about it in a thorough manner. Their first thought should be to have an examination by their physician and dentist as any infection present can prevent gain in weight.

If no infection is present, then they should look into their health habits. Are enough fat and starch foods eaten? Is enough light outdoor exercise taken to stimulate the appetite? Is enough sleep obtained at night and could not some more rest be obtained during the day.

Just as animals can be fattened by more rest and more food, so some gain can be made by most human beings by more food and rest.

#### Overweight and Underweight

This handy booklet by Dr. Barton contains many helpful suggestions for those who are too thin and those who are fat, including diet suggestions, exercise, various types of overweight and underweight. To obtain it send your name and address, enclosing Ten Cents and a three-cent stamp to cover cost of handling and mailing, to The Bell Library, Post Office Box 5, Station O, New York, N. Y., and ask for booklet No. 105 — Overweight and Underweight, mentioning the name of this paper. (Registered in accordance with the Copyright Act.

### Success of Fourth Loan Depends on Public Reception

#### Chairman of Sales Confident that Public of Cochrane Unit Will Put it Over the Top.

"A vital factor contributing to the success of the Fourth Victory Loan campaign will be the general public reception of the salesmen, whose objective will be to reach the quota of \$2,250,000.00 set for the District of Cochrane."

This was the statement made this week at Victory Loan headquarters at 39 Third Avenue, by Mr. H. B. Martin, chairman of sales.

Mr. Martin emphasized his own confidence in the people of the whole unit of Cochrane. He felt sure that they would meet the situation with courage and resource. "The men who fight in the front line," he continued, "enabled us to continue on here in the battle for the billion. Let us go over the top so that they may continue and conclude successfully their battle against the enemy."

Mr. Martin urged every householder to bear in mind that every official canvasser came as an ambassador of the Canadian people, with a sound, secure, national investment proposition. "There is nothing," he concluded, "offered to-day in the savings field, more attractive or gilt-edged than Victory Bonds."

A full list of the official salesmen will be published in The Advance at a later date.

### Urges All to Put Their Last Dollar in the Loan

Sunday evening in the Kiwanis hall, Fourth Avenue, at an organization banquet, S. J. Morgan, one of the Fourth Victory Loan speakers, made a strong appeal for united action in the forthcoming campaign. He emphasized the need for everyone putting in the last dollar to put this coming loan over the top. He stressed the urgency for every last man to "back the attack" on the home front as the boys were doing overseas.

Mr. Morgan did outstanding work as a speaker in the previous loan and was given an enthusiastic reception by the gathering on Sunday evening. To use his own words that evening, he felt the unanimity of the audience to the cause of the Fourth Victory Loan.

After welcoming the representatives, he introduced Mr. H. Burt, the Public Relations chairman, who gave a resume of the publicity planned for the coming campaign. In a short talk, Mr. Burt gave assurance of support and close cooperation to the Group Payroll plan and left no doubt that the organization was well in hand.

Mr. N. L. MacNamee next addressed the representatives and appealed for coordinated enthusiastic support and urged a stronger effort in the light of the new high objective in the District of Cochrane which totalled \$2,400,000 through the addition of \$150,000 Special Names quota, though he pointed out that the general canvass was \$2,250,000. Mr. MacNamee said "We have the cause and if we go about the job with the same determination and the

### Attention Automobile Owners

Automobile insurance premiums—Public Liability, Property Damage, Collision—considerably reduced on account of present gasoline rationing. We shall gladly quote you rates. We also sell Fire, Sickness and Accident and all forms of Insurance. Real Estate.

## SULLIVAN & NEWTON

SECURITY (Est. 1912) SERVICE

21 PINE STREET NORTH TIMMINS, ONT.

### WANTED! GLYCERINE FOR HIGH EXPLOSIVES

Save all waste Fats and Bones

CANADA URGENTLY NEEDS THEM

#### HERE'S WHAT TO DO

- 1 You can take your fat drippings, scrap fat and bones to your meat dealer. He will pay you the established price for the dripping and the scrap fat. If you wish, you can turn this money over to your local Voluntary Salvage Committee or Registered Local War Charity, or—
- 2 You can donate your fat dripping, scrap fat and bones to your local Voluntary Salvage Committee if they collect them in your community, or—
- 3 You can continue to place out your Fats and Bones for collection by your Street Cleaning Department where such a system is in effect.

DEPARTMENT OF NATIONAL WAR SERVICES

### HOLD HIGH THE TORCH OF FREEDOM

## CANADIAN WORKERS Speed THE TANKS

In this monstrous, fantastic war of man-made mammoths, Canadian factories are participating with increasing force. Tanks, armoured vehicles, and many other needed war machines are streaming forth to carry the fight to the foes of freedom.

Manpower is the greatest factor behind the production of machine power—labour and management, shoulder to shoulder, in a struggle to out-produce the Axis.

Throughout Canada in hundreds of branches from coast to coast six thousand men and women of the Bank of Montreal are rendering war-time banking service—in Victory Loans, War Savings Certificates and Stamps, in foreign exchange control, in handling pay for the active service forces, the civil service and workers, in loans to industry, and in many other ways.

## BANK OF MONTREAL

"A BANK WHERE SMALL ACCOUNTS ARE WELCOME"

MODERN, EXPERIENCED BANKING SERVICE . . . . . the Outcome of 125 Years' Successful Operation

Timmins Branch: T. W. TOD, Manager

SAVE for Victory