

Predicts Musical Lighthouses That Will Sing to Sailors

Talking lighthouses to tell sailors off and made audible. The beam from a revolving lighthouse, for example, might be made to sing a definite note whenever its rays fall on a small photo-electric cell mounted on a ship's bridge. Even the captain in his cabin thus would know, by the distinctive musical note of the beam, which lighthouse of several along a coast was then in sight. Such lighthouses now are distinguished by color or by the number and arrangement of flashes as the light revolves. The use of color necessitates decreased intensity of the light, since colored lights are not so bright as pure white ones. The recognition of lights by flashes requires considerable practice. It might be easier, Mr. Caldwell believes, to have each lighthouse identify itself by a musical note or even by spoken words, although the former might require ship's captains to possess musical ears in addition to the manifold qualifications already necessary for that job.

Russia Also Has A Family of Smiths

By Helen Christine Bennett
McCall's special representative
to Russia

In America we have one family name that crosses all boundaries. It is the name of Smith. It may be borne by the socially elite or the workman who goes out by the day. We know there must be its equivalent in Russia. When asked, smiles came at once to the faces of Russian women. "Of course we have such a name. In Russia it is Ivanoff." It is the Smiths—the Ivanoffs of Russia who tell the story of the new life.—The Editor of "McCall's."

One of the most revolutionary changes brought about by the Soviets has been the freeing of woman to an extent not equaled in any country in the world. In Russia today woman may vote and hold office with none of the discriminations found in other countries. She has equal sex rights and privileges; she may marry and divorce at will; she has equal rights in her children and all her children, born in wedlock or out, are legitimate. She may do anything a man may do without stigma. She is free as no woman in the world has ever been free—as man is free.

When you first arrive in one of the great cities of Russia and look at the people on the streets, you search in vain for the smart, well-dressed men and women you are accustomed to see on the North American continent. The Smiths who pass you wear the clothes of workers. They are comfortable and useful clothes, but there is nothing luxurious about them. Let us look at the women. The one just passing, dressed in khaki shirt and knickerbockers, is the foreman of a construction gang. The older woman, with the red kerchief that marks the member of the Communist Party, is a high official, and the woman with her, in a drab gray, is a factory manager. Behind them are two doctors, a judge, and a "superior soldier" (officer) in uniform. There are in Russia women soldiers with a rank equal to that of a general. All work is open to women.

But if we want to know the more typical Mrs. Smith of Russia, we must go to the factories. At the Metal Combust, a textile factory at Ivanovo-Voznesensk, where there are 7000 workers, Martha Smith—Martha Ivanoff—stands before a great spinning machine. Seven hours a day she watches the spindles. The week is five days.

"I get the children ready for school before I come to the factory," she said. "No, I give them no breakfast—that is at the school. My shift begins at ten. Pieter and Lydia stay by the school two hours after my work, that I may buy for the house. Dinner? It is at the school. Min is here, at the factory—My breakfast also here. My husband, he eats with me here. At evening we make supper at home. At night? Now—her eyes sparkled—"I go three times a week to the class. I learn to read and write. The children? The sleep. If my husband goes, my neighbor listens."

"Every cook" insisted Lenin, "must learn how to run the government." Martha is learning. To help her, the government has shortened her working hours, served her children free meals at school, and given her and her husband meals at low prices at the factory. As a worker, Martha actually receives much more than the 80 rubles a month she is paid at the factory. She and her husband have food cards, clothing cards, cards for railway tickets at less than the ticket office sells them, soap cards and cards for sweets, and through the factory she may buy tickets to theatres, cinemas, concerts, at much less than box-office prices. As she will eagerly tell you, there is much more.

At almost every factory a doctor looks after the health of the workers. "If I am sick," said Martha, "the doctor will care for me. Pay? No—I am a worker!"

Why all this fuss about factory workers in Russia? Why should they be preferred citizens? There is justice in the question. Preference for any class is far from a Communist ideal of share and share alike. The Soviet government is frank in its reply.

"We have no Communism yet in Russia," said one official. "We are but nursing the first feeble germs of Communism. We live now under a dictatorship of the proletariat, of the workers. It is a transition period and will not last. It is the first essential step toward Communism."

Latest Addition To Army of Robots

An Electrical Device Now Speeds the Handling of Telegrams Dictated Over Phone

An addition was recently made to the corps of robots which the New York Telephone Company has developed and put into service in the last few years. Its function is to speed up the service given to telegrams that are dictated over the telephone, and it performs this function so efficiently that, on the average, only one second passes from the time an incoming telephone call reaches the device to the time when a typist answers the call, ready to take down the telegram. All New York City telephone calls in which a person asks for Western Union are handled by this machine. The telephone operator connects the party desiring to send the telegram with the receiving station of the Western Union. There the call is handled by the new receiving unit, which can connect any one of the 120 incoming trunk lines with any one of the 110 operators who can work at one time. In other words, this unit must select from the 110 telephones in the station one which does not happen to be in use, and connect it with the trunk line on which the call has come in. If all the telephone operators are busy, it "stores" the call.

The operator knows when a call is on her wire because she hears what is known as an "audible"—a tone like that which is heard on the ordinary dial telephone. She immediately says "Western Union" and proceeds to type the telegram on the noiseless typewriter which is on her desk. What the device does, therefore, is to cut down the time required to connect the party with a girl who is to take down his message and forward it.

A visitor to the Company's new building would see no sign of the complicated machinery which is helping the girls there to handle the calls. All he would see would be groups of girls sitting at desks, their hands-clamped on and their transmitters hung ready, taking down the telegrams as they came over the wires. The robot is on the floor above. It consists of a mass of wires, rotary switches, relays, protective devices, timing circuits, etc., all mounted on tall frames.

One of the novel parts of the new equipment is a signal board which indicates, by names of colored lights, how many of the operators are busy and whether any calls are being forced to wait.

Guard the Baby Against Colds

To guard the baby against colds nothing can equal Baby's Own Tablets. The Tablets are a mild laxative that will keep the little one's stomach and bowels working regularly. It is a recognized fact that where the stomach and bowels are in good order that colds will not exist; that the health of the little one will be good and that he will thrive and be happy and good-natured. The Tablets are sold by medicine dealers or by mail at 25 cents a box from The Dr. Williams Medicine Co., Brockville, Ont.

A Motorist's Paradise

Leipzig, Germany—Motorists who violate the ordinance against parking in front of the Gewandhaus during concerts now find, when they return to their cars not a summons to court, but a note reading: "New regulations govern the driving up to, leaving or parking in front of the Gewandhaus. Your car was parked today in violation of these regulations. You will find on the back of this notice a map showing the places where parking is possible. If further information is desired please telephone the traffic department, No. 7231, extension 257."

This method has brought so encouraging results and so much praise for the Leipzig Police Department that it is to be extended to cover violations of parking ordinances generally.



No chance of this modern incubator failing. With capacity of more than 1,000 eggs, this new revolving incubator was one of features of Los Angeles poultry show.

Danger from Colds

Every woman beyond middle age should realize that a majority of the troubles she has to fear have their origin in what are known as common colds. Each attack lowers her vitality and reduces resistance to disease. At this season of the year every woman should see that her blood is restored after any cold, however slight. For this Dr. Williams' Pink Pills are a reliable tonic. These Pills are not a mere stimulant giving temporary relief. They build up the body by creating that rich red blood which imparts the glow of health; steadies the nerves, improves the appetite and digestion and makes the users capable of withstanding the rigors of our Fall and Winter months. They are sold by medicine dealers or by mail at 50 cents a box from the Dr. Williams Medicine Co., Brockville, Ont.

Cottonteed Meal Found Excellent Food for Trout

Ithaca, N.Y.—Cottonteed meal, long an accepted livestock feed, has been found an effective food for trout, reports Professor C. M. McCay, of the New York State College of Agriculture. Professor McCay, working at Cornell in co-operation with the Connecticut state fish hatchery at Burlington, Conn., also has found that cocoon meal, dry skim milk and dry buttermilk are excellent trout feeds. A half million dollars could be saved annually if the various fish and game commissions would make use of the recent discoveries, he says. The cottonteed meal is not fed alone but is mixed in equal parts with dry skim milk and a good fish meal. With the newer feeds Professor McCay finds that the trout is more efficient than the pig in converting feed into meat.

Excavating of Old Fort Reveals Roman Past

Glasgow—The fort baths brought to light during excavation work on the Roman fort at Cadder promise to give very clear evidence of the various periods of Roman occupation, said John Clarke at a meeting of the Glasgow Archaeological Society. It was hoped to complete the excavations next year, Mr. Clarke added. The fort had been the sixth of the Antonine Wall forts from the west end of the wall.

Sightless Author Acts in Own Play

Paris—A play written by a blind man in which he acts with another blind performer is being presented at a Paris theatre. It is called "The Triumph of Will."

How Women Lose Fat in England

How would you like to lose unhealthy fat that you don't need and don't want, and at the same time feel better than you have for years? How would you like to lose your double chin and your too prominent abdomen, and at the same time make your skin so clean and clear that it will compel admiration? How would you like to get your weight down to normal, and at the same time develop that urge for activity that makes work a pleasure and also gain in ambition and keenness of mind? Get on the scales to-day and see how much you weigh—then get a bottle of Kruschen Salts. Take one-half teaspoonful every morning in a glass of hot water, and when you have finished the first bottle weigh yourself again.

Owl Laffs

Bransville Judge—"See here, I'm going to put a stop to this here horse stealing, or none of us will be safe."

Mary, Mary, quite contrary—How you hem-line grows! It used to swirl above your knees, Now it nearly hides your toes.

Young Bride—"I haven't the heart to fry the eggs. They look up at me so piteously out of sad yellow eyes."

Looking back over the years, the proverbial line of least resistance seems to be a woman's waist line.

Hat Clerk—"A wonderful fit, old man."

Customer—"Yeh, but suppose my ears get tired?"

A New York salesman was staying in a Texas hotel where he observed an old-fashioned roller towel.

Salesman (to man in wash room)—"Say, doesn't the owner of this hotel know that it's against the law of the State of Texas to use roller towels now?"

Man Addressed—"He knows it all right enough, but I rec'n that law wasn't passed when this towel was put up."

Flapper Motto—"Better be fat in the head than thick at the hips."

The life guards at the bathing beaches ought to make good book-keepers. They all know how to handle figures all right, all right.

A young man, who had an enormous mouth, became engaged to a girl, and went to her father to ask his consent.

Youth (smiling broadly to hide his confusion)—"I have come to—to ask you for your daughter's hand. I—I—"

The Father—"Excuse me, but will you close your mouth for a moment so I can see who you are?"

One thing you never hear one girl say to another any more is: "Why don't you take a tuck in it?"

The young farmers were boasting about the size of the vegetables they had grown. Finally one of them turned to Uncle Seth:

Young Farmer—"What was the biggest thing you raised this year, Uncle Seth?"

Uncle Seth—"A squash."

Young Farmer—"Well, how big was it?"

Uncle Seth (drawing)—"We never measured it, but we used the seeds for snow shoes."

First Travelling Salesman—"Being on the road ain't what it used to be."

"Second Ditto—"Naw, I've been on the road for ten years now and never had to sleep at a farmer's house yet."

Evidently the less a bathing suit holds of the female wearer the more it holds the man.

Hostess—"Would you like a sonata before dinner?"

Her Guest (giving a start of surprise and pleasure)—"Thank you, I had a couple on the way over here, but I think I could manage another."

There are still a great many people who simply will not let the dentists do all the looking down in the mouth.

Customer—"How much will it cost to have this gum pulled off?"

Hi-Jacker—"Shucks, partner, I leave it to you. You pay me according to the good yer gets out of it."

Little Girl Next Door—"What's the new baby at home, Johnny, a boy or a girl?"

Disgusted Little Brother—"Aw, it's a girl. I saw 'em putting powder on it."

Horace—"You can't go out with Kate. She's a girl of rank."

Manuel—"Yes, and I am as rank as she is."

Europe Telephones Chile New York.—Telephone service between Chile, Argentina and Uruguay and 13 countries in northern and central Europe was inaugurated by associated companies of the International Telephone and Telegraph Corporation on Dec. 19. The service is made possible in Europe through co-operation of the Germany Reichspost in Berlin.

Care for Your Hands By Daily Use of Cuticura Soap Heal Itches and Irritations with Cuticura Ointment

Silent Aircraft Made Possible by British Studies

New Advantage for War Craft Lies in Exhaust Changes and New Type Propeller

London.—The production of silent aircraft has at last been brought within the realm of possibility as the result of many years of work by the Aeronautical Research Committee, which is summarized in a newly issued report. Theoretically, the silent bomber could be built if certain precautions were taken in constructing and installing the engines and the exhaust system and if a certain new type of propeller were used. Most of the noise made by aircraft comes from the exhaust and the propeller. Five hundred, 1,000, or more horsepower can be produced in the internal engine only by the accompaniment of a great deal of noise. The propeller, whirled at high speed by this immense power, scarcely is quieter. Yet, noises can be arranged to cut each other out and the principle of interference as a cure is found to be fundamental in this new scheme.

Exhaust Noises Located To determine how much of the exhaust noise comes from the exhaust pipe and how much through the walls of the exhaust manifold and exhaust piping, an aero-engine was run with its exhaust led into a virtually perfect silencer. The noise was then reduced to a negligible quantity.

The kind of silencer used in automobiles is too bulky and heavy for aircraft if it is to be efficient. It also creates back pressure, with loss of power, which cannot be allowed in aircraft.

The only other way of silencing an engine exhaust—the way to which this report refers—is by suppressing it by interference with another sound of equal intensity and frequency and intensity will suppress each other at any point at which they are exactly out of phase, and it is this principle which has been applied to silencing airplane motors.

The exhaust noise from an engine is first led into a common pipe, then the pipe is divided into pipes of unequal lengths, the lengths being calculated in accordance with the type of engine and number of revolutions a minute. A mutual cancellation of sounds results.

While it is true that this method of silencing holds good for only one engine speed, in practice aero-engines, particularly in large machines such as bombers and commercial liners, are run at constant speed. The maximum variation in steady flight is not more than 2 per cent. Such variation from the speed for which the silencing system was designed only would produce a slight sound.

Propeller noises can be eliminated by running the airscrew so slowly that the frequency of the vibrations it produces is too low to be audible. A four-blade propeller run at 300 revolutions a minute would not make any noise, but the size would be prohibitive. The principle of the interference acoustic, (not aerodynamic) is invoked again, and the blades are so arranged that the noises they make cancel out. The blades are arranged in the form of an "X" at intervals of 45 and 135 degrees.

The conclusion indicated is that it would be possible to produce an almost silent airplane, but that at present it would scarcely be practicable.

Chinese Like Foreign Dishes

The younger generation of Chinese, in their frequent attendance at dinner and tea dances in the ball rooms of large modern Shanghai hotels, or in the numerous cafes, are taking to foreign-style dishes and beverages, including coffee, and are often accompanied by older members of the family who patronize foreign-type restaurants to an increasing extent. Shanghai is a sort of great showplace, where well-to-do Chinese from the interior come in large numbers from time to time for temporary visits, either on business or for the purpose of seeing the wonders of the modern world as developed so far in this great metropolis.

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Now you will know the pleasant way to lose unsightly fat, and you'll also know that the six vitalizing salts of Kruschen have presented you with glorious health. That's the way Englishwomen keep slim—why not you?

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Les Baux

(From The Atlantic Monthly) There is no need for rain regret. For entry of the lives whose lot is set in this enchanted place. Where grey crags touch the sky—while far below Meadows, miraculously green. Are sunk in sleep, between Upovering rocks, and from the cliff's sheer face White-flooding bushes grow. Should you live here, you must choose The mountain or the valley—and so lose. For one, the other joy; too soon the when and where Would have you in their customary care. Rather, let your dwelling here. Be in the mid—and you are free Of all the range the ravished eye can see; May house you without fear In the topmost pinnacle, where the star-pricked dome Shall roof you through the night's slow-wheeling hours. Or make your home Among the hills and the meadow flowers Down in the valley—at your will Be shepherd, huntsman, poet; you may dance With the line flinging on the line In the cherry orchard by the water mill. Or where the sunbeams shine From the blue backs of swallows, as they glance In the mid-air, below The rocky terrace, to and fro Your insubstantial form may go. Now vast as night, now infinitely small— As having nothing, yet possessing all. —Freda C. Bond.

Do You Know—

Your electric cord will last much longer if you keep it suspended from a hook instead of winding it around the iron when putting it away? If you soak an orange in hot water the skin will come off easier and more perfectly when you peel it? A teaspoonful of glycerine added to each pint of rinsing water will makeannels and woolen blankets like new?

NEW HANDLES.

New handles for your percolator can be obtained at a small cost in any color you want to dress up your kitchen. You can screw them in yourself.

Auto & Radio - Hammon's BATTERIES - Hammon's

Hammon's Batteries. 6-volt, 11-plate, in rubber case. Special \$5.25. 13-plate, \$6.50. 15-plate, \$7.50. Radio "A" Battery, 6. Hammon's Battery Co., Toronto. 1379 Dundas Street, Toronto.

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She Couldn't Be Hoodwinked.

Miss E. Thomson, of Clapham, writes—"I find that Carter's Little Liver Pills will do more to keep the complexion clear, and the skin free from blemishes, than all the face creams I have used. I found the real cause of face blemishes was usually due to liver and stomach troubles. My druggist recommended them as a specific for stimulating the liver and expelling the constipation poisons from the system." Take Carter's Little Liver Pills for sick headache and indigestion. All druggists 25c and 75c red packages.

GAS relieved

PHILLIPS' MILK OF MAGNESIA. For Troubles due to Acid Indigestion, Sour Stomach, Headache, Constipation, BILIOUSNESS, etc. One tasteless spoonful in water neutralizes many times its volume in acid. The results are immediate with no harmful after-effects. Once you learn this perfect way you'll never deal in any other manner with the headaches, gas, bloating, nausea, dizziness, indigestion, biliousness, etc., due to an over-acid stomach and bowels. Be sure to get genuine Phillips'. It is always a liquid; never made in tablet form. Look for the name Phillips on the bottle. All drug stores sell it—50c.

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