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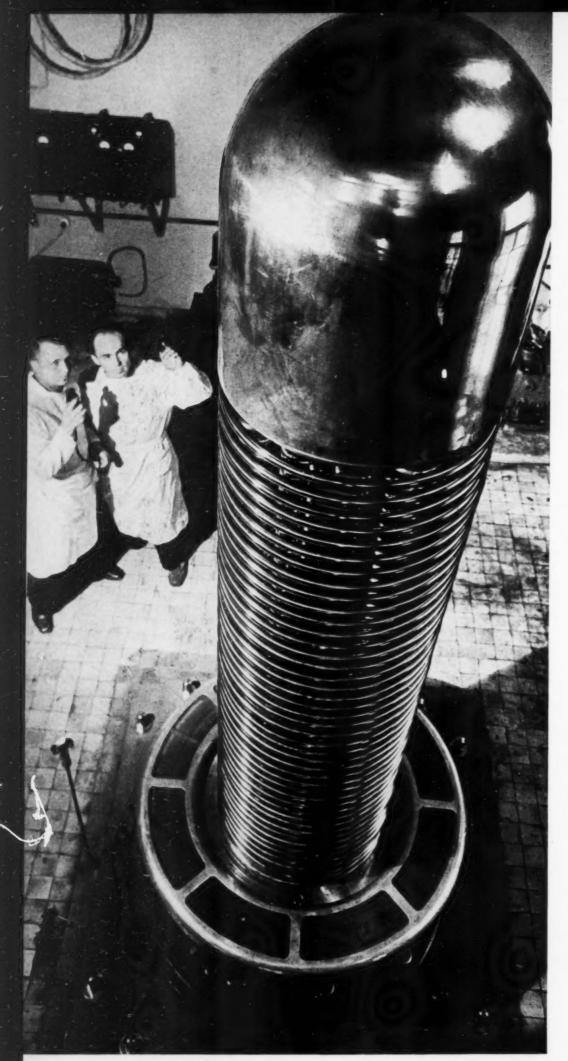
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NEW HOUSING FOR 75 MILLION PEOPLE

- See page 18

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EQUIPMENT GENERALLY USED IN SOVIET RESEARCH WILL BE ON DISPLAY AT THE NEW YORK EXHIBITION.

# USSR

#### ILLUSTRATED MONTHLY

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FOR THE first time since the New York World's Fair twenty years ago, Americans will be able to visit the Soviet Union without leaving the United States. Beginning June 30 the USSR in miniature will be on display for forty days in New York's Coliseum—a panorama in photo, film and graphic model of the way Soviet people live, work, study and play.

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At the same time Soviet people will be touring the United States as they walk through Sokolniki Park in Moscow where the exhibition pavilions will be showing things American.

Even though visitors to the two fairs will be separated by an ocean, they will be cutting across frontiers in this reciprocal project designed to further understanding between the two countries.

The cover of this issue is an artist's concept of the entrance hall of the Soviet exhibition. The huge parabola darts upward as though it were flying through the transpar-

where bale

ent layers of the atmosphere beyond which lie the unknown expanses of outer space. It is intersected by the elongated body of a space rocket and the silvery cone of a sputnik.

This is symbol for the future in motion, the beginning of mankind's thrust toward a multitude of distant suns. It might well be the theme of the exhibition.

Soviet science has been contributing much to move us toward this great goal. Many complex problems in design and technology had to be solved, and new materials and precision instruments had to be created before the space satellites and artificial planet could be launched. There is probably no single division of the exact sciences which was not involved in the space exploration project.

The country has reason to be proud of the results of this synthesis of science and engineering. It provided the world with fundamental data on the atmosphere and outer space now being studied as a preface to the

launching of the first manned rockets. This portion of the exhibit will very likely be attracting the same huge crowds as did the comparable display at the Brussels Fair.

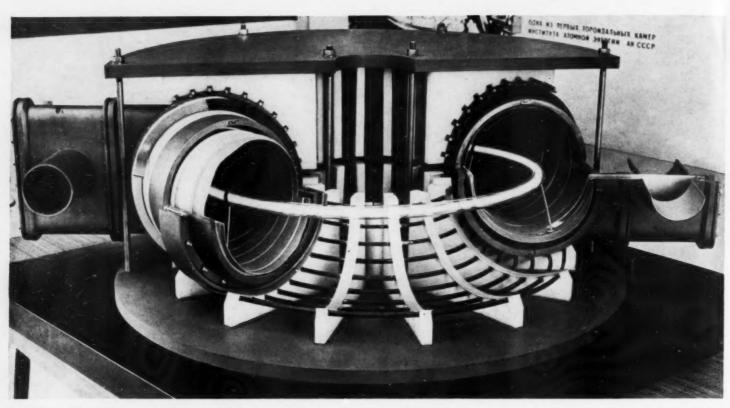
Soviet scientists have been working—and with most fruitful results—on semi-conductors, ultrasonics, radioactive isotopes, controlled thermonuclear reactions. All this will be vividly demonstrated in the science and technology displays.

Models of experimental equipment will be on view, among them such newly designed instruments as the hodoscope for counting cosmics particles that enter the earth's atmosphere from outer space, the high-speed pulse height analyzer and a vacuum installation

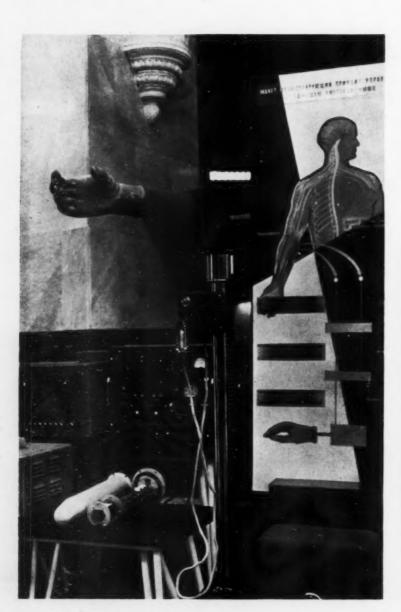
for studying chain reactions.

American visitors will have the opportunity to see what Soviet scientists have been doing with computing mechanisms and with automation and the use of remote control techniques in industrial processes.

Work on an atomic-powered icebreaker for



EXHIBITS LIKE THIS TOROIDAL CHAMBER WILL BE USED BY SPECIALISTS TO EXPLAIN RECENT TRENDS IN SOVIET RESEARCH ON CONTROLLED THERMONUCLEAR REACTION



A glimpse into the exciting future for industrial automation will be provided by this mechanical hand, whose movements are directed by biocurrents of the human body through a transducer-amplifier assembly.

Many new types of trucks are being turned out and highways extended to take care of the 90 per cent increase in motor freight haulage anticipated during the next 7 years.



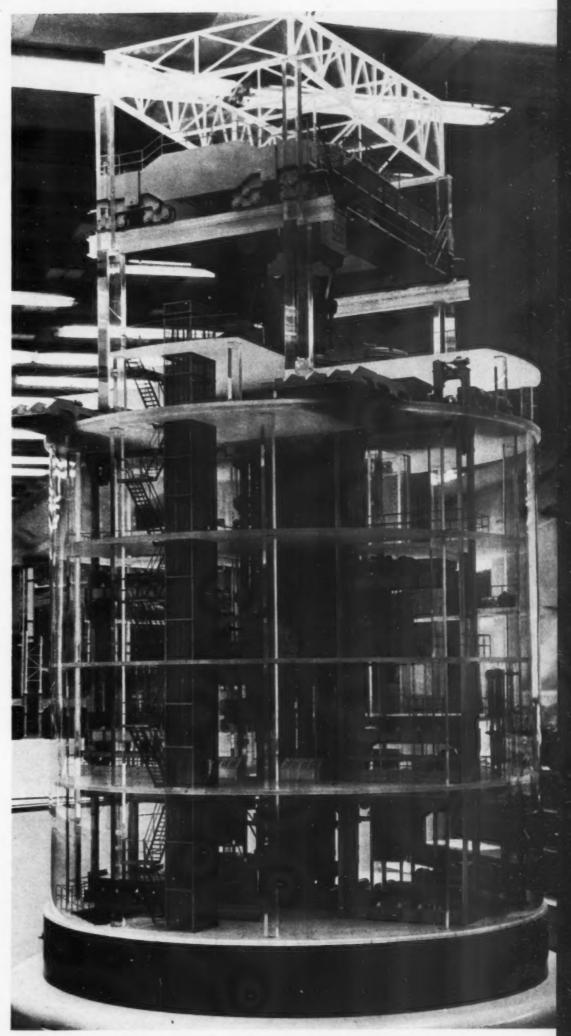




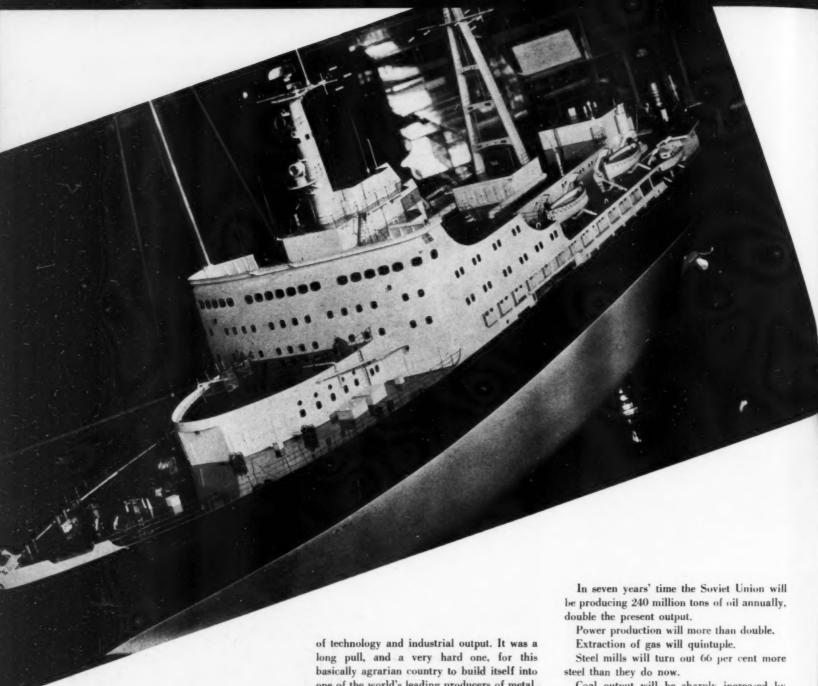
Arctic exploration is now in its final stages in a Leningrad shipyard. Before long this vessel, to be named after Lenin, will set out on its peaceful cruise, plowing a route through ice-locked ocean expanses. The *Lenin* will be able to circumnavigate the world four times without refueling.

Here is the atom penetrating to the remote corners of the globe to gather scientific knowledge for all people to use. Atoms for peace will be the caption for many of the exhibits—for models of the atomic power stations already built and generating electricity; research equipment for producing a controlled thermonuclear reaction and related displays of atomic energy being used to serve humanity and not to destroy it.

The economic displays will be a commentary on the Soviet Union's past, its present and its future. Only 41 years ago Russia was close to the bottom of the world's list in level



MODEL OF A CONTINUOUS STEEL-POURING SET-UP SHOWS A TECHNIQUE RECENTLY PERFECTED IN THE INDUSTRY.



one of the world's leading producers of metal, fuel and power.

And why so much emphasis on steel, oil, electricity? Soviet people are frequently asked. The answer is not difficult. These are the elements out of which not only factories are built but houses and food and books and music.

The exhibit will show how the country has grown and what its future growth will be like. That future is mapped out by the seven-year plan for economic and cultural expansion between 1959 and 1965. Here are some of the

Coal output will be sharply increased by working the new open-cast East Siberian deposits.

That is growth indeed and much past the forecast and blueprint stage, to judge by present progress. The seven-year plan calls for an annual average growth in industrial production of 8.6 per cent. But in these opening months of the plan's first year, growth has averaged more than 10 per cent.











Exhibition vistors will be looking at many of the newest machines made in the Soviet Union for factories and farms, including precision automatic machines with programming devices much superior to those which won a Grand Prize for the Soviet Union at the Brussels Fair. On display will be new automatic lines, coal combines, turbodrills and a variety of electronic devices.

New car models recently off the production lines of Soviet auto plants will be on exhibit, ranging from limousines to midgets. Specially featured will be the low-priced, low-upkeep Moskvich, a small car very popular at home and abroad.

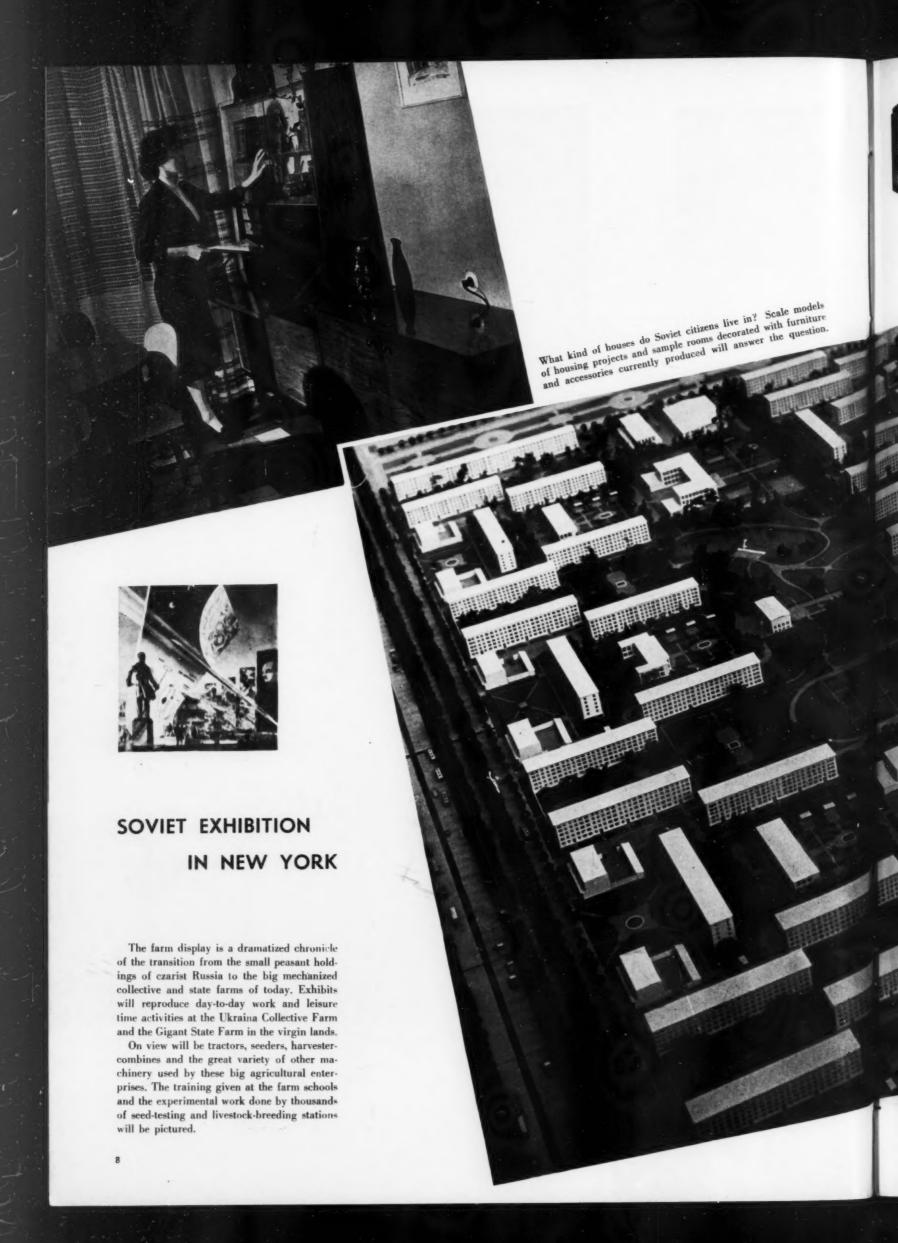
The aviation display will show scale models of the TU-104 jetliner and the giant TU-114 turboprop airliner with its spacious seating for 220 passengers.





A HIGH SCHOOL HOBBY CLUB MAKING A WORKING MODEL OF A HARVESTER COMBINE TO SEND TO NEW YORK.

1 01 U 1 U 1 E







Could the sons and daughters of czarist Russia's peasants have dreamed of a college education and scientific farming? In Soviet times this has come true. Five agricultural academies, 135 agricultural colleges and hundreds of research stations help to conduct Soviet farming on a scientific basis.

New apartments and houses for 75 million people—that is the leading theme of the display on housing. Foreign tourists to the Soviet Union invariably comment on the enormous amount of construction going on. In the past five years there have been as many new dwelling units built as all of Russia had prior to the Revolution. But supply is still a long way from catching up with demand.

The exhibit will show in graphic form the vast improvements in living conditions, the new apartment buildings designed for comfort, air, light and convenience; the household appliances and furniture being mass-produced for sale at prices within easy range of Soviet consumers; the well-planned residential garden districts that are becoming a familiar feature of Soviet urban living.

The display on health and preventive medicine will be most comprehensive and will picture hospitals, clinics, maternity centers. sanatoria and health resorts. Visitors will be able to walk into a full-scale operating theater equipped with the most ingenious instruments for suturing delicate nerves and blood vessels, for heart surgery, for revivification and for transplanting organs.

Graphs, charts and pictures will tell the story of the nationally financed system of social security and social insurance. They will detail the pension plan which makes it possible for every man and woman to enjoy a secure, dignified and independent old age and the provisions that are made for the care of the sick and disabled.

Visitors to the Coliseum will get an idea of the Soviet people's recreational activities and the facilities available to them from pictures of the palaces of culture, community centers, sports stadiums and vacation resorts.

The exhibit on education will highlight some of the remarkable facts of the growth of

the Soviet school system. Every fourth person, 54 million people, are studying in one or another kind of school. The Soviet Union now has 765 schools on the college level and 3,500 specialized secondary schools. Seven and a half million Soviet men and women have a specialized secondary or higher education, 39 times more than in the Russia of the czars.

The current reorganization of the Soviet public school system to relate school work more closely to productive work will be described through photos, charts and illustrative models.

On display in the section devoted to the arts will be the representative works of graphic artists, painters and sculptors. Colorful exhibits will highlight the diversity of Soviet music and theater. The Soviet panorama films. Wide Is My Native Land and The Magic Mirror, will be shown in New York during the run of the exhibition. Panorama is the equivalent of American cinerama.

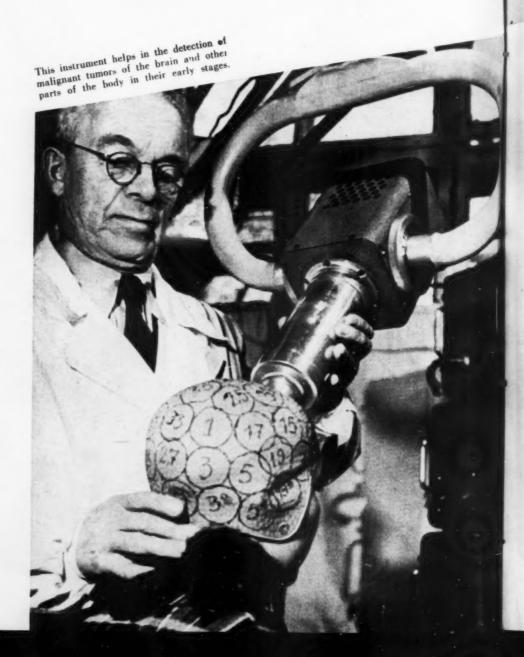
But probably of even greater interest to the American public will be the live performances of song and dance groups to be given in New York during the exhibition. The groups will include the Russian Pyatnitsky Choir, a leading choral ensemble, and outstanding dancers and singers who will present the choreographic and vocal art of the many nationalities inhabiting the country.

The achievements of creative workers in every medium—Vera Mukhina and Sergei Konenkov in sculpture, Konstantin Yuon in painting, Galina Ulanova in the ballet, Sergei Eisenstein and Alexander Dovzhenko in the film, and others—will be demonstrated. The part that each of the republics has played in creating a national heritage of literature, music, theater and art will be dramatized.

An exhibition of this kind always leaves behind a bit of the life it portrays in the form of impressions made on those who see it. A more tangible and lasting reminder will be provided the American public by the objets d'art, the Soviet-made cars and machinery, TV's, refrigerators and cameras, foodstuffs and other goods on display which will be sold when the exhibition is over.

If we are to judge by the reception given the Bolshoi Ballet in New York and other cities, it is very likely that a considerable slice of America will be visiting the Coliseum this summer. And similarly, if we are to judge by the way Soviet audiences enthused over the American ice show, there will be very large crowds indeed jamming Sokolniki Park in Moscow.

This two-way traffic is very much to the good—good for the Soviet Union, the United States and the peace and well-being of the world.





# Young People in an Old City

Photos by Dmitri Chernov





narian who seemed to be a walking chronicle of Taganrog's ancient glories.

He gave me the city's background of eventful history. It was founded in 1698 by Peter I some ten years before the northern city of Petersburg, which we now call Leningrad. The czar chose Taganrog Cape because it commanded the approach to the Sea of Azov. The town must have been an exceedingly busy place then. It was the first mercantile port in the south of Russia with the first man-made harbor docking the country's first big ships.

The old man quoted me the statement of Chekhov-of course I subsequently heard it from other Taganrog residents-and let me know that the town was much admired by the poet Alexander Pushkin when he visited it in the nineteenth century, and by Giuseppe Garibaldi, the Italian liberator, who was captain of a ship that docked at the port.

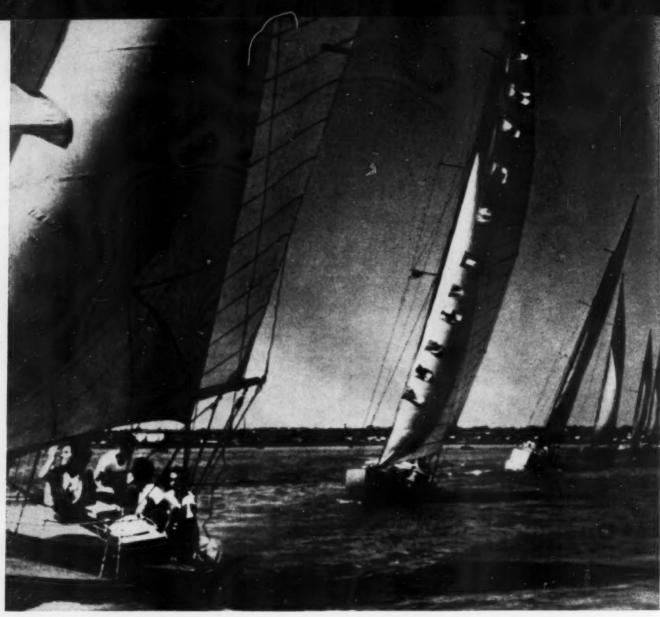
But the old man and his cronies were particularly eloquent about the glory of the Taganrog of their youth-a bustling, vigorous trading center, the waterfront streets suffused with the aroma of coffee, cinammon and other spices brought by foreign ships in exchange for south Russian wheat. The city did a brisk

ernized and new ones were built. The city's metallurgy plant is now the biggest in southern Russia.

Taganrog today manufactures steel, harvester combines, ships, steam boilers, metal cutting lathes and a large variety of consumer goods, ranging from clothing to toys. By 1965, when the seven-year plan is completed, it will have doubled its present pace of industrial construction and will be manufacturing six billion rubles' worth of goods.

#### A Very Young City

This latter information I did not get from my octogenarian acquaintance as we sat talking in the harbor near a bronze Peter I gazing out to sea. The old man was reminiscing about the city's past glories. It was the young Taganrog people I talked to who were much more interested in its very lively present.

Taganrog gave me the impression of a very young city, in spite of its advanced chronological age, probably because there were so many young people in the plants I visited, particularly the harvester combine factory. It was the younger workers, I was given to under

THE YOUTH HAVE THEIR OWN YACHT CLUB FOR THE CITY'S MOST POPULAR SPORT AND ARE PROUD OF BEING THE CHAMPIONS OF THE RUSSIAN FEDERATION

# Young People in an Old City

stand, who were largely responsible for the plant's new Model SK-3 harvester combine, a very reliable and inexpensive machine which won the Grand Prize at last year's Brussels World's Fair.

I met Arelii Vergun, secretary of the city's Young Communist League branch, just graduated with a degree in philosophy from Moscow University. He was very enthusiastic about the way young people were tackling the seven-year plan. He introduced me to some of the young workers at the harvester combine plant.

In the tool-making department I met Georgi Shcherbina, who has been working at the plant since 1950. He learned his highly skilled trade of toolmaker at the plant's technical school and as apprentice to some of the older workers and engineers. Now he is passing on his skills to the five young workers in the team he leads.

The team has made quite a reputation for itself for its excellent cooperative work and its fresh ideas.

Talking about the members of his team-

and he made no attempt to hide how proud he was of them—Shcherbina told me: "We've been doing a lot of thinking about how to make the most productive use of the new machinery the plant keeps installing. We got together one evening recently to see if we could work up some good ideas, and I think we did. Pretty soon all the technological processes will be carried on automatically. It will take a good deal of knowing to handle and control the complex machinery. Our team decided some time ago that each one of us was to study either at evening school or by correspondence."

Georgi himself has been taking a correspondence course at the machine-building school. The other members of his team are taking courses at the school in the plant to prepare for college matriculation. "In a few years," he said, "each one of us will have a thoroughgoing technical education."

As to help from the management of the plant to workers who want to better themselves by study, there is plenty of that forthcoming, Georgi explained. Training equipment has been installed in the shops and teaching is done by plant engineers. The workers get everything they need for their studies free of charge. All of this is provided for in the annual collective agreement signed by the management and the trade union.

There is also a very close working relationship between the plant and the Taganrog Radio Technical Institute. The plant engineers and the institute scientists work closely on research problems. Professor Mstislav Morozov, who holds the chair of metal technology at the institute, spends almost as much time in the shops as he does at the institute and the young men in Shcherbina's team are very much at home in the professor's laboratory.

#### Many-Sided Young People

Shcherbina had me meet a friend of his, Vadim Ramazanov, a student at the institute, and we spent some time together. Vadim is twenty-four. His father was killed in action during the war, a monument to his memory stands in Taganrog harbor.

The city has every facility for the leisure-time activity of these young people, who are as versatile at play as they are at work. Top to bottom: corner of the Youth Center; at one of the city's 26 gymnasiums; Radio Engineering Institute's amateur film studio.

Vadim went through technical school and took a job as a fitter at the harvester combine plant. It was there that he and Shcherbina became friends. Combining work and study, he finished his high school course and then enrolled at the institute.

Popular with both students and workers and active in public affairs, he was elected deputy to the local Soviet, the city council, at this year's election.

At his home I met other students. Most of them were working in one or another of the city's industrial plants and studying for their degrees either at evening colleges or by correspondence.

All of them, it struck me, were young people with many-sided interests. They talked of Taganrog's Anton Chekhov Theater and I listened to a heated discussion of one of the recent productions. They talked about music, books, the seven-year plan and even—I suspect for my sake—the city's history.

#### The School and the Shop

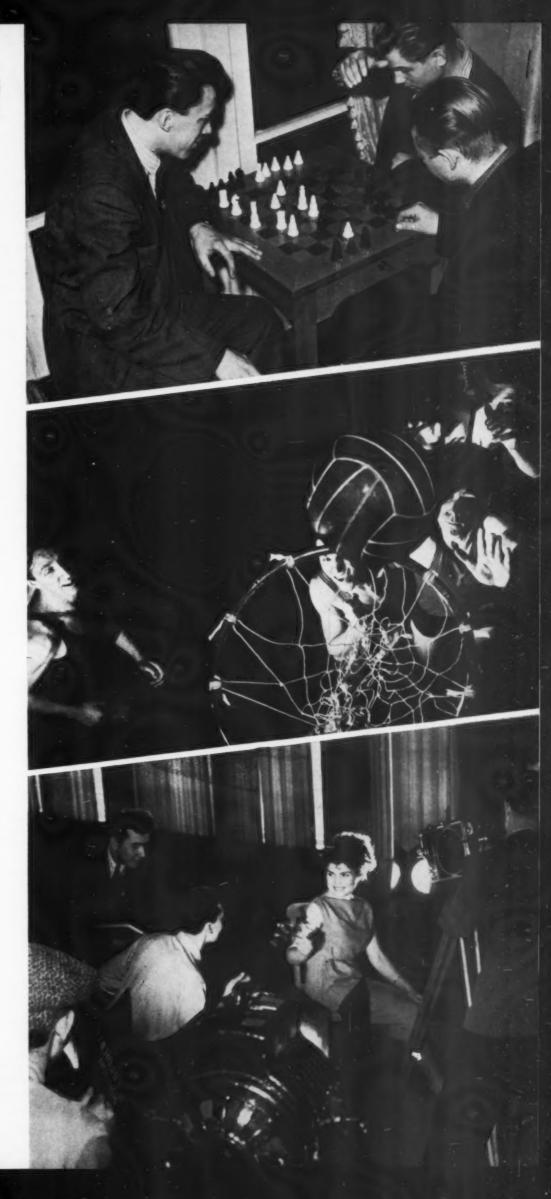
When they talked school and shop, these twenty-year-olds impressed me as rounded people. Their theoretical talk, as much as I could follow it, was tied in closely with the practical down-to-earth production problems they were meeting on the job and vice versa.

This follows very naturally from the working relationship between the school and the factory. The courses and the diploma projects are determined to a considerable degree by the work the factory is doing, so that the motivation is always clear and direct. The student is working on study projects and problems for which practical solutions are needed. To apply his theoretical studies productively, he must learn from the worker at the bench.

The same thing operates the other way round. The worker must call on the theoretical background of the student so as to get a more generalized view of the job he is doing. Here then we get an exchange of learning which is mutually valuable.

The student science club at the Radio Technical Institute gives many talks at the factory on semiconductors, transistors, tele-radio control, ferro-magnetic materials and other such topics which the workers find both interesting and very instructive.

This inter-relationship of technical school and plant will soon be even more direct than it is at present. The institute is in process of transforming itself into a VTUZ-plant, VTUZ is the Russian abbreviation for Institute of Higher Technical Training. This year's freshman class and all succeeding classes will be following a new curriculum that combines study with work at the plant.





LAST-MINUTE RUSH TO MEET THE PRESS SCHEDULE FOR THE INSTITUTE'S PAPER RADIOSIGNAL.

#### LITERARY FORUMS ON CONTEMPORARY WORKS AND THE CLASSICS ALWAYS DRAW A LARGE CROWD.



# Young People in an Old City

They will spend their first two years in production work at the plant and in classes at the institute. In the following years they will take theoretical and specialized courses and will apply their knowledge in work projects and research directed to solve plant production problems. The aim is to link classwork with actual production, so that the student at graduation is equipped with both a theoretical and practical mastery of his specialty.

#### Too Busy for Yesterday

Since Taganrog is a coastal city, young people gravitate naturally to water sports. On week-ends the harbor is jammed with small craft. Long-distance swimming races are as popular and draw crowds as large as do soccer games in other cities.

Not that soccer does not have its sworn adherents, and by the many thousands. So does tennis, fencing, boxing and volleyball. Cycling is particularly popular and long-distance races are run along the shores of the Azov and Black Seas and the mountain roads of the Caucasus. One of the young people told me of an 1800-mile race held some years ago.

The movies are, of course, a perennial favorite with Taganrog young people, as they are everywhere else. At one student affair at the institute I met a group of amateur film producers. By working on construction sites in their free time, they managed to get enough money together to equip their own film studio.

With the help of the trade union and school organizations, they have been producing documentaries and comic shorts and are at work on a film record of the life of young people in Taganrog. They hope eventually to work it into a current history of the city.

Literary forums are very popular with the young people. I attended one that was held at the Teachers' Institute and listened to the very stimulating discussion from the floor by young workers and students on recent Soviet novels: Alexander Kuznetsov's Continuation of a Legend, Galina Nikolayeva's The Battle on the Way, Vsevolod Kochetov's The Yershov Brothers and Danil Granin's After the Wedding.

Listening to them talk of the books and themselves, of their present and future, of their interests and friendships and work—of all those things which young people feel and think and dream about—I thought that here are the leaders of tomorrow, these young men and women of Taganrog and the thousands of other Soviet towns and villages. They know where they are going, these people of the young Soviet generation. They have no time to look back for more than a glance at the dim-visioned past of my octogenarian friend, they are too busy making the future.



Yuri Spiridonov, Moscow University student, is the author of the open letter to American youth.

DEAR FRIENDS, I have long wanted to become acquainted with young people of my own age in the United States and I am grateful to USSR magazine for this chance to write to you. I hope this letter of mine will be the beginning of a two-way correspondence that will bring us together as friends.

I should like to tell you a little about myself and some of the things I've been thinking about. I am 21 years old and for the past four years I have been studying soil conservation at Moscow University.

I come all the way from Archangel, which is closer to the Arctic Ocean than to Moscow. It is a big stretch of country in the north of the Russian Federation, rich in timber, furbearing animals, cattle and fish. I spent my childhood there on a collective farm in the Kholmogorsk District. My mother works in the dairy section of the farm, my father was killed near Leningrad fighting the fascists in the Second World War.

Our village, on the bank of the northern Dvina, is called Lomonosovka, after the great Russian scientist and poet. He was born in this region two and a half centuries ago. The school I went to at home is also named in his honor. On the walls of the school auditorium his famous lines addressed to youth are inscribed in gold:

Dare and do, you inspired students, Have no fear and prove your worth! We, too, have our Platos, Newtons, Nurtured by our Russian earth.

I have tried to follow his admonition to "dare and do." And although I do not hope to aspire to Plato's or Newton's laurels, I

# A Letter to American Young People

From Yuri Spiridonov Student at Moscow University

hope to follow in their footsteps—and in Lomonosov's—by devoting myself to science.

It was two-odd centuries ago that he trudged his way to Moscow, a peasant boy in bast shoes. He was the future founder of Moscow University, a pioneer in the modern natural sciences, a poet who blazed the trail for today's literary Russian. For his time, Lomonosov did very important research in metallurgy, mining, geology, meteorology, optics and astronomy.

Like many of the young people in our village, when I graduated from secondary school four years ago, I took the same route that Lomonosov had to Moscow and the university. But I traveled by sleeper coach. When I saw the familiar bronze statue of Lomonosov in front of the university which bears his name, I felt encouraged. I took the entrance examinations and passed them. American students will have no trouble understanding how happy I was to be studying in the country's leading university with other students of sixty nationalities from all over the Soviet Union and people from fifty or more foreign countries.

We pay no tuition, our living quarters are inexpensive and the monthly maintenance stipends we get from the government makes it easy for all of us to "dare and do."

The Biology and Soil Department in which I am enrolled has 26 sections headed by such eminent Soviet scientists as Alexander Oparin, the biochemist; Nikolai Krasilnikov and Vladimir Shaposhnikov, the microbiologists; Georgi Nikolsky, the ichthyologist; and Victor Kovda, the soil expert. They lecture, supervise our laboratory and research, and lead our scientific expeditions during vacations.

I usually join these summer expeditions to study the new agrotechnical methods of cultivating reclaimed floodlands and peat bogs, which will most likely be the subject for my diploma thesis. This field of work is especially important now since the seven-year plan calls for reclamation of great tracts of land.

Most of us who will be getting our degrees in a year's time have already chosen our specialties and even our jobs. There is a growing demand everywhere in the country—at research institutes, experimental stations, collective and state farms—for trained specialists. We graduates of Moscow University have a very wide choice of job possibilities.

There is a very warm family feeling that Moscow University students have, whether they are from home or abroad. In the botanical gardens adjoining the Biology Department there is a "Friendship Path" lined with young trees planted a few years ago by Soviet and foreign students. The trees are cared for by the student body, and every time I work or sit in the garden I am reminded of the ties that bind young people of every country, in-

cluding those in the United States and the Soviet Union. We would like to see this friendship flourish the way these young trees have.

On Sunday, June 28, we will be celebrating Soviet Youth Day, dedicated to friendship between Soviet and foreign young people.

Our two countries have been exchanging student and youth groups, in accordance with the exchange agreement signed early in 1958. A group of American young people have been studying at our university for about a year now, and Soviet students have been studying at various American universities. We like the American boys. Many of them are good athletes and vie with us in the gymnasium where I train for the wrestling squad. We have made friends with them and they with us.

Contact means understanding and understanding means friendship—a very important thing for our two countries and for the world. Let us join our efforts in building a peaceful future for ourselves and for young people the world over.

Please let me hear from you.

Yours in friendship, Yuri Spiridonov Room 536, Section "D" Moscow State University Lenin Hills Moscow, USSR

Robert Taiffe, one of the American students at the University, has a talk with Spiridonov.





MOSCOW, CAPITAL OF THE SOVIET UNION



MINSK, CAPITAL OF BYELORUSSIA

# MILLION

in Cities a



For workers of the Amurstal Iron and Steel Plant — Far East

By Alexander Budaev, Editor, Building Gazette

NEW HOUSING for 75 million people, almost a third of the population of the Soviet Union—that is the staggering goal projected by the seven-year plan for 1959-1965. The target figure calls for the construction of fifteen million apartments in urban communities and seven million cottages in rural areas, more than was built—and quite a lot was built—in the past forty

Is this Utopian? Not at all. This gigantic housing program is very solidly based on past performance. Note that last year's housing plan for cities and towns scheduled the construction of 656 million square feet of dwelling space. Actually 731 million square feet were built. From present indications, this year's scheduled 861 million square feet will also be completed long before the year is out.

Coping With Difficulties

Much has been done in the four decades since the Socialist Revolution of 1917 to relieve the very acute housing shortage carried over from czarist times.

Working people in prerevolutionary Russia had far less living space per family than in any other European country. Almost immediately after the Soviet Government took power, it moved workers by the hundreds of thousands out of their miserable slum quarters and basements into decent apartments.

Whatever living space was available in cities and towns, for the most part in houses and large apartments which had been under-occupied by people of wealth, were distributed as fairly as possible. But these comparatively few dwelling units were far from sufficient to meet the critical housing needs of millions



HOUSES



STALINGRAD, RUSSIAN FEDERATION

### sand Towns



NOVAYA KAKHOVKA, THE UKRAINE



For workers of the Izhora Engineering Plant—Northwest Russia



For miners of new coal fields in Vatutino—the Western Ukraine



For builders of the Angarsk Hydroelectric Station — East Siberia

# in the Countryside



COLLECTIVE FARM VILLAGE-TRANSCARPATHIA



HOUSING FOR STATE FARM WORKERS-GEORGIA



COLLECTIVE FARM VILLAGE-BYELORUSSIA



Floor plan of a two-room apartment. Rent is based on the actual living area, which does not include the kitchen, bathroom, closets or entrance hall.



This is a two-room apartment in a housing project completed recently. New buildings have shops located on the ground floor.



of families living in substandard houses the term is hardly adequate to describe the ancient, vermin-ridden slum tenements in which most workers in czarist Russia lived.

Government funds were therefore allocated to build additional housing in those localities where the shortage was most pressing. Even before the current seven-year plan the scale on which housing was being built was far greater than in any other country. Last year the Soviet Union ranked first in numbers of apartments built per thousand of the population.

This construction, however, as extensive as it was, could hardly keep pace with the rapid growth in urban population that resulted from industrial development. In 1926 the urban population of the Soviet Union was 26 million. By prewar year 1940 it had grown

to 61 million and by 1956 to 87 million. Over-all urban housing was built at approximately the same rate. In 1956 there were 200 per cent more dwelling units than in 1926 and 50 per cent more than in 1940.

Not only were a good many houses built but they were quite different from those of prerevolutionary times. In smaller cities 99 per cent of the old dwelling units were in single-story antiquated log houses. Even in Moscow as many as 91 per cent of the units were in these ancient structures. The bulk of the new city housing in the Soviet period has been in large apartment houses.

#### Building on the Ruins of War

But a good many of the old houses still have to be replaced. Had it not been for the

There is a feeling of space, air and light even in city apartments, with their large windows, balconies and landscaped lawns and flower beds.



war, everybody in the country would by now be comfortably housed. The Nazi armies destroyed, either totally or partially, 1,710 cities and towns and more than 70 thousand villages. Twenty-five million people were left homeless.

DR

It required enormous efforts to rebuild for these people, let alone increase the amount of housing. But both were done with astonishing dispatch.

In the period between 1946 and 1950 the urban population alone received in new and restored houses some three million apartments. Between 1951 and 1955 the amount of new housing built in cities and towns had jumped to approximately five million apartments.

Minsk, Kiev, Stalingrad and many other large cities had literally to be rebuilt from

ruins. They have all been restored now with wide and spacious avenues, parks and modern apartment buildings. Dwelling space in Minsk, for example, has increased by 250 per cent as compared with the prewar period.

Within ten to a dozen years the Soviet Union proposes to have licked the housing problem completely, to have provided modern housing facilities in town and country for the whole population. That is the size of the construction program upon which the country is now embarked, a very vital part of the whole seven-year plan.

#### The New Tenants

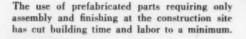
Most of the country's housing is financed from the national budget and is public property. The landlord is the duly elected city or With furniture and household goods produced in growing quantities, many families are completely refurnishing their new homes.

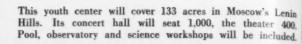




Scale model of the central section of downtown Stalingrad. There is no longer a trace of the

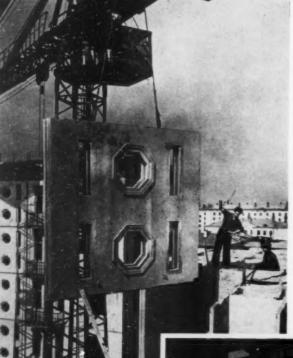
war's ravages, but building continues to go on.







#### WHOLE CITIES EMERGE AS AL



village Soviet. Each Soviet has a housing committee whose function it is to consider and pass on applications for available apartments.

There are, in addition, apartment houses built by industrial enterprises. Apartments here are distributed by joint decision of the management and the trade union.

Here is how new housing was distributed in Moscow, for example, in 1957. During this typical year, 71,800 families moved into new apartments. Among them were 37,245 families of industrial workers; 26,420 families of scientists, engineers, technicians and other professionals; 8,135 families of invalids, pensioners and former service men.

Rent and utilities in Moscow, as in any other city or town, come to no more than four to five per cent of family income. It will vary somewhat with earnings and facilities but will never exceed ten per cent and for larger families will be even less than the four to five per cent national average.

#### The Cost of Construction

New housing and municipal construction

Section of a plant producing reinforced concrete panels for apartment houses. Entire buildings are now made at the factory.







PLANNING HAS RESULTED IN A PLEASING COMBINATION OF ARCHITECTURAL UNITY AND EFFICIENCY.

#### AS ARCHITECTURAL ENSEMBLES

proposed by the seven-year plan for all parts of the country has a solid financial foundation—allocations budgeted from government funds alone will amount during 1959-1965 to approximately 380 billion rubles—some 170 billion more than the sum spent in the seven previous years. This means that an average 5,600 rubles is to be spent for every working man and woman within the next seven years for new housing, school, hospital and public utility construction.

In addition to the appropriation for housing construction proper, the seven-year plan

budgets an additional 80 billion rubles for communal development—new water mains, sewage and gas lines, heating and landscaping.

The cost of construction and maintenance of government housing is far from covered by rentals. The average cost of a new brick house in 1956 was roughly 150 rubles per square foot of living space. A house should stand up fairly well for about fifty years. Depreciation, then, will come to about .25 rubles a month. But the rent paid by the tenant per square foot is considerably less than for depreciation alone, not to speak of

heating and general maintenance. It comes to an average of .07 rubles a month. The large difference is made up by government subsidies.

#### Single-Family Houses

There is a good deal of individual house building going on, particularly in rural communities and suburban areas. This type of private building of single-family homes is encouraged by long-term government loans. The individual builder gets the lot free and government agencies provide the design, building materials and the labor, if required, at low cost. The house becomes the permanent property of the builder.

Of the 861 million square feet of building scheduled for this year in cities and towns, 310 million will be small private houses. In many communities enough of this kind of construction has already been done to solve the local housing shortage.

This was true, for example, in the residential settlement of the Krasny Oktyabr Plant in Stavropol where the workers built 100 houses for themselves, enough to meet their housing shortage completely. These settlements have attracted very favorable comment from foreign architects and builders.

Whether the project is a block of apartment houses or a cottage community, the design provides for all the needed communal services. The projects are self-contained residential communities, termed micro-districts, with schools and stores, nurseries, playgrounds, restaurants and, of course, transportation facilities.

#### City Planning

Aside from the renovation and expansion of the older urban communities, settlements founded in recent years have been growing into cities. In the past thirty years the number of cities and towns in the Soviet Union has increased from 709 to 1,569. They include such well populated municipalities as Magnitogorsk, Komsomolsk-on-the-Amur, Angarsk, Novaya Kakhovka and Magadan.

CONSTRUCTION IS HIGHLY MECHANIZED IN THE SOVIET UNION, GUARANTEEING THE FULFILLMENT OF THE HOUSING PROGRAM WORKED OUT FOR THE NEXT SEVEN YEARS.





Gubkin is an ore town growing around the Kursk Magnetic Anomaly, which is now being tapped.





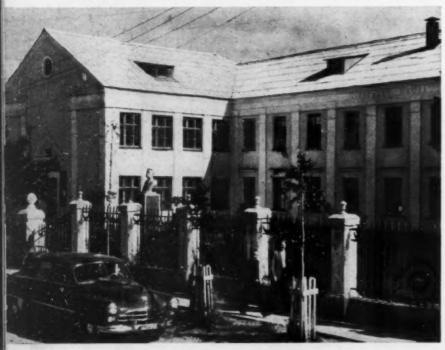
The Miners' Club in Gubkin has many amateur art groups and is a center of community activity.



#### CULTURAL FACILITIES CONSTRUCTED W

The communities now being built have ample cultural, service and transportation facilities within easy reach.

THE SECONDARY SCHOOL WAS BUILT AT THE SAME TIME HOUSES WERE GOING UP.



A town will generally grow up alongside a new industrial center. The Magnitogorsk Iron and Steel Plant built in the Urals in the early thirties is a typical example. The garden city of Magnitogorsk with a population of 300,000 has grown up around it on both banks of the Ural River. Residential Magnitogorsk on the west bank is separated from the blast furnaces by a forest belt which keeps the air permanently fresh and clean.

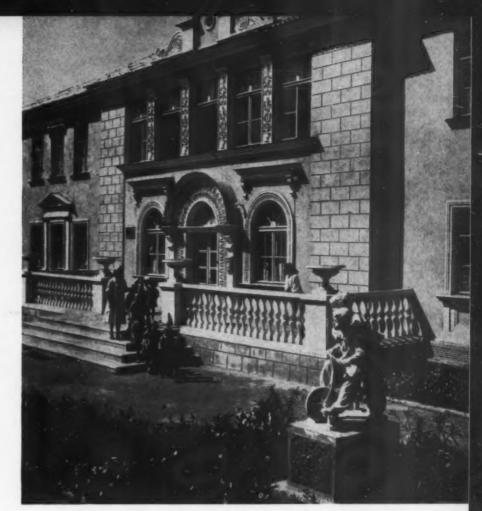
Volzhski is a new town, only seven years old, which grew up around the Stalingrad Hydropower Station on the Volga. It is a well-planned, beautifully landscaped town of 60,000 people. A living fence of greenery walls off the traffic in the center of the main avenue from the houses on either side. This is the garden city design that has been followed in laying out new industrial centers in Siberia, Central Asia and the Far East.

There has been an increase in public catering establishments within recent years intended to free women as much as possible from burdensome household chores. The ground floor of large projects will usually be reserved for stores and restaurants where the housewife can order a ready-cooked meal or one that only needs to be heated.

The number of service stores have been growing—for tailoring and dressmaking, shoe repair and house appliance repair. There were 80,000 such shops last year. By the end of



YOUNG RESIDENTS ARE PROVIDED WITH PLAY AREAS.



A KINDERGARTEN FOR THE CHILDREN OF WORKERS OF A NEW PLANT IN ZAPOROZHYE.

#### ED WITH NEW HOUSING

this year there will be 103,000 and by 1961 at least 153,000.

#### **Building Methods**

Large-scale building of the type done in the Soviet Union is highly mechanized. About a hundred thousand big excavators, scrapers, bulldozers, self-propelled cranes and other machines are being used presently. The concrete parts—wall panels, blocks and other elements—are prefabricated. The construction site becomes an assembly area.

Builders have been progressing from production of separate prefabricated elements to large panel construction, to the production of an entire building or else of all its component parts right at the factory. Builders are also making increasingly larger use of the light, durable and very attractive plastic building materials.

As a general rule, regional government agencies with their staffs of building specialists are responsible for housing construction. These agencies are subordinate to the economic council in each of the large economic regions into which the country is divided. Coordination on the national level is done through the State Construction Committee of the USSR Council of Ministers. This well-defined organizational setup helps to accelerate the building program.

NO SCHOOL WOULD BE COMPLETE WITHOUT BALL COURTS, ATHLETIC FIELDS AND GYMS.



# UZBEKISTAN:

By Sharaf Rashidov

First Secretary, Communist Party of the Uzbek Republic

Sharaf Rashidov is both a political leader and a gifted novelist. He was born in 1917, the son of poor peasants. He studied at a teacher's training school and then at the Uzbek University in Samarkand where he majored in philology.

During the Second World War he was wounded in front line fighting. After the war he worked as a journalist and wrote his first stories. Between 1947 and 1950 he was editor of the widely circulated newspaper Kzyl Uzbekistan and served as chairman of the Writers' Union of the republic.

In 1950 he was elected President of the Presidium of the Supreme Soviet of the Uzbek Republic and Vice President of the USSR Supreme Soviet. Since March of this year he has been First Secretary of the Central Committee of the Communist Party of Uzbekistan.

Sharaf Rashidov, in spite of his very demanding public duties, finds time for writing. His latest novels, *The Victors* and *Stronger than the Storm*, have won him an admiring audience of readers in Uzbekistan and elsewhere in the country.



THE SONGS of a people, it has often been said, are its history told in music and verse—the joys and sorrows of its past, the hopes of its future.

An unforgettable memory of my childhood is a song I first heard in the hut of an Uzbek peasant. "Deep are the rivers," the words ran, "but you are dying of thirst, and I haven't a drop of water to give you, my child. There is plenty of wheat in the world, but I haven't a pinch of flour to bake bread for you, my child. Fertile is our land, but I have no bit of soil to grow grapes for you, my child . . ."

It was not only a mother wailing to her child, but a whole people crying a protest. Before the Socialist Revolution the Uzbeks were wasting away from lack of land and water, from unbearable toil, from hunger, disease and the afflictions of wind and weather.

So it was in the past. But it will never be so again. My people now sing different songs, of freedom and happiness and creative labor. They sing of deserts transformed into blossoming oases, of electric lights ablaze in every

WATER, FOR UZBEK FARMERS, HAS BEEN A CENTURY-OLD NEED. THE GREAT FERGANA CANAL NOW IRRIGATES TENS OF THOUSANDS OF FORMER DESERT ACRES.



# A NEW COUNTRY AND PEOPLE

corner of the land, of achievements in science and the arts. They sing of peace and the brotherhood of nations.

#### A Land Awakened

I am old enough to remember the small railroad shops in Tashkent. There was not very much the capital of our republic had in the way of industry three or four decades ago. In smaller towns there were only a few primitive cotton-cleaning mills. And yet, underfoot, were untouched treasures of natural resources.

Today Uzbekistan with its seven million people has a developed industry and many large industrial centers. Our farms and plantations have blossomed, too, with heavy crops of cotton, grain and fruits. Great flocks of sheep now graze on our irrigated pasturelands.

A traveler crossing our hills and valleys a half century ago would have found it impossible to imagine that this primitive region, into which even such simple necessities as nails had to be brought in from the outside, would, in a time span so brief, be exporting intricate machinery for farming, mining and construction, equipment for the electrical, ra-

dio and chemical industries to Europe and Asia.

In the manufacture of some kinds of goods Uzbekistan is ahead of many countries in Europe. The hundreds of hydro and thermal electric stations that power our industries now generate double the electricity produced by all of Russia before the First World War.

#### A Tour of Uzbek Industry

Let us begin our industrial tour with Tashkent. There we find factories that make spinning machines and looms, cotton harvesters, excavators, electrical and chemical equipment. As for the light and food industries, they are almost all represented. Tashkent has one of the world's biggest textile mills. There are clothing, shoe, furniture, crockery, refrigerator factories, meat-packing plants, distilleries, canneries.

The Tashkent-Angren train takes us to two new, well-planned towns: Almalyk, a nonferrous metal center with a big lead and zinc plant, and Angren, a coal town.

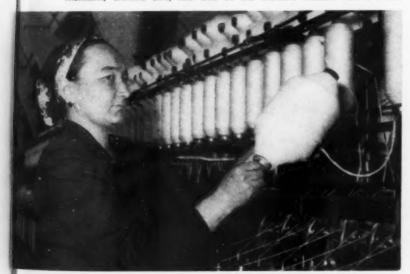
Our coal mining has lately had to meet the rather keen competition of a growing natural gas industry. A few years ago a rich gas source was found in Andizhan Region and more recently one of the world's large deposits of natural gas was discovered at Gasli, near Bukhara.

A pipe line now being built will be carrying gas to Bukhara—that part is already finished—and to Samarkand and Tashkent. Within the 1959-1965 period another line will be laid between Uzbekistan and the Urals. Before the seven-year plan is completed, gas production will be stepped up 106 times, to a total of more than 18.3 billion cubic meters.

Now let's take the train to Chirchik. Here we find one of the Soviet Union's largest electro-chemical plants and a big farm machinery factory. The train takes us on to Begovat, a small village only twenty years ago and now a bustling town employing tens of thousands of people at its metallurgy plant, cement mill and the Farkhad power station, the largest in the republic.

Next we travel on to Leninsk, the center of the Uzbek oil industry, to Vannovskaya with its oil refinery, and to Fergana, where the largest oil processing plant in Central Asia is being built. Uzbekistan produced 13,000 metric tons of oil in 1913. Compare that with the 1,115,000 tons of 1957, and the 2.5 mil-

TASHKENT, CAPITAL CITY, HAS ONE OF THE WORLD'S LARGEST TEXTILE MILLS.



THE REPUBLIC'S BIG CROP IS COTTON-3 MILLION TONS OF IT LAST YEAR.



ZINC AND LEAD ORE FOR UZBEKISTAN'S GROWING METALLURGY INDUSTRY.



# million cubic meters 1965 1965

New section of a natural gas pipeline. Uzbekistan will be extracting more than 18 billion cubic meters of gas by the end of the 7-year plan.

#### **UZBEKISTAN**

lion tons it is scheduled to produce by 1965.

By that year the growing chemical industry is scheduled by the seven-year plan to quadruple its present output. The plan also projects new factories for the manufacture of mineral fertilizer, building materials, plastics, rayon, wool and leather as well as a big housing program for the cities and the countryside.

Capital investments during the next seven years will be almost 2.5 times as large as for the seven years preceding and will total 35 to 36 billion rubles. This is very nearly the entire sum spent for building under all the earlier five-year plans started in the late twenties.

#### Water Means Life

There is an ancient Uzbek saying, "Where the water ends, the earth ends." Irrigation is no academic question in arid Central Asia. For centuries it has meant the difference between starvation and plenty.

Prior to the Socialist Revolution only a small fraction of the land, principally in the river valleys, was irrigated. But there are abundant water sources, and with the wealth

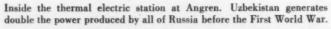


Cable-way buckets carrying zinc and lead ore for refining from the Altyn-Topkan mines, the republic's big nonferrous metallurgy center.

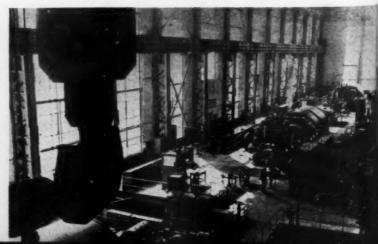


Boarding a passenger liner at the Tashkent airport en route to one of the republic's many industrial cities built in the past few decades.

New housing for chemical workers in suburban Chirchik. This booming town has one of the largest electro-chemical plants in the country.







of sunshine—250 sunny days a year—Uzbekistan's fertile soil can grow almost anything. The old farm adage is, "Thrust a stick into the earth and watch a tree grow."

Despite this potential richness, Uzbekistan's farmers lived in poverty for centuries. Before the Revolution, two-thirds of the cultivated land and the water belonged to the feudal aristocracy and the clergy, while the million and a quarter landless peasants toiled for a crust of black bread and a cup of tea. All the farming was done by hand on tiny plots.

This is ancient history now. Prosperous collective farming and large-scale irrigation is the present order of things. Paraphrasing the old proverb—we know where the water begins, at the Syr-Darya or Amu-Darya, Zeravshan or Angren, Chirchik, Naryn or the Surkhan-Darya rivers, but it is much too soon to say where the water ends. With every passing day new canals carry water further and further into the deserts, transforming them into cotton plantations and orchards.

The new irrigation systems of Uzbekistan reach for 100,000 miles, with a collector-drainage network 12,500 miles long. More than two million acres of wasteland have been brought under cultivation with work under way to irrigate the virgin lands of the once aptly-named Hungry Steppe, of Central Fergana and other regions.

Uzbek farmers have reason to be proud of their big crops of peaches and figs, apricots, grapes and pomegranates of a quality that they will match with fruit grown anywhere in the world. The republic takes first place in the country for its silk, karakul and rice.

Our people call cotton white gold. It is the republic's major crop and our growers have been doing phenomenal things with it. Look at these figures:

The year—1913; planted to cotton—1,100,-000 acres; crop per hectare—12.2 metric centners; gross cotton crop—518,000 metric tons.

The year—1958; planted to cotton—3,320,-000 acres; crop per hectare—21.7 metric centners; gross cotton crop—almost 3 million metric tons.

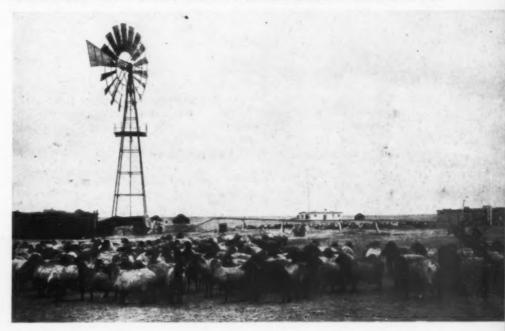
Uzbekistan now grows more cotton than Pakistan, Turkey, Iran and Brazil taken together.

Great progress has also been made with

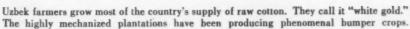


THESE COTTON PICKERS AND TRACTORS ARE PART OF THE MOTOR FLEET OF A COLLECTIVE FARM.

UZBEKISTAN SHEEP MEN ARE WORKING TOWARD A 50 PER CENT INCREASE IN WOOL CLIP BY 1965.



to grow mer varieties of







Scores of Uzbek researchers are looking for ways to grow finer varieties of pest-resistant cotton.





A SQUARE IN TASHKENT, A GROWING CITY OF PARKS, TREE-LINED AVENUES AND MODERN BUILDINGS.

No empty seats in the Tashkent stadium at major sport events.

#### **UZBEKISTAN**

livestock. To use statistical language again—since 1918 the number of head of cattle has grown by half a million, the number of sheep and goats by almost five million and pigs by 220,000.

As to farm prospects for the future—by the end of the seven-year plan period the cotton crop will hit a record figure of 3,800,000 tons, production of meat will double, vegetables will triple and the wool clip will go up by 50 per cent.

#### **Every Field of Study**

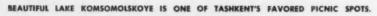
There is no branch of modern science to which Uzbek researchers have not contributed. Experimental work with controlled thermonuclear reactions, the use of radioactive isotopes in industry and medicine, the creation of living cells, new surgical methods, the origin of ancient oriental cultures—this is the spread of research being done by more than 7,000 Uzbek scholars. The republic has its own Academy of Sciences and 100 specialized research institutes.

At the time Uzbekistan became a Soviet Republic, more than 95 per cent of its people were illiterate. Needless to add, there were no colleges or research institutes. In this brief historical period the Uzbeks have made the great leap from complete illiteracy to the most advanced modern learning.

Our 1,300,000 children now study in 5,589 elementary and secondary schools in all parts of the republic. In 1918 Lenin signed the decree founding Tashkent State University, the first university in Central Asia. Now Uzbekistan has 35 schools for higher education with a student body of 70,000. More than 60,000 boys and girls attend junior colleges and specialized secondary schools.

Our colleges train engineers, agronomists, physicians, teachers, orientalists, artists, writers, musicians—specialists for any profession

Statue in Tashkent of Uzbekistan's famed poet, Alisher Navoi.









LARGE NUMBERS OF MAGAZINES, PAPERS AND BOOKS ARE PUBLISHED IN THE NATIVE LANGUAGE.



Prize-winning cotton grower Khamrakul Tursunkulov and his son.

you can think of. The republic now has twice as many college trained people per 10,000 of the population as France; seven times as many as Turkey, and 28 times as many as Iran.

Books are no longer the property of the favored few. Uzbekistan has about 3,400 libraries today as compared with 14 in 1913. Each year about 25 million books are published in the republic, which has its own novelists, poets and journalists. Writers like Khamza Khakim-Zade, Gafur Gulyam, Abdullah Alimjan, Musa Aibek, Kamil Yashen and others have won millions of readers in the Soviet Union and abroad.

Fifteen of the republic's eighteen magazines and 162 of its 208 newspapers are printed in

the Uzbek and Karakalpak languages. The circulation of periodicals is more than a million. The contrast with czarist times is striking—of the 14 papers then published in Uzbekistan, only one was in the native language.

For use by the people are 4,000 cultural and community centers, 36 recreation parks in cities and towns, scores of theaters, concert halls, museums and art galleries. Tashkent has a large radio station and a first-rate television center. These are all products of the Soviet period.

Our people carried nothing over from the czarist days except the will to create. All we have, we built with our own hands, and the building goes on.



Farmer Chini Sharapova is a deputy to the USSR Supreme Soviet.





Preventive medicine and widespread medical services have sharply reduced the once very high disease rates.





THE SECOND UZBEK ART AND THEATER FESTIVAL WAS HELD RECENTLY IN MOSCOW. THIS IS A NATIONAL DANCE ACCOMPANIED ON THE "DOIRA."

# THE ARTS IN TODAY'S



SPRING," A DANCE PERFORMED AT THE FESTIVAL BY THE FOLK DANCE ENSEMBLE OF UZBEKISTAN.







A SCENE FROM THE UZBEK NATIONAL OPERA DILOROM BY COMPOSER MUKHTAR ASHRAFI SET DURING THE SASSANID DYNASTY, 226-651 A.D.

# ZBEKISTAN

UZBEKISTAN has virtually created a national theater since the Socialist Revolution. It had no professional theater before then. Today's 26 theaters stage every kind and variety of production—operas and ballets, dramas and musicals—concerts, children's plays, puppet shows and a circus.

The republic's film industry is even younger, staffed by talented script writers, directors, actors and cameramen who have learned their crafts in the past twenty years.

The second Uzbek Art and Theater festival was held in Moscow recently, an event which attracted visitors from all parts of the country. Nineteen of the best dramatic, musical and dance productions were chosen for presentation.

Uzbek music has experienced an impressive renaissance through the work of its gifted composers—Sadykov, Babayev, Burkhanov, Ashrafi, Mushel, Leviev and Yudakov. By blending the national folk melodies with the whole body of traditional and classical music they have created fresh and stirring opera, ballet, symphony, chamber and dance music.

The republic has in the past several decades trained its own concert artists and dancers who have won enviable reputations both at home and abroad for their talented and colorful performances.



AN UZBEK DRAMA THEATER PRODUCTION OF JULIUS CAESAR.

UZBEKISTAN'S CIRCUS CLOWNS ARE INIMITABLE FOR THEIR SPRIGHTLY INVENTIVENESS.



# THE ARTS IN TODAY'S UZ



Zulfiya is one of Uzbekistan's best-loved poets. She is also editor of the magazine Uzbek Woman.



It is the rare factory or collective farm in Uzbekistan that does not have its amateur dance group. "Good Cheer," a dance performed by Tashkent textile workers.

No need for artificial sets for this dance performance on a collective farm. The dance, the accompanying instruments and the national costumes are all traditional.



A charming and spirited courting dance performed by the boys and girls of an amateur dance group from the Khorezm Region.



# AY'S UZBEKISTAN

In the last few decades Uzbekistan has developed talented writers like Aibek (left) who have used the native themes in their stories and poems.



Uzbek folk artisans have long been famous for the beauty and intricacy of their gold embroidery designs on wall hangings, skull caps and slippers.





The music of Mukhtar Ashrafi, Uzbek composer-conductor, conveys much of the Oriental flavor so characteristic of Uzbek folk music.



Gifted artist Rakhim Akhmedov has painted dozens of canvases that portray the life and labor of the cotton growers of the Republic.



Good medical care and his own will saved Viktor Kiselyov from a life of invalidism.

VIKTOR KISELYOV narrowly escaped being one of the tragic casualties of war. As it is, he is a healthy man, father of a growing family with a secure job and a future that is as bright as he himself wants to make it.

Viktor was 19 when the war broke out and took him from school into the army where he spent the next three years. In 1944 he was badly wounded and for more than a month it was questionable whether he would live or die. He recovered but left the hospital a complete invalid, unable to raise his arms or to bend his back without great difficulty.

This was the shape he was in when he went back to his native town of Zhdanov in the Ukraine on a disability pension of 600 rubles a month. He continued hospital and sanatorium treatment for two years at government expense until he took a turn for the better and finally got on his feet.

While in the hospital convalescing, Viktor fell in love with one of the nurses and after he was discharged, he and Irina got married.

In 1947 they had their first baby, Nina. By that time Viktor was in good physical shape and was tired of living as a pensioner. He was young, healthy and he wanted to work. And there was the matter of income. Although his pension was sufficient for a single man, it wasn't nearly enough to raise a family on.

### Plenty of Jobs Open

Jobs were no problem. There were plenty open and available in Zhdanov or any one of a dozen other places. But Viktor didn't want an unskilled job and he had no trade since he had gone into the army straight from school. He looked through the "trainees" section of the help-wanted ads and soon found a number of trades he could learn at government expense.

The steel mill in the neighborhood was expanding production and needed rolling mill operators. Viktor thought it over and decided to take a crack at the job, over the objection of his wife who thought his health wouldn't stand the strain. But he was checked out as physically fit by the clinic at the steel mill and enrolled in the six-month course for rolling mill operators. He got his training without charge and was paid, in addition, apprentice wages of 500 rubles a month during the training period.

When he'd finished the course, Viktor, together with other trainees, was sent to some of the other steel plants in the region to see how skilled operators worked. He came back to Zhdanov and was put on a job in the rolling mill. Before long he was making 1000 to 1200 rubles a month.

Up to then the Kiselyovs had been living with Viktor's parents but when a second child, Tanya, was born, the house became too small for two families. Viktor applied to the factory management for an apartment, his application was approved by his trade union and some months afterward the young people moved into one of the new apartment houses the mill had built.

### The Family Today

This is Viktor's twelfth year at the mill. He is one of the plant's top rolling mill operators and earns enough in wages and bonuses for labor-saving ideas so there is a tidy savings bank account to the family's credit. The family increased by one as of last year when Vasya was born.

Viktor is ambitious for his family and himself and has been going to technical school at night. He will soon be finishing his fifth and last year in the metallurgy course. It will mean qualification for a better job than the one he has now, and more money, of course.

About two months after the boy was born, Irina talked of going back to work. She felt that she wasn't making use of her background in nursing and the local hospitals were calling for trained people.

Irina had checked with the nursery in the

# FAMILYS





VIKTOR THINKS HE'S VERY LUCKY TO HAVE IRINA FOR A WIFE AND HE ADORES HIS CHILDREN.

# YSTORY

By Lev Petrov





In 1947 Viktor, then on pension, wanted a job. Trained at plant expense, he is now a skilled rolling mill operator.

# **FAMILY STORY**



Nina, the eldest girl, is in fifth grade. She spends her summers at a children's camp.

neighborhood. It had a good staff and facilities for child care and it would merely be a matter of bringing the child in every morning on her way to work and calling for him at night.

But Viktor is a little old-fashioned that way. He thinks Irina ought to be home for a while longer until Vasya is older. Irina was of two minds, and since they do well enough on Viktor's salary she didn't press the point. Not that she had abandoned the idea—Irina can't see herself a permanent housewife—she has just postponed it for a year, or perhaps two years at the outside.

# Income and Expenses

Irina keeps a running account of money that comes in and goes out. Here is how the family budget shapes up. This is for last year:

29,000 rubles

Expenses (1958)

 24,461 rubles

Notice that there are no expense items listed for the children's education or for Viktor's schooling. There is also no expense listed for vacations. The eldest girl spent the summer at a Young Pioneer camp but the family paid nothing for accommodations.

Viktor and Irina are thinking of making a trip abroad next vacation. They will be getting a 70 per cent discount. The difference will be made up by the trade union social insurance fund.

There are no medical expenses listed either, aside from Viktor's stay at a sanatorium, for which he paid only a third of the regular cost. Viktor needed no hospital treatment in 1958 but Irina did. She was ill with pneumonia and spent 30 days at the hospital. Her stay cost an estimated 950 rubles but Irina paid nothing. Medical treatment of every sort is covered by the government.

In addition to that, Irina spent ten days in a maternity clinic when she gave birth to Vasya. She paid not a kopeck of the 500 rubles it cost the clinic. Moreover, had Irina been working, she would have been entitled to between 60 and 90 per cent of her regular wages during her 16-week maternity leave.

VIKTOR TAKES ON HIS TWO DAUGHTERS AND THEIR FRIEND IN A FAST GAME OF ICE HOCKEY WHILE IRINA GIVES LITTLE VASYA HIS BATH AND GETS HIM OFF TO BED.





Tanya has a quartz lamp treatment at the local polyclinic to help her get rid of a severe cold.

As for education, the Kiselyovs will have no such item on the expense side of their budget even when the children go to college. Education is free all the way from kindergarten through the university.

## More Social Services

These and other such services that are not listed in the Soviet family budget should really be written in as income. More such services will be provided every Soviet family as the present seven-year plan makes progress. By 1965 the government will be spending 360 billion rubles, as compared with 215 billion in 1958, for public education, including student maintenance stipends; health services, including vacation resorts and sanatoriums; and other social services. This means an average of 3,800 rubles a year added to the income side of the budget of every working person. In addition, about 800 rubles per worker will be spent on new housing, schools, hospitals and other construction.

This greater expenditure for welfare services is made possible by the country's growing economic strength. That growth can be seen in every industrial plant, including the Azovstal mill where Viktor works. New blast and open-hearth furnaces have recently been installed and capacities of the old ones have been enlarged to turn out more steel.

Men like Viktor have been doing their bit to boost production by figuring out ways of getting more out of the equipment. Viktor has already turned in a number of valuable suggestions for increasing efficiency. Every suggestion that helps turn out more steel with less work also helps to provide more education, better housing, more consumer goods for everybody in the country.

By 1965 the Kiselyov family income should be 40 per cent higher than it is now, and the expense side of the balance sheet should be lower since more goods and foodstuffs produced will mean lower consumer prices. That is how the Kiselyovs and all other Soviet families will be figuring their household budget in the next few years.



WITH THE CHILDREN TUCKED IN BED, THE KISELYOVS HAVE THE NEIGHBORS IN FOR CARDS OR CHESS.



WHEN HE GRADUATES FROM TECHNICAL SCHOOL, VIKTOR'S JOB CATEGORY WILL BE RAISED.

# RAYS FROM OUTER SPACE

By Sergei Vernov, USSR Academy of Sciences

and Alexander Chudakov, Mathematical-Physicist

THE EARTH is continually bombarded by very penetrating and intensive radiation from outer space. These cosmic rays were first discovered in observations taken from balloons and all studies since have been done from high-altitude flights. But it was the space rocket, reaching far beyond the earth's atmosphere, that provided the necessary vehicle for the apparatus that could collect data on this little-understood phenomenon.

For theoretical studies, these cosmic rays have very wide import. Their significance is not less important practically. With space flight in the offing, we must know what harmful effects this radiation is likely to have on the human space traveler at various distances from the earth.

The Soviet cosmic rocket launched early this year carried instruments—counters of charged particles and luminescent counters—to study cosmic radiation. These instruments registered X-rays, gamma rays and electrically charged particles of various energies. They also measured the ionization created by all types of radiation. We now have available the results of the study of cosmic rays both near the earth and at distances of more than 60,000 miles from the earth's center.

### Energies in Hundreds of Millions of Electron Volts

Figure I shows that the intensity of radiation depends on the distance from the earth's surface. The horizontal axis shows the altitudes and the vertical axis the intensity of radiation (in two scales, one of which is 100 times the other). The unit of measurement is the ionization created by primary cosmic rays.

As this figure shows, at distances greater than nine terrestrial radii the intensity practically does not change as the distance from the earth increases.

The diversity of the apparatus carried by the rocket made it possible to analyze the composition of cosmic radiation in space. The results indicate that practically all particles have enormous energy, measured in hundreds of millions of electron volts and even greater energies.

The conditions near the earth are quite different. The words "near the earth" in this connection must be understood as applying to those regions in space at a distance of several terrestrial radii. As can be seen from the curve in Figure I, the degree of harm that the radiation in this region can cause is hundreds of times as great as it is in space.

Analysis of the composition of the radiation in this region showed the presence of X-rays which originate when electrons bombard the casing of the container that carries the instruments. Thus it was concluded that a large number of electrons revolve about the earth at a distance up to 30,000 miles.

Since the instrument readings show that the energy of these electrons is quite insignificant, from 30,000 to 100,000 electron volts, they can be absorbed by small layers of substances. It is therefore possible to provide protection for the space pilot against the harmful effects of this radiation.

The intensity of cosmic rays at great distances from the earth—as seen from Figure I—is very small, only two particles flying through one square centimeter per second. This being so, there is no reason to be concerned about radiation illness.

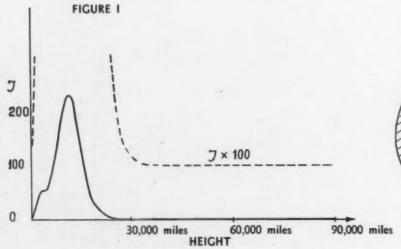
True, one must not forget that explosive processes sometimes take place on the sun, even though they are very rare. At such times the sun becomes a source of cosmic rays and the entire solar system is filled with deadly radiation. When the Soviet space rocket made its flight the sun was in a relatively calm state. It is under similarly calm conditions that our future space travels will be taking place.

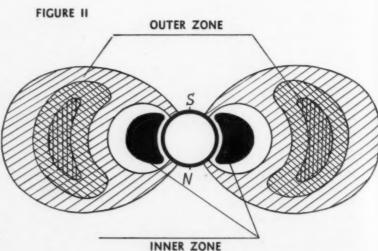
### A "Halo" of Radiation Around the Earth

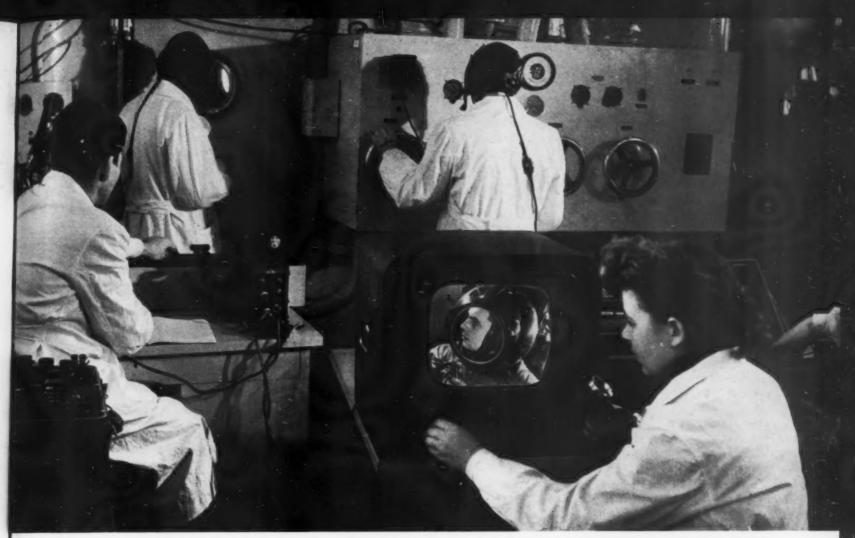
At the sessions of the IGY assembly held in the summer of 1958 previous cosmic ray studies made with data gathered by the sputniks were submitted. Comparison of these studies with the present ones show that the earth is surrounded by two zones of intensive radiation.

Figure II shows how these two zones surround the earth. There is a space between the zones, and the intensity of the radiation there is considerably less than in each of the zones themselves. The composition of the radiation in the two zones also differs markedly. The electrons in the outer zone have relatively low energies. In the interior zone high energy particles dominate. There is reason to believe that they are protons.

According to the law which governs the motion of particles with an electrical charge, these particles move in the magnetic field of the







THERMO-PRESSURE CHAMBERS, WHICH RE-CREATE THE CONDITIONS IN OUTER SPACE, ARE USED BY RESEARCHERS TO TEST MAN'S REACTIONS TO TRAVEL IN THE COSMOS.

earth along a closed trajectory, and wind about the lines of force of the magnetic field. With the data gathered by the sputniks and the cosmic rocket it was possible to measure these particles at various distances from the earth and in relation to various lines of force.

With the sputniks, for example, we were able to measure the number of particles at altitudes of 250 and 1,100 miles. The cosmic rocket extended our sphere of investigation very considerably. We found that the number of particles increases greatly with the distance from the earth.

At an altitude of 9,300 miles there are 700 times as many particles as at 250 miles (along the same lines of force). This means that for every 700 particles that exist at an altitude of 9,300 miles, only one reaches the lower altitudes. All the other 699 oscillate along the lines of force, traveling from one hemisphere to the other, without reaching the lower altitudes.

This proves experimentally that the electrons which move around the earth have an oscillating motion. They roam about for a long time "locked up" in the magnetic trap which is created near the earth by its magnetic field. This phenomenon is similar to that which occurs in devices in which physicists try to start a thermonuclear reaction.

Thus, we have a kind of halo of particles around the earth that we term terrestrial corpuscular radiation. The origin of this radiation is now being studied.

Soviet scientists at last year's IGY Assembly suggested the following hypothesis: Under the influence of cosmic rays the earth becomes a source of neutrons. As they fly away from the earth these neutrons partially disintegrate. This accounts for the origin of the electrons and protons which are caught in the magnetic trap near the earth.

Further investigation will supply the complete explanation for the phenomena which occur in space and in that part of space which is adjacent to the earth and is altered under the influence of the terrestrial magnetic field. Apparently similar halos of particles surround other celestial bodies that have a magnetic field. Future space rockets will be proving whether this assumption is true or not.



STUDYING COSMIC RAYS IN A WILSON CHAMBER AT THE ACADEMY OF SCIENCES.



The war was over at last. With the Nazi invaders defeated, the soldiers returned to civilian life. Other demobilizations followed and from 1955 to 1958 the Soviet Armed Forces were reduced by two and a half million men.

# THE SOVIET UNION The Postwar Period

By Leonid Papin, Historian

This is the fifth and final article in a series on the history of the Soviet Union. The first, issue No. 11(26), described the events of 1917 leading to the establishment of the Soviet state. In issue No. 2(29) the period of civil war, foreign intervention and reconstruction was covered. The third article, issue No. 4(31), dealt with the first three five-year plans by which the Soviet Union built its modern economy. The fourth, issue No. 5(32), told about the Second World War. The series is concluded with the following article which takes the reader through the postwar period and the adoption of the current seven-year plan.

THE GUNS of the Second World War fell silent at last. Fascist Germany and militarist Japan had surrendered unconditionally to the nations of the anti-Axis coalition and the world was at peace again.

The soldiers went home. As many as 30 classes of men and officers were demobilized from the military forces of the Soviet Union immediately after the war. Moreover, from 1955 to 1958, the armed forces were further reduced by more than two million men.

The Soviet people had reason to be proud of the victory. They had carried the main burden of the war. They had not only preserved the independence of their own country but had freed many European nations from fascist slavery. Now they girded themselves for the trying tasks of peacetime reconstruction. It would take years, they knew, to heal the wounds of war.

The Soviet land had suffered frightfully from the fascist invaders. In the occupied regions, they had destroyed 32,000 factories, more than 1,500 cities and towns, and more than 70,000 villages. They had razed 82,000 schools and many colleges and other cultural institutions.

The total loss suffered by the economy, added to war expenditures and loss of revenue from industry and agriculture in the occupied regions, came to 2,569 billion rubles. The losses from direct destruction of property came to 679 billion rubles. Could these colossal sums have been spent for peaceful building, the country would long ago have been able to provide an abundance for everyone.

"Twenty-five years—that is the time Russia will need to rebuild what we have destroyed," German Field Marshal Stulpnagel had written to Hitler shortly before the war ended. But here again the fascists had underestimated the Soviet people.

The country barely took a breathing spell after the war. Almost at once the nation set to work on a five-year plan that was designed not only to reconstruct the economy but to surpass the prewar level of production.

The work of restoration actually started while the war was in progress. As rapidly as the enemy was forced out of an occupied region, rebuilding began. But it was only the most essential and urgent steps that could be taken under wartime conditions. When hostilities ended, the greater part of destroyed and damaged industry, transport and agriculture had not been rebuilt. The sum of 115 billion rubles was allocated for the job of restoration.

# Industry Converts for Peace

The Soviet Union had built an immense armament industry to prosecute the war, mightier than that of Germany as events had clearly demonstrated. When the war ended, the factories that had been pro-

ducing tanks, guns, shells and military aircraft were neither shut down nor put on a care-and-maintenance basis. They were retooled for peacetime production. Within a very short time, by the end of 1946, reconversion was complete. This accounted in large measure for the rapid rate at which the economy grew.

The all-out effort quickly restored the mills and factories, mines and power stations, the collective and state farms that had been destroyed. Leningrad, Stalingrad, Sevastopol, Odessa and many other wrecked cities, towns and villages arose from their ashes more beautiful and more modern than before the war.

At the same time new cities and towns were being settled and new industrial plants were being built. Hundreds of new plants were ready for operation in 1946, the first year after the war. By the end of 1948 the industries of the Soviet Union had not only regained but, for the most part, had surpassed their prewar levels. From 1946 to 1950 more than 6,000 large plants were either restored or built anew.

### The Farms Restored

Grave difficulties had to be overcome in rebuilding Soviet agriculture. The fascists had burned what they could not plunder in thousands of farms and machine and tractor stations. Farm machinery and livestock had been shipped to Germany. Seventeen million head of beef and dairy cattle were either destroyed or shipped out. To aggravate the problem, 1946 turned out to be a very bad drought year.

The next year's harvest, however, was so good that in 1947 the food rationing system instituted during the war could be discontinued. This was accompanied by a reform of the currency to facilitate the resumption of normal trade conditions.

Among the countries involved in the war, the Soviet Union was, as a matter of fact, the first to balance its currency and to lift wartime restrictions on consumer goods. Since the end of the war there have been seven large reductions in prices of foodstuffs and manufactured goods, evidence of the rising living standard of the Soviet people.

# Peaceful Coexistence

Both the war and the speedy peacetime recovery proved once again the stability of the government and the unity of the people. This unity was strikingly demonstrated in the first postwar elections to the Supreme Soviet, the country's highest legislative body.

The Soviet people went to the polls on February 10, 1946, and unanimously elected their new deputies—workers, farmers, scientists, scholars and people in the arts. The unanimity and the turnout of voters



STALINGRAD TODAY BEARS FEW TRACES OF THE WAR'S DEVASTATION. MODERN BUILDINGS GRACE NEW STREETS LINED WITH BEAUTIFUL TREES AND FLOWERS.

was an unmistakable expression of confidence in the domestic and foreign policy of the government.

The Soviet Union was one of the sponsors of the United Nations organization. Its proposal in the UN directly after the war urged general disarmament and the banning of atomic weapons and in 1946 the world organization adopted a resolution on the regulation and reduction of armaments and armed forces. Following a suggestion of the Soviet Union in 1947, the General Assembly adopted a resolution that condemned war propaganda. Other important proposals have been submitted by the Soviet delegation, among them one for a peace pact between the five great powers: the United States, China, Britain, France and the USSR.

The Soviet Union has been consistently guided by this principle, first expressed by Vladimir Lenin—that countries with different social and political systems can, and must, live and work together peacefully. This principle of peaceful coexistence was read into Soviet law in 1951 when the Supreme Soviet adopted a statute on the Defense of Peace which branded war propaganda a major crime against humanity.

# International Contacts

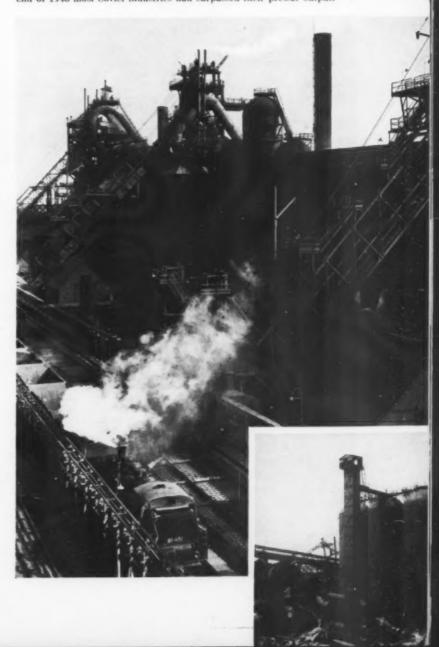
Since the war the Soviet Union has been working to foster friendly relations between countries and to reduce world tensions. Consistent with that aim it established diplomatic relations with the Federal Republic of Germany in September 1955 and signed the treaty with Austria in May of that same year which fixed Austria's position as a neutral power.

The Soviet Government has been working to reach mutual understanding by personal meetings of political leaders. From 1955 to 1958 the USSR was visited by statesmen of more than 20 countries, and Soviet leaders visited Britain, Yugoslavia, India, Burma, Afghanistan, Indonesia and many other countries.

The USSR has been steadily advocating the widest trade relations between countries, without any political conditions or limitations what-soever and now trades with more than 70 countries. The goods bought are varied—equipment for the chemical industry from the Federal Republic of Germany, radio and TV equipment from Britain, automatic production line equipment from France. Soviet trade with non-socialist countries has more than doubled in the past five years and its export trade has grown in proportion.

By 1958 the Soviet Union had concluded some 90 agreements on cultural and scientific exchange with other countries, among them the one signed with the United States which has been working so promisingly this past year and a half.

The Zaporozhye metallurgy works, the largest in the country, and other factories destroyed by the enemy were quickly rebuilt. By the end of 1948 most Soviet industries had surpassed their prewar output.





The people registered their support of government policies in the 1946 elections. This was the first year of the five-year plan to restore the economy which had sustained war losses of two and a half trillion rubles.

# History of the Soviet Union

## Construction Everywhere

Construction during the postwar years has been nationwide, penetrating to remote corners of the country where new deposits of coal, ore, oil and gas have been found. Hydropower plants have been built along the Volga, others along the Dnieper and the Don Rivers. Thermal power plants have gone up in those sections of the country where coal is plentiful. These are units in a grand plan to create a unified power system for the European part of the Soviet Union.

Work is under way to harness the power of the Siberian rivers and to tap the natural wealth of that enormous and barely-exploited region. Industrial centers have been springing up in Kazakhstan and in other of the Central Asian Republics.

The whole country since the war has been taken with a veritable fever of construction. When there was a shortage of labor in sparsely populated regions where new industrial centers were being built, many thousands of workers volunteered to leave settled communities for these pioneering areas. They built towns and cities where there had been nothing but bare steppe and dense forest.

The results of their labors are expressed in these comparative figures. By 1955 the USSR had exceeded the prewar 1940 level of industrial output by 3.2 times. It had climbed to second place in the roster of the world's nations for production of the major industrial commodities.

## The Virgin Land Program

Agriculture has fared as well during the postwar period. To stimulate greater farm output and raise the standard of living in the countryside the government purchasing agencies paid higher prices to collective farmers for their crops. At the same time retail prices for foodstuffs were reduced.

AUSTRIAN CHANCELLOR RAAB, HEADING ONE OF THE MANY GOVERNMENT DELEGATIONS TO THE SOVIET UNION, REVIEWS AN HONOR GUARD WITH PREMIER KHRUSHCHEV



The many thousands of experienced farm managers and trained specialists working at the collective farms and the larger volume of farm machinery turned out by industry have done much to raise productivity.

In order to get a significant increase in grain crops within the shortest possible time, the virgin land program was started. This was a bold project for breaking ground in great stretches of virgin and long-fallow lands in the East, beyond the Volga and Urals, in Siberia, Kazakhstan and elsewhere.

In 1954 a host of young people led by experienced farmers moved on these regions. These pioneering settlers lived in tents and makeshift accommodations until building materials arrived at these distant places, miles removed from railroads. Life was not easy, nor were they spared the difficulties of pioneering, but they built houses and farm buildings, plowed and cultivated this new land and harvested their first crops.

On this once bare land there are hundreds of flourishing state farms. each one with its well-planned village. Up to now the virgin land program has given the Soviet Union an additional 90 million acres of fertile land, more than is sown to grain by Austria, Belgium, Denmark, France, West Germany, Holland, Italy, Spain and Sweden put together.

As early as 1956 the virgin lands produced a bumper crop. That year 54 million metric tons of grain were gathered by the country, 16 million more than had been harvested during the best crop years.

# The Twentieth Party Congress

The Twentieth Communist Party Congress held in February 1956 was one of the memorable events of the postwar period. It defined the major goal of the years ahead—to boost industrial and agricultural per capita production to a level above that of the world's most industrialized countries and thereby provide the material means for a constantly rising standard of living.

As outcome of the Congress deliberations, the wages of a number of categories of industrial and office workers were raised. The transition to a seven-hour day was begun and the workday preceding a holiday was cut by two hours—this without reduction in pay.

The Twentieth Congress proposed the draft of a new law increasing pensions. The draft after some months of nationwide discussion was adopted by the Supreme Soviet.

The Congress also turned the spotlight on certain infringements of Soviet law in the recent past that had resulted from decisions that had been made individually and not by collective judgment. While these infringements could not alter the socialist nature of the Soviet state, they did hamper its development.

Nikita S. Khrushchev said at the Congress: "We have no need to hide our shortcomings since our general line is correct. The cause of communist construction is growing and winning out. There will be fewer shortcomings the more the masses are drawn into the struggle against them."

The Congress pointed the way toward a larger development of Soviet democracy, toward improvement in the work of government bodies, toward a greater degree of initiative for the republics and the individual citizen.

In February 1957 the Supreme Soviet passed legislation to enlarge the rights of the union republics so as to enhance their role in administering their own affairs and that of the country as a whole.

### Industrial Management Reorganized

The national economy which until then had been managed from ministries at the capital was reorganized on a regional basis. A number of the ministries were eliminated and the country was divided into economic administrative districts, each one headed by an Economic Council with coordination vested in the State Planning Commission of the USSR.

This made for more direct and more flexible management, better use of local resources, and more effective coordination between industries and economic regions. Even more important, it stimulated local initiative and local talent and drew thousands upon thousands of workers into the management of their industries. The result was quickly evident in the accelerated pace of industrial production.

In March 1958 a law was passed on the reorganization of the machine and tractor stations, making it possible for the collective farms to buy their own machinery. The machine and tractor stations had been introduced in the early thirties, at a time when there was an in-



Construction of hydroelectric stations is following a master plan for a unified power system for the country. The Gorky Station is one of nine now operating on the Volga, whose annual potential is 60 billion kw-h.

sufficient number of agricultural machines to supply the country's needs and when the farmers were too poor to buy their own. They helped the new collective farms by making available both the machines and the skilled technicians to run them, by popularizing modern farming techniques and efficient planning methods.

As the years passed, the picture changed. Industry was turning out more and more machines for agriculture and the Soviet schools more and more skilled agronomists, tractor drivers, mechanics. Mechanization increased the farmer's productivity and his income, too. The new law acknowledged these changes and provided still another incentive for the further development of agriculture.

Economic growth brought with it a rise in living standards. There has been a steady increase in the volume of foodstuffs and manufactured goods bought by the Soviet consumer and in funds budgeted by the government for educational and cultural facilities and for welfare services. Housing has been and will continue to be a major concentration until the goal adopted in 1957 is achieved—to end the housing shortage within the next 10 to 12 years.

## Progress in Education and Science

During the postwar years phenomenal progress was made in public education. More than 160 new schools on the college level and numerous secondary schools were opened in the first decade after the war. Between 1950 and 1955 more than a million specialists in all fields of study were graduated from Soviet colleges. The number of evening and correspondence schools were greatly increased for those people who wished to attend classes after work.

Scientific research was done on a large and greatly expanded scale. Particular success was achieved in studies of the peaceful uses of atomic energy. In 1954 the Soviet Union began generating power with the world's first atomic station. A synchrophasotron, the world's fastest nuclear accelerator, was built for the Institute of Joint Nuclear Re-

The Volga-Don Canal, completed in 1952, was the final link of a vast inland shipping route joining all the seas in the European part of the country. It also made possible the irrigation of the fertile but arid Don steppes.

# History of the Soviet Union

search founded in 1956. The first artificial satellite was launched by Soviet science and in the first days of 1959 our solar system acquired a Soviet-made planet.

## The Twenty-First Communist Party Congress

The Soviet economy had progressed to the point where planning had to be done for longer periods than heretofore. Such far-reaching changes had taken place in all spheres of economic, cultural and political life that the country was ready to embark on a new period of development—the all-out building of a communist society, a society that could produce in sufficient abundance to satisfy the spiritual and material needs of every one of its citizens.

In 1957 the major features of a plan were outlined for the next fifteen years with the goal of reaching and exceeding the per capita productive capacity of the world's most industrialized countries. In November 1958 a Plenary Session of the Central Committee of the Communist Party of the Soviet Union considered the target figures for the country's development between 1959 and 1965, the first seven of the 15 years.

These were published and discussed for months at meetings held from one end of the country to the other, attended by an estimated 70 million citizens. More than 4.5 million speakers made proposals and amendments to the draft of this seven-year plan. Many were subsequently incorporated into the amended draft. In addition more than 300,000 articles and letters from readers on the draft plan were published by newspapers and magazines.

The seven-year plan was a product of the whole of the Soviet population. Many of the proposals suggested methods by which the target goals could be reached in less time or with savings in labor and materials. Workers at the Kuznetsk Metallurgy Plant, for example, showed a way of boosting output of steel in their plant by 48 per cent instead of the 17 per cent rise proposed by the draft.

The Extraordinary Twenty-First Congress of the Communist Party met in January 1959 to discuss the draft plan and the amendments that





had been offered by Soviet citizens. Its historic deliberations mapped the economic and cultural course of the Soviet Union for the seven years to come.

It envisaged an 85-88 per cent increase in producer goods and a 62-65 per cent increase in consumer goods in the period between 1959 and 1965 at an annual rate of increase of approximately 7.3 per cent, far in excess of that of any country in the world.

Production at that high level would supply an abundance of goods and services for every man, woman and child in the country.

Scheduled by the seven-year plan is a housing program for 15 million new apartments in urban areas and 7 million homes in the countryside, sufficient to rehouse a third of the total population of the Soviet Union.

### Higher Standard of Living

Real wages during the seven-year period will rise by an average of 40 per cent and real collective farm income by the same figure. The increase will result from direct wage increases, higher farm productivity, and from lower retail prices. Provided for in the plan are larger pensions and lower income taxes, with the prospect of abolishing all personal taxation in the near future.

Before the end of the seven years the Soviet worker will be working a shorter day. The transition to a 35-hour week and a 30-hour week for miners and others who work underground will begin in 1964 and will be completed before 1968. This reduction in the workday will not be accompanied by wage cuts. It will come hand in hand with increases in real wages.

Social services now provide every Soviet citizen with free education from the kindergarten through the university, free medical and dental service, pensions, libraries, clubs and other facilities for recreation and cultural development. These and a lengthening list of other services are to be greatly expanded during the period between 1959 and 1965.

This, in essence, is the seven-year plan—to lay the material foundation for an economy of plenty, to build enough and produce enough to provide the Soviet worker with the highest standard of living in the world.

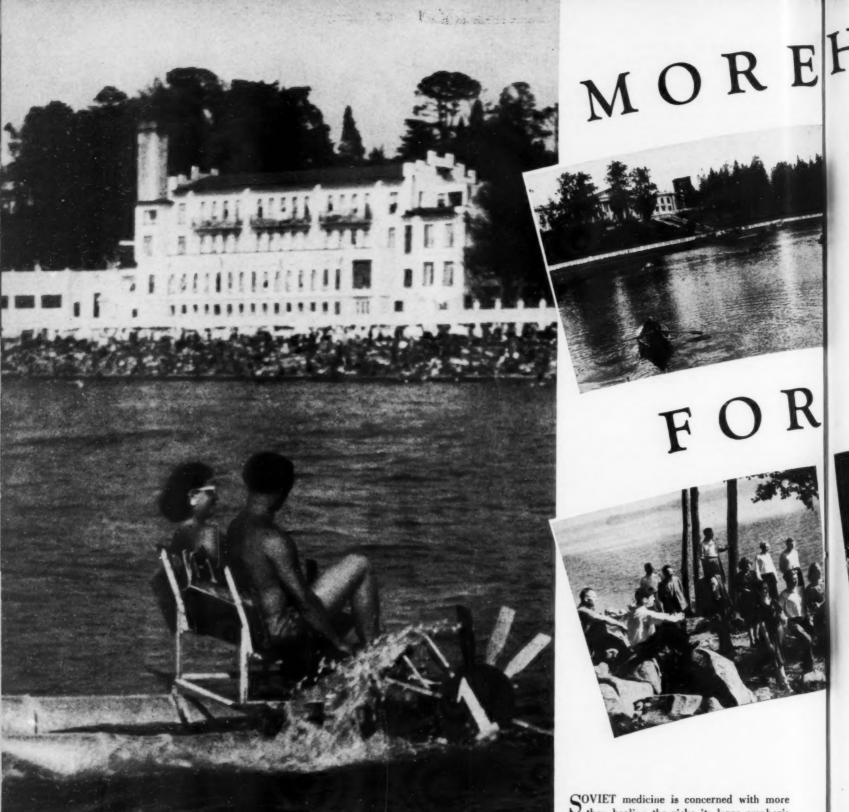
With a higher standard of living will come both the opportunities, the leisure and the facilities for every Soviet citizen to further develop his productive potentials, his creative gifts, his talents for leadership—to become the communist man in the communist society.



Thousands of young people volunteered to go to Siberia and Kazakhstan to help cultivate virgin land. Millions of bushels of grain have been added to the harvest as a result of the 90 million acres of land they plowed up.

THE SUCCESSFUL LAUNCHING OF THREE SPUTNIKS AND THE ROCKET NOW CIRCLING THE SUN WAS THE HIGH POINT OF SOVIET SCIENTIFIC AND TECHNICAL ACHIEVEMENT.





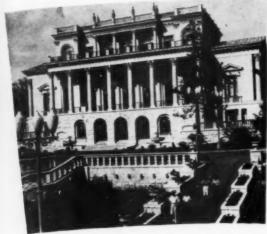
Soviet medicine is concerned with more than healing the sick; its large emphasis is on building up people so they stay healthy. The more than 3,000 health and vacation resorts that accommodate 5.5 million people annually go far to meet that objective.

The Soviet Union with its diversified geography and climate is rich in natural health building resources. There are spas and health centers of all kinds, most of them open the year round, in climatic regions as varied as the Arctic, subtropical Caucasus, and the dry desert country of Turkmenia.

# Resort Towns

There are whole towns and cities whose major industry, if one may put it that way, is vacationing. Kislovodsk, in the foothills of the Northern Caucasus, is a first-class resort

# EHEALTH RESORTS





# MORE PEOPLE





By Leonid Goldfail Health Resort and Physical Therapy Institute

city with 40 palatial sanatoriums—a city of flowers and parks, baths and solariums, openair theaters and concert halls.

Before the Soviet period, Kislovodsk had a few hotels which catered to the wealthy and privileged. Now many thousands of people suffering from heart diseases, hypertension and asthma are accommodated annually at Kislovodsk's sanatoriums that have a staff of 450 physicians and 2,600 nurses.

Sochi, famous health resort on the Caucasian coast of the Black Sea, near the Matsesta sulphur springs, has been reconstructed almost from the ground up. Forty years ago it was a backwater village with unpaved streets. Today it is the finest resort city on the Black Sea coast, known for its luxuriant subtropical beauty and its bracing sea air. It has 50 sanatoriums and other health and curative facilities.

Sunny Crimea now has 300 health and vacation resorts. Many of these were mansions and palaces once owned by the czar and by titled dignitaries and financial magnates. These have all been converted into resorts for the working people. Many new ones have been built just for vacationing and also for the treatment of sufferers from lung and bone tuberculosis, rheumatism and nerve disorders.

## From the Ukraine to the Pacific

The Georgian resort towns in the Caucasian mountains have also long been popular for rest cures. Borzhomi's medicinal baths have done wonders for stomach patients and Tskhaltubo's hot nitric-radon springs for people with joint, nerve and cardiovascular disorders.

Spurred by the seven-year plan, the coun-

try's network of vacation and health resorts is now being greatly expanded everywhere, from the Ukraine and the Baltic Coast to the Far East and the shores of the Pacific.

In the picturesque foothills of the Carpathian Mountains, for example, is the Truskavets resort, famous for its mineral springs used in the treatment of kidney trouble and gastro-intestinal diseases. New medical buildings are now being built there.

The resorts on the Baltic Coast are being enlarged. Fifty new sanatoriums were recently built on the seaside near Riga, a region whose mild climate and fragrant pine forests are ideal for the treatment of cardiovascular and nerve ailments. At Kemery, some 50 miles from Riga and not far from the sea, new medical mineral springs were found and a sanatorium specializing in gastric disorders is now being constructed.

THE CRIMEA, WITH ITS AZURE SKY AND BEAUTIFUL COAST, IS THE SETTING FOR 300 RESORTS.



A HEALTH RESORT FOR WORKERS IN THE BUILDING TRADES IN ZHIGULI ON THE VOLGA RIVER.

# MORE HEALTH RESORTS FOR MORE PEOPLE

Discovery of new mineral springs in the Urals and elsewhere in the country has stimulated resort construction. The recently built Ust-Kachka balneological resort is situated on the high banks of the Kama River in the Urals surrounded by beautiful woods and lakes. It is popular for its very salutary hydrogensulfide and iodobromide springs.

The Lake Moltayevo resort uses the curative muds of the Urals for the treatment of rheumatism and nerve disorders. The mineral waters of neighboring Nizhniye Sergi are beneficial in the treatment of stomach ailments and the radon-saturated water of the Kisegach resort for diseases of the joints and nerves.

Siberia has many deservedly famous health centers. Abalakh in Yakutia, Eastern Siberia, is widely known for its curative muds and is always full-up. Krasnoyarsk is another spot with recently discovered mineral springs and a new resort for gastric disorders, the Uchum.

The Talaya balneological health center on the banks of the Kolyma River serves many people who live in the industrial and farm centers that have grown up in the extreme northeastern part of the country. A dozen miles from Vladivostok in the Far East is the Sadgorod curative mud center. Near the Pacific Coast, in the Sikhote-Alin Mountains, is the year-round Vangou center whose siliceous waters are beneficial in the treatment of rheumatism and skin diseases.

These vacation and health resorts are owned by the citizens of the Soviet Union, and services and facilities are available to everyone. Guaranteed to every citizen by the Soviet Constitution is not alone a paid annual vacation and free medical service but the facilities

THE BRACING BALTIC SEA AIR AND WHITE SAND BEACHES BRING THOUSANDS OF PEOPLE YEAR AFTER YEAR TO THE MANY HOLIDAY CENTERS AND REST HOMES NEAR RIGA.



through which these constitutional rights may be exercised.

### Who Are the Patients?

Take the Ordzhonikidze sanatorium of Kislovodsk as illustration. Last year it took care of 6,567 people. By occupation they were distributed as follows: 3,980 were industrial and office workers; 2,086 were people in various professions; 333 were pensioners, and 168 were non-working dependents.

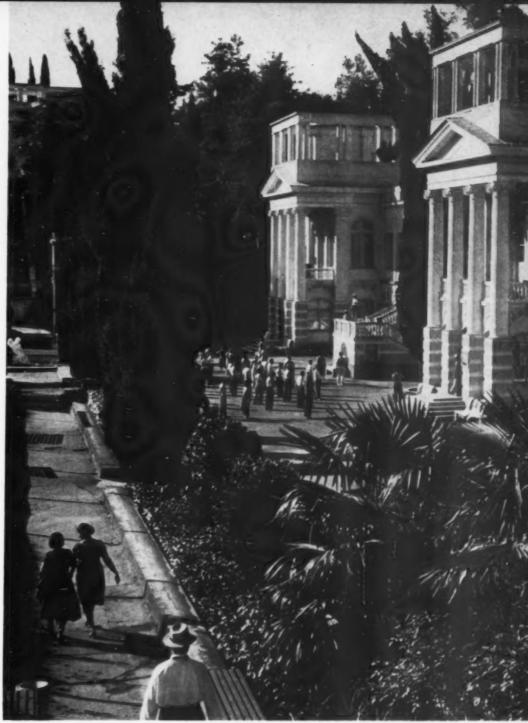
These figures more or less repeat themselves for all vacation and health resorts. Foreign visitors invariably comment on the fact that vacationers and patients at Soviet holiday and health centers are ordinary working people. The comment of Professor Marchella Boldrini of Rome University in the guest book of the Ordzhonikidze sanatorium is typical of many. The Italian visitor wrote that the sanatorium was "an honor to the country that built it" and could not fail to "evoke genuine admiration from any foreigner."

The cost of treatment for a 24-28 day period comes to 960-1,300 rubles, depending upon the type of sanatorium. Climatic resorts are the cheapest, while mineral spring and curative mud sanatoriums which give treatments that require special facilities and staff are more expensive.

In both cases, however, workers pay as a rule only 30 per cent of the cost. the remainder is paid out of the annual government appropriations for social welfare. In the case of lung tuberculosis, treatment is entirely free, with the government defraying all costs.

This is true also for children's health resorts. The first children's sanatorium, Artek. was set up in the Crimea in 1925. Now it takes care of 1,200 children at a time. Similar resorts for children have since been built in many other parts of the country known for their health building qualities.

Patients are recommended for treatment at one or another health resort by physicians at hospitals, clinics and dispensaries. Treatment includes prescribed therapy for the ailment, curative physical culture, dietetic feeding and rest. Balneological and curative



THE COUNTRY'S 3,000 HEALTH AND VACATION RESORTS ACCOMMODATE WORKING PEOPLE THE YEAR AROUND

No weather problem for these water-loving vacationers with this glass-enclosed swimming pool.



The radioactive baths of the Narzan Sanatorium are prescribed for joint and nerve ailments.



Beautiful Matsesta is world-famous for its therapeutic sulphur hydrogen springs.



CORRECTIVE EXERCISE IS PRESCRIBED AS PART OF THE COURSE OF TREATMENT FOR MANY AILMENTS

THE QUARTZ RAY TREATMENT IS CAREFULLY TIMED FOR EACH OF THE PATIENTS BY THE ATTENDANT.

Nothing like a speedy run in a motorboat to tune up vacation appetites for a dinner.



Miner Nikolai Fedotov and his wife make a picture record of their rest home stay.



MORE HEALTH
RESORTS FOR
MORE PEOPLE

mud treatment is given by the general health resorts. For such specific ailments as tubercular, neurologic, cardiac and other diseases there are specialized sanatoriums. The physisians in attendance are specialists in the most advanced health resort methods of treatment.

### Therapy and Relaxation

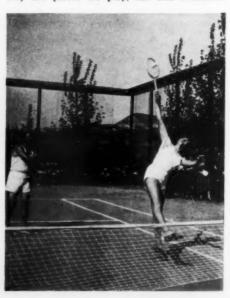
Sanatoriums are a good deal more than medical institutions in the usual sense of the word. They are places for relaxation and entertainment besides, with well equipped libraries, movie theaters, concert halls, tennis courts, ball fields and the usual equipment of holiday resorts.

Aside from physicians, the efforts of hydrogeologists, climatologists, engineers, architects, landscape artists and specialists in a dozen other areas are directed toward the aim of getting the most out of these health centers.

As early as 1921, the Central Health Resort Institute was set up in Moscow. Its work has been supplemented since by 13 additional research institutes. Among them are the Balneological Institute in the Northern Caucasus, the Sechenov Physical Methods Treatment Institute in Crimea and the Ukrainian Health Resort Institute at Odessa.

These research institutes seek out the best climatic and geographic settings, develop methods of treatment and work out the basic requirements for planning, building and running these health centers so they can best serve the patient.

Sanatoriums are not only medical institutions, they are places for play, fun and relaxation.





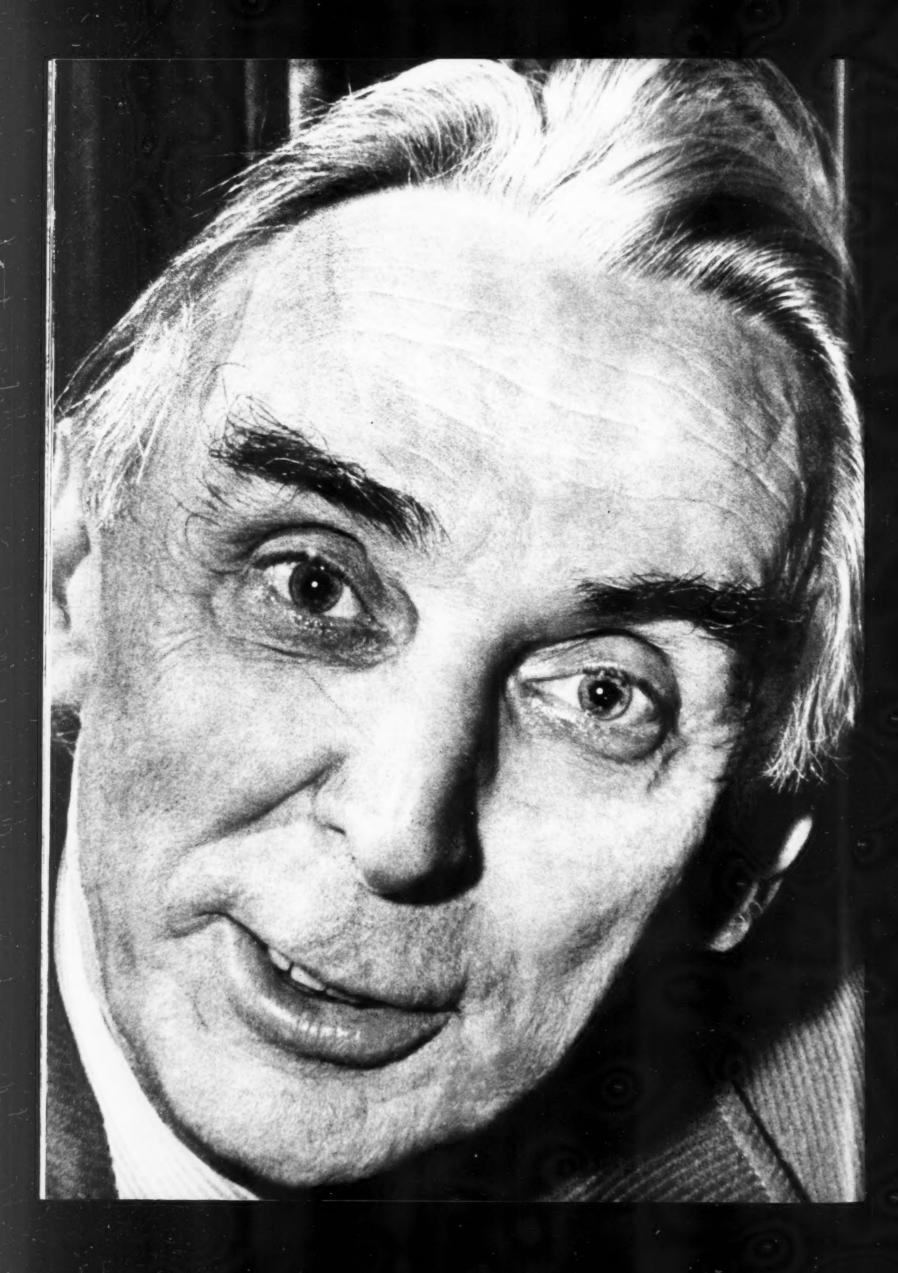
HEALTH RESORTS FOR CHILDREN HAVE BEEN SET UP IN THE MOST PICTURESQUE PARTS AND IN CLIMATIC REGIONS RANGING FROM ARCTIC TO SUBTROPICAL.

Dressed for the day's first activity—a morning dip. The camp program is planned by physical culture experts to build healthy bodies.



Artek, the first of many children's sanatoriums, was set up in 1925 in the Crimea. Its 1,200 children come from every part of the country.









# KONSTANTIN FEDIN

# SOVIET NOVELIST

By Bertha Brainina, Critic

A WRITER'S works do not always give you the picture of the man himself, but this is not the case with Konstantin Fedin's books, which are very much the man. He is exactly the kind of human being you would expect him to be from a reading of his novels.

Konstantin Alexandrovich Fedin was born in the old Russian town of Saratov in 1892. From early youth he rebelled against the petty bourgeois life he saw around him. He ran away from home while still in his teens and went to Moscow with the hope of becoming an artist. His father went after him and brought the prodigal son home.

He was placed in a commercial school in Kozlov. After graduating he entered the Moscow Institute of Commerce where he studied economics. In the spring of 1914 he traveled to Nuremberg to improve his German. When the First World War broke out he was interned in Zittau and there he remained until the treaty of Brest was signed.

During these years, Fedin says he "observed prewar Europe holding its breath with foreboding but still blustering and making merry; and postwar Europe, worn out by four years of nightmare and ready for revolution."

Fedin returned to Russia in the fall of 1918.

a Russia liberated by the October Socialist Revolution. He worked in Moscow, in the People's Commissariat of Education and then. a while later, in 1919, moved to Syzran on the Volga where he edited the newspaper Syzran Communar and with the help of local people founded the literary journal Otkliki (Respanse)

That fall, at the height of the offensive launched by Yudenich and his Whiteguard forces, Fedin went to the front as correspondent for the newspaper Boyevaya Pravda (Militant Truth). He remained at the front until early 1921. The experience gave him the background material for his literary efforts—short stories, theater, film and book criticism and topical articles for the Petrograd Pravda.

# A Search for Realism

It was pride in his country and sympathy for its oppressed that moved Fedin to the revolutionary side, but he carried along with him the remnants of petty-bourgeois attitudes. romantic, individualistic and at variance with socialist thinking. That was perhaps a motivating reason for his joining a group of young writers who styled themselves the "Serapion Brothers," after a novel of that name by Ernst Hoffman, nineteenth century author of romances.

The "Serapions" preached revolt against

the great realist tradition of nineteenth century Russian literature, against the tradition of Tolstoy, Chekhov and Dostoyevsky. Theirs was an "art for art's sake" literary school which judged a book not in terms of its relevance to life but in terms of "inner laws" supposedly independent of social reality.

Fedin's Wasteland, published in 1923, set largely in the prerevolutionary period, mirrors the struggle which he was waging with himself during this period between realism and decadence.

Fedin later spoke of his temporary abandonment of realism as his period of "literary measles." "It is easy," he said, "to follow the course of the illness in my first book with its fever of imagery, rhythmic chills and fairytale delirium."

It was at this time of sharp inner conflict when Fedin was searching "to understand everything" that he began his correspondence with Maxim Gorky. For Fedin, Gorky was not only a great writer but a man whose life was inseparably tied to the Revolution.

He wrote his first letter to Gorky, he says. "in a fever of hope. I searched for sonorous. ornate words . . . and proudly declared that I did not seek to be healed, nor did I require a doctor. But the meaning of the letter was very simple. I had to know where, in what direction, and how, I should find myself."

This was the beginning of a friendship which had a decisive influence in maturing the young writer, both as thinker and craftsman. "Gorky's principles," wrote Fedin. "so helpful a moral and aesthetic support in the early years of my life, have influenced me significantly ever since."

Gorky offered him sympathy, understanding and encouragement. Their meetings always gave Fedin an extraordinary sense of exhilaration, as though out of the window of Gorky's studio overlooking Kronverk Street the older man was showing him a bright new world that he could help create.

The novel Cities and Years appeared in 1924. It was one of the earliest Soviet novels to deal with the intellectual and the Revolution, but it still moves the reader today. The book has the quality of a harsh, austere symphony, the music, explosive and dissonant, of the old Russia smashing down to ruin and of the rising new Russia of the Revolution.

The many-faceted novel centers on Andrei Startsov, the intellectual altogether divorced from life and oppressed by his own vacillation, by the gulf between his words and his actions. Reared on the sterile abstractions of philosophy, his "mind is out of harmony with his heart." His heart urges that he take his stand with the people and the Revolution;

his will is paralyzed by the doubt and hesitation fostered by a spurious and delusive individualism.

Three years after Cities and Years Fedin published another novel, The Brothers. The protagonist is Nikita Karev, a musician of talent searching for a musical language that will be comprehensible to the people and convey their moods and longings. But when he shuts himself off from them in a world of his own building, a "speck of a world," his contact is broken and he can write no music at all. It is with the help of those who are building the new society that he gropes his difficult way back to the world of people.

# Europe and the War

In 1928 Fedin made a tour of Norway, Holland, Denmark and Germany. There he saw a West "making merry, with its eyes closed to the world's misery." He visited Europe again during the economic depression of the late twenties and early thirties. He observed the trend of political affairs in Germany, before Hitler came to power, in fascist Italy, and in Paris when the city, mustered in defense against the "Croix de Feu," marched under the banners of the Popular Front.

"That trip," he wrote, "gave me the material for two novels. The Abduction of Europe (1933-1935) and Arktur Sanatorium. In the first I wanted to show Europe contending against the new society that was being irresistably built in the Soviet Union. In the second I tried to give a picture of the depressed Western life of the period."

Romain Rolland, whom he met through Gorky, gave him background material on European life in the early thirties. Their first meeting took place at Villeneuve, a Swiss town, in May 1932, at Rolland's invitation. Fedin was then being treated at a tuberculosis sanatorium in nearby Davos. They continued to correspond afterward.

He remembers Rolland with affection. He admires him as a great writer and great Frenchman who labored with all forward-looking people for justice, true democracy and world peace. Fedin has moved away from the Western themes he used in Abduction of Europe and Arktur Sanatorium but he eventually hopes to return to them with a novel built around a character in the spiritual image of this great humanist writer.

The war with all its heartbreak and tragedy was a rigorous test of character, one which not everyone came through. Fedin set an example of fortitude and self-denying concern for others at Chistopol, to which the Moscow writers' organization had been evacuated

# KONSTANTIN FEDIN

when World War II began. As head of the organization, he gave innumerable writers the moral support and the more tangible help which carried them through the trials of the

"The Second World War," writes Fedin, "forced the Russian to reevaluate Western Europe. My fifth trip abroad, in 1945-46, to observe the Nuremberg trials of the German war criminals, was such a reevaluation. At Nuremberg I found intact, amidst a heap of rubble, the vaulted door through which I fled in 1914 when I tried to get out of Germany. It was there that my understanding of Europe originated. There I now contemplated the fruits of European wisdom. Since my youth I had listened to cries about the salvation of Europe and convinced myself that Europe was being saved with more and more vigor. For seven weeks I looked on at the Nuremberg waxworks of these latest and most violent saviours of Europe. What the international tribunal said about those ghosts of the underworld sitting in the dock stirred a hope that perhaps someday Europe would really be saved."

The march of events both in the Soviet

Union and abroad during the war helped Fedin to find answers to many problems that had troubled him up to then-the role of the intellectual, the function of art, the essential character of the new type of man growing out of a socialist environment. These and related questions he treated most fully in the novels he wrote in the late forties-Early Joys and No Ordinary Summer.

# The Communist as Hero

The setting of Early Joys is Saratov, a provincial town of Old Russia, a town of "printed calico, retired generals and flour kings." The time is 1910. The novel depicts the unsettled situation which followed on the defeat of the first Russian revolution of 1905, when behind the scenes of rampant reaction, a new revolution was breeding, when the working people were girding for new battles, when everything was "waiting for a sharp and life-saving change."

In No Ordinary Summer we meet the same characters ten years later, in 1919, shortly after the Socialist Revolution. The setting is again in Saratov.

The major figure in both novels is Kirill Izvekov, a Communist, a soldier of the Revolution, devoted to his country and the new social order it is building. Fedin develops his character in the round-his love for the young actress Annochka, his relation to friends, his reaction to books and to nature. He is an integrated character, strong and active, with subtle and complex emotional motivations. Izvekov stands in sharp contrast to Pastukhov, a writer, and Tsvetukhin, a ramous actor, who stay aloof from the crucial historical events in which Fedin involves his characters. Kirill is a refutation of Pastukhov's constantly enunciated rationalization that the Revolution aims at making everyone the same. It is only the Revolution, Fedin is saying, that makes possible a richly diverse flowering of human personality.

Kirill Izvekov, interestingly enough, is the first Fedin hero to be lucky in love. He brings to that venerable emotion, so much dealt with in the older Russian literature, a new strength and passion. It is as though Fedin were testing his Communist character in an emotional area in which only the old romantic hero, with love as his major preoccupation, could triumph.

## Work in Progress

Fedin is now working on a new novel which will complete the trilogy of which Early Joys and No Ordinary Summer are the first two parts. The third part is to be called The Campfire, with a central Russian setting in the second half of 1941.

"What I am working toward," says Fedin. "is a picture of the period. I would like the period to have at least as much emphasis as the characters, perhaps more. I'm using this point of approach even more in the present work than I did in the two previous novels. In other words, I look upon my trilogy as one big historical novel."

This appraisal of history woven into story and character is very typical of Fedin's work. He uses the method in No Ordinary Summer. where a chronicle of the Civil War forms an inseparable part of the narrative. The events on the fields of battle are presented in separate scenes that greatly enlarge the novel's scope and meaning.

To order a vast amount of complex history and a large group of characters into an integrated whole is a literary task of no small dimension. Tribute to Fedin's mastery of language and understanding of character is the success he achieves in the first two books of the trilogy in making each detail-a gesture, a phrase, a description—a necessary element in the story as it unfolds.

Fedin spends most of his time at his country home in Peredelkino, near Moscow. He works nine hours a day at his writing-from ten in the morning until three, and again from six to ten at night. On Sundays he works only in the morning and spends the afternoon with his many visitors. His leisure time he divides between his orchard and flower garden and his two grandchildren.

TWO GRANDCHILDREN, A FRUIT ORCHARD AND FLOWER GARDEN VIE FOR THE WRITER'S LEISURE TIME.





# NO ORDINARY SUMMER

By Konstantin Fedin

Konstantin Fedin is an esteemed Soviet novelist. This excerpt is from his novel No Ordinary Summer, the second part of a trilogy on which he has been working for fifteen years. The trilogy when completed will picture the past half-century of Russian history. No Ordinary Summer covers the period of the Civil War of 1918-1922.

The central characters are Kirill Izvekov, a Bolshevik who has come back to his native Saratov after many years of exile, and Vasili Dibich, a former officer of the czarist army.

The horrors of the First World War and the sufferings of the people which Dibich witnesses on his return from the front bring him to the camp of the Revolution. Here we meet Dibich at the crucial moment when he decides to join the Red Army.

THE SUMMER began ominously. Natives of Saratov, who were only too well acquainted with the caprices of this fruitful region, recognized that the persistent winds presaged drought. Since the beginning of spring there had been only one rain, which ran lightly over the surface without soaking in. The winds quickly dried up the moisture and a hard crust formed over the earth. Soon the green hillsides turned gray, a sight which became more oppressive with every hour. The waters of the Volga fell, the sandbanks widened and seemed to swell above the river.

Kirill glanced up at the sky as he left the house one Sunday morning. It was white, tinged with the faintest blue, and quivering at the horizon. Mirages appeared on the steppes beyond the Volga when the heat of the day was at its height. Suddenly one would see a pale green forest of poplars rising above the riverbank, separated from the earth by a band

of shimmering light. There was no telling whether the forest grew on the riverbank or rose up directly out of the water. The light kept shifting deceptively and the cool verdure lured the eyes.

The wind brought to Kirill's nostrils the faint smell of decaying fish. With every day the odor was becoming stronger. When the wind blew from the Volga, the entire city, to the farthest house on the hills, was saturated with the smell.

Rumors spread that the herring, swimming north, were jumping out of the water from the heat and shallowness and decaying on the sands. The fish appeared in unprecedented abundance, the front of the school streaming as far north as Khvalynsk, Syzran and the Samara Bend, while from down river new schools kept arriving, the fish floundering with exhaustion, dropping behind, dying on the way. The fisheries of the Lower Volga made no attempt to stop the migration, letting the vast

# NO ORDINARY SUMMER

throngs swim by to their own destruction. The Lower Volga had other things than fish to think of at this time.

With the advent of summer the White Army of the South Russian Forces began the most sweeping drive against the Red Army which the Civil War in the South had yet known. The volunteer forces of Denikin were moving along the roads to Kharkov. The command assigned a separate White corps to take the Crimea. Special volunteer detachments were to cut off the exit from the Crimean Peninsula. Further east an army of Don Cossacks was advancing northward against Donets groups of revolutionary forces. Wrangel was leading his Caucasian army over the Salsk steppes to Tsaritsyn. The forces of the North Caucasus had detailed units for the taking of Astrakhan.

These six lines of advance fanned out over the entire South like a hand of cards held in the fist of Denikin's staff headquarters at Ekaterinodar. The opening of the drive was well coordinated, and never thereafter did the coalition of czarist generals, landlords, bourgeoisie and Cossacks feel such a unifying surge of joy and hope as at the beginning of that summer's bloody campaign.

The Red Army resisted Wrangel's attempt to take Tsaritsyn, and drove back the forces of the Caucasian army in an unexpected counterattack. In addition to the fact that Astrakhan sent reinforcements to Tsaritsyn, the city itself fought against the North Caucasus detachment of Terek Cossacks who were attacking the Volga delta in two columns, one crossing the steppes from Holy Cross, the other skirting the shore of the Caspian Sea from Kislyar. The roar of battle grew ever louder on the sun-blanched expanses of the Lower Volga. The quiet of peaceful activities became a thing of the past, and even the Volga fisher-

men ceased plying a trade that went back to time immemorial.

Kirill was ever conscious of the events of the war, but that morning the sultry wind from the Volga brought him an almost physical sense of the vast terrain where the struggle was taking place. He went over in his mind all the news from the front that had been reported the past few days. Although the work he was doing undoubtedly contributed to the struggle, he was oppressed by the feeling that he was isolated from events which were deciding the future. At present this feeling was particularly strong.

But the wind brought still another emotion: Kirill was suddenly overwhelmed by a desire to go down to the Volga, to find some spot on an island, closer to that pungent odor of fish and water, where he could stretch out on the hot sand, give himself up to the harsh caress of the heat, listen to the shallow splashing of the waves, and feel the prickle of wind-blown sand on his body.

But he had left his house with quite another thing in mind. He had decided to visit Dibich in the convalescent home. This was not to be postponed, for it was uncertain when he might have another free moment for this purpose, besides which Dibich had sent him a note saying that he wanted to speak with him.

Kirill had arranged to have Dibich placed in one of the best convalescent army hospitals. In the four weeks of his stay there, Vasili Danilovich had so improved that he did not recognize himself in the mirror. His eyes had cleared and the lids were no longer inflamed. His shaved face had turned more genial, younger, finer-featured. His voice rang clear and the dimple in his chin winked jovially when he laughed.

True, there were few occasions for laughter. Dibich lay in a small ward which held only four beds. The occupants of two of them kept changing constantly. The patient in the third was a former officer now attached to regimental staff headquarters, who had been in the convalescent home almost as long as Dibich himself. He was a short man with purple pouches under his eyes, high coloring, and soft, restless hands. He was prone to frequent bilious attacks, but between times he was very lively and eager to talk. He was constantly engaging Dibich in conversation—a born arguer.

Dibich had learned much during his stay in the convalescent home. Everyone who came there had his own store of knowledge, gathered during the Revolution; and the knowledge of each individual merged to form the general knowledge of those who had lived through this period of trials and suffering. These people—orderlies, nurses, doctors, barbers, attendants, and men from the front—told Dibich things he had never known before, and little by little he filled in the blank spaces

of the years he had spent as a war prisoner. Dibich did more listening than speaking. By slowly absorbing the electric charge of other people's thoughts (now vague, now clear; now cold, now impassioned; now resentful, now approving) he realized that each individual had paid such a high price for his point of view that it was as dear to him as though he had acquired it through a second birth.

At the end of the fourth week a new patient was brought into the ward—a steamer mechanic from Archangel, a man just over thirty, freckle-faced, with prominent cheekbones. Everything about him gave the impression of solidity, from the ponderous gestures which he used sparingly, to his broad northern drawl. He had been injured when his unbelted blouse had caught in the cogs of a steam winch and had gotten a blow that left him unconscious. They kept him in an emergency hospital for two days and then sent him here. He said he had no mind to be landlubbering it for long. It was chance that had brought him to the Volga. Running away from the Whites in Archangel he had landed in Zaton, where the ships of the Volga War Fleet were repaired.

The fourth cot was vacant at this time so that the three were alone in the ward. The staff officer kept pumping the Northerner, asking who he was and what he was until he got him to talk.

"Have you ever taken the run to Murmansk?"

"Sure," drawled the sailor. "I was only a kid of ten when I first scrambled aboard a steamer, and there I've been ever since. When I was fifteen I was already stoking it. What seas haven't I crossed! What countries haven't I lived in!"

"Learn anything from living abroad?" asked the staff officer.

"Plenty. But I only just realized it. It all came clear on the last run from Murmansk to Archangel."

"How could you learn about life abroad while sailing Russian waters?"

"Easy enough. Russian boats in the North are flying the British flag these days."

"Well, what of it?"

"Here's what. The English spent the whole trip in the wardroom guzzling whiskey and smoking cigars, while our fellows—muzhiks and officers alike—were shut up in the hold along with some stinking fish from the moment we left Murmansk until we arrived in Archangel."

The staff officer waved his hand:

"Of course. The trouble is that some people would gladly spend a year in the hold along with some stinking fish if it meant getting rid of the Bolsheviks."

Dibich flushed and struggled to take himself in hand before saying: "I'd be willing to sit in the hold as long as you like in order to rip the foreign flags off our ships."

"To be sure," sighed the staff officer. "The trouble is that the European countries will never agree to recognize the Soviets. According to them, the only way to come to power is through succession."

"They'll recognize any power that will pay them the czar's debts, those European countries of yours," said Dibich.

"Why mine, I'd like to know? More yours than mine I'd say, considering you spent so much time in Europe."

Dibich said nothing. The sailor kept throwing short glances at the two of them.

"I got a good look at those as would rather sit in the hold than join up with the Bolsheviks," he drawled. "A year ago the White Guards came out to give the English volunteers a big welcome on the banks of the Dvina. The troops stood snapped to attention from one end of Archangel to the other. Chaikovsky's whole damn government came out on the bridge to greet them! 'Make yourselves to home, friends, make yourselves right to home!'"

Apparently the argument had ended in a draw. But on the following day Dibich wrote Kirill Izvekov a short note and waited impatiently for an answer.

Kirill entered the ward with his quick step, stopped in the middle of the room, glanced at the occupants of all the beds, and raised his hand to scratch the back of his head. The man who was smiling a greeting from the cot near the window was not at all the Dibich whom Kirill had once brought out of a faint with valerian drops. He looked more like Dibich, the battalion commander who had given private Lomov a telling off in the unfinished dugout. But the present Dibich also differed from the battalion commander not only because he was still much thinner, but because of a certain relaxation which gave his face almost a carefree expression.

"They sure have given you a good overhauling! You look ready to get back in the ranks!"

4

There was no restraint in Izvekov's voice, and he did not glance warily at the other patients as visitors usually do in hospital wards.

"I myself was thinking it was about time for me to be getting back in the ranks," said Dibich with a smile.

"Oho! But aren't you rushing a bit? Are you really all right? It isn't so easy to get over what you've been through."

"I've been doing gymnastics for a week already. Yesterday I lifted up that chair by the leg."

"The front leg or the back one?"

"The back one."

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n

"Well, when you can lift it by the front one, it'll be time for you to leave the convalescent home."

He laughed out loud. The youthful fooling drew them together, and for the first time they felt the same age. They began to compare notes about schools they had gone to, recalled playing leapfrog during recess and other games with belt buckles and locked hands to measure strength.

Suddenly Kirill cried:

"Come on, let's try it now!"

He sat down on the bed opposite Dibich.

They locked their right hands and braced elbows awkwardly on the mattress. Dibich put up strong resistance, his face becoming red with the effort, but gradually he gave way, his arm finally dropping to the mattress.

"I told you it was too soon to be leaving the place," said Kirill jovially, turning to the other patients. "Who else wants to try?"

"Out for easy laurels in the convalescent home?" laughed the staff officer.

"I'm not so sure they'll be easy. Here, you come over and try," he said to the sailor from Archangel.

The sailor waited a moment to answer, as though he were thinking it over.

"What if I take on the two of you at once?" he drawled hesitantly. "Come on, Comrade Dibich, we'll show him!"

Kirill and Dibich joined hands and planted their elbows on the bed table beside the sailor's cot. The sailor took his place opposite them, grabbed both hands in his huge, warm fist, and bent them down to the table as easily as though he were moving a lever.

Kirill noticed a heart pierced by an arrow tatooed on the man's chest.

"Sailor?" he asked briefly. "What's your name?"

"Strashnov," answered the sailor with a nod.

Once more Kirill sat down beside Dibich's bed and studied him with a glance full of inexplicable satisfaction.

"Why don't you ask me which side I want to join?" asked Dibich.

"Why ask? I can tell by looking at you."

Dibich grinned.

"Smart, aren't you?"

"Is it definite?"

"Ouite."

"Good. As soon as they let you out of here, come right to me. I'll give you a recommendation. We're going to form some units. You can help us."

"I was thinking maybe I'd have a chance to pay a visit to my mother first. Just a flying one."

"As you like," said Kirill.

"Will you fix me up with a boat passage?"

"Of course."

For the first time they both became silent.

"Do they let you see the newspapers?" asked Kirill.

"Yes. What's happening at the front?"

"It's in the papers. We've taken Ufa. Now we'll start advancing beyond the Urals."

"And in the South?"

"Things are worse in the South."

"Looks like Denikin's making a decisive attack."

Izvekov glanced at the neighboring cot. The staff officer was watching him attentively.

"We Bolsheviks are the ones who will do the deciding," said Kirill in a loud voice, waiting to see if there would be a comeback.

The room became even quieter.

"I say that because the people are backing us. Do you agree?"

"Yes," said Dibich.

"There's no question about it. Have you noticed one thing? The people realize that in the essentials we are doing just what they want. That is not a mere coincidence. Our aims serve the historical interests of

Russia, and at decisive moments in the life of the people our aims and these interests become one. Take this, for instance: the people wanted to get out of the war, they overthrew the landlords and now they are driving out the interventionists. In every case we supported them, isn't that so?"

Kirill did not take his eyes off Dibich's neighbor. He noticed that the staff officer was watching him with that narrowed gaze which unconvinced listeners always train on a speaker. And suddenly Kirill felt an upsurge of that long unexperienced joy of being a professional propagandist, an occupation to which he had devoted himself for many years, both under his own name and under the name of Lomov. As he spoke he was glad that Dibich agreed with him, but even gladder that he was irritating the officer. At the front they had called this "putting salt on somebody's tail."

At last he turned to him directly.

"It seems you are skeptical about what I say."



KIRILL IZVEKOV VISITS VASILI DIBICH, A WOUNDED FORMER CZARIST OFFICER

"I beg your pardon, but you mustn't forget that this is a convalescent home and I have a liver."

"Oh, yes. A serious complaint. . . . Well, then, Comrade Dibich, apparently you'll be going home for a visit, eh?" said Izvekov, getting up.

"I'll come see you as soon as they let me out of here."

"I'll be expecting you. But see you don't overdo it," he said, pointing to the chair. "And don't go casting any glances behind, or you'll be turned into a pillar of salt like Lot's wife," he laughed.

On his way out he stopped for a second beside the bed of Strashnov.

"Would you mind telling me who you are?" asked the sailor.

"I'm Secretary of the Soviet. Izvekov."

"Oh-h-h," said the sailor. "I've heard of you. Hm, of course!"

"Why of course?" smiled Kirill.

"Simply of course," repeated Strashnov, returning the smile and holding out his mighty hand.



Aram Khachaturyan (left) and Dmitri Kabalevsky are welcomed by settlers of the Altai's virgin lands with the traditional offering of bread and salt.



The composers visited several music schools in Siberia's newly developed areas. A group of miners are enrolled in this evening class in the Kuzbas.

# COMPOSERS on a MUSICAL TOUR of SIBERIA

By Dmitri Kabalevsky

A RAM KHACHATURYAN and I recently made a concert tour of Siberia—Novosibirsk and other cities, the mining towns of the Kuzbas and the rich farm regions of the Altai. It was a truly unforgettable experience.

How shall I put it into words? There are so many things we come across in day-to-day living that move us to joy or sorrow, that arouse new thoughts and feelings. When we try to put them down in black and white, they seem dull, even trivial. What we do most often then is to take the easy way out and talk about the exterior facts—the outside of things, people, places. The trouble is that this is not what we want to say, the outside is not what really matters. What I want to do is to give you something of the inside of our Siberian trip.

Khachaturyan and I have toured many cities where we gave performances of our works. During these concert tours we usually met local music teachers, students, performers, other composers. And, of course, we went sight-seeing and talked to many people.

But our concert tours heretofore generally took us to cities that had symphony orchestras of their own, where the musical taste of the public had been trained for decades and where there were many professional musicians as well as amateurs. Our Siberian tour did not follow the customary pattern and so we saw and experienced much that was new for us.

It took us to Novosibirsk, the mining towns of Yurga, Kemerovo, Leninsk-Kuznetsky, Prokopievsk and Stalinsk in the Kuzbas Region and to the towns of Pavlovsk and Barnaul in the Altai Territory. It was the first time that we toured not only with soloists—the violinists Rosa Fein and Victor Pickeisen in this case—but with a symphony orchestra, the Novosibirsk Philharmonic.

None of the towns in the Kuzbas or the Altai Territory have orchestras of their own, so that in these communities there are relatively few people who attend symphony concerts regularly. Our audiences were made up in the main of factory workers and collective farmers with a sprinkling of students from music schools.

Our programs, nevertheless, followed their usual pattern. We made no attempt to simplify or to trim them down to suit less cultivated audiences. Khachaturyan conducted his suites Masquerade and Gayane, his Memorial Ode to Lenin and his violin concerto. My program was made up of musical sketches from Romeo and Juliet, a violin concerto, the suite Comedians, and the overture from the music for the film Sisters.

### Music Schools and Coal Combines

There were all sorts of impressions we carried away with us from these places we were visiting for the first time. Near Novosibirsk we saw the great ice drifts on the Ob River, the immense reservoir and the almost completed hydropower station, a breath-taking construction project, it seemed to us. We were very pleased to learn that even while the construction gangs were living in temporary quarters, they had built a community cultural center with a music school for the younger children.

At Leninsk-Kuznetsky we were taken down to one of the coal pits and for several hours we walked through the mine workings 500 feet underground. There we watched a coal combine on the job—an amazing machine that has taken over the old hand drudgery.

In Kemerovo and Novosibirsk we heard concerts given by amateur music groups made up of workers. We went to performances at the Novosibirsk Opera House, the Kemerovo Musical Comedy Theater and the Stalinsk Drama Theater. We managed to hear two recitals by the wonderful Siberian Folk Chorus conducted by composer Vladimir

Levashov. And, of course, we took the time to visit music schools wherever we stayed. At the Novosibirsk Conservatory and the music schools in Barnaul, Yurga and other cities we saw much that was commendable.

We were especially impressed with the Prokopievsk school. It has two concert halls, one seating 300, the other 150, and 28 classrooms

Dmitri Kabalevsky in Pavlovsk, Soloists and orchestra toured with the composers.



in a fine modern building. Instruction in every one of the orchestral instruments is given to the 500 children enrolled. The school has five student orchestras—a symphony orchestra, a wind ensemble, a Russian folk instrument ensemble and two accordion ensembles that give more than 50 concerts during the academic year. Those we heard proved that the teaching was on a very high level. Besides classes for children, courses in music appreciation for adults are given at the school building and in five extension branches located in the residential neighborhood.

### The Asides of the Tour

No small part of the very gratifying recollections of our tour are the talks we had with all sorts of people. In Pavlovsk, Khachaturyan and I went for a stroll before one of the performances. A woman, well on in years, stopped and introduced herself, thanked us for coming to play in her city and asked us to tea at her home. Later we found that it was she who had embroidered the napkin on which we were presented with the traditional welcoming bread and salt after the concert.

Then there was the old miner in Stalinsk who came backstage after the performance to thank us for the first symphony concert he had ever heard. He had traveled a long distance to hear it, he told us.

A group of young music lovers attended our concert in Prokopievsk and rode with us the next day to Stalinsk when they learned we were to give Khachaturyan's violin concerto.

These are only a few of the asides of our

trip, so to speak, but they are recollections which sketch the tour out for us in a way that we are not likely to forget for a long time to come.

In all we gave some twenty concerts. Without exception, we found every one of them rewarding. And it was not simply the fact that our playing was appreciated—every artist is pleased at that—but because we had the very strong feeling that the people listening to us loved the music we were playing. To us every concert was repeated proof of the fact that our people are reaching to a high musical level, much higher than we musicians sometimes realize.

We were especially struck by this fact at two concerts we gave, one at a miners' club near Prokopievsk and the other in Pavlovsk, a farm center. Both concerts were attended by impressively large audiences and their response would have been enough to convince anyone that the fairly widespread notion that a musically untrained audience is not receptive to symphonic music is a much exaggerated belief.

After the concert in the miners' club, one of the young people in the audience, a miner—and, it turned out, an amateur musician—asked us a question about modern Western music. We answered in a rather general way, thinking that it was not necessary to talk musical detail to an audience without a music background. Our explanation was much too superficial, we found out, when such questions as these were thrown at us: "Please tell us in greater detail what the dominant trends are in modern Western music." "Do the composers use folk melodies and rhythms in their com-



500 children study music at the Prokopievsk school, which has 5 local branches.

positions?" "How does the public respond to modern music?"

In Stalinsk we were asked about the International Tchaikovsky Contest in Moscow at which the American pianist Van Cliburn and the Soviet violinist Valeri Klimov won first prizes. We were surprised and pleased by the great public interest in this musical event.

# Wonderfully Receptive Audiences

Khachaturyan and I have talked about our Siberian tour many times since we returned. Neither of us remembers ever playing before such wonderfully receptive audiences, with people so taken with music. And I am not talking in terms of packed houses and many encores. That is the more usual concert atmosphere. No, I am thinking of a rather special and very rare atmosphere which made this tour so memorable—a kind of mutual gratefulness, the audiences to us, we to these unforgettable audiences. This is something for a musician to treasure.

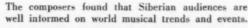
In Leninsk-Kuznetsky and Prokopievsk we were given miner's lamps as keepsakes, and in the virgin soil territories of the Altai we were presented with the traditional new-baked bread and salver of salt.

The miners told us, "May these lamps symbolically light your creative path as they light our work underground." And the farmers told us, "Your music helps us to grow big crops."

We tried to tell them how deeply grateful we were that they had shown us these great farms and mines and power stations they had built. We thanked them for the warmth, generosity and understanding with which they had applauded our concerts and for the valuable insights they had given us in the talks we had after the performances. They probably have no idea how important all this is going to be for our future work; how very much our music will be reflecting the impressions and influences of our Siberian tour.

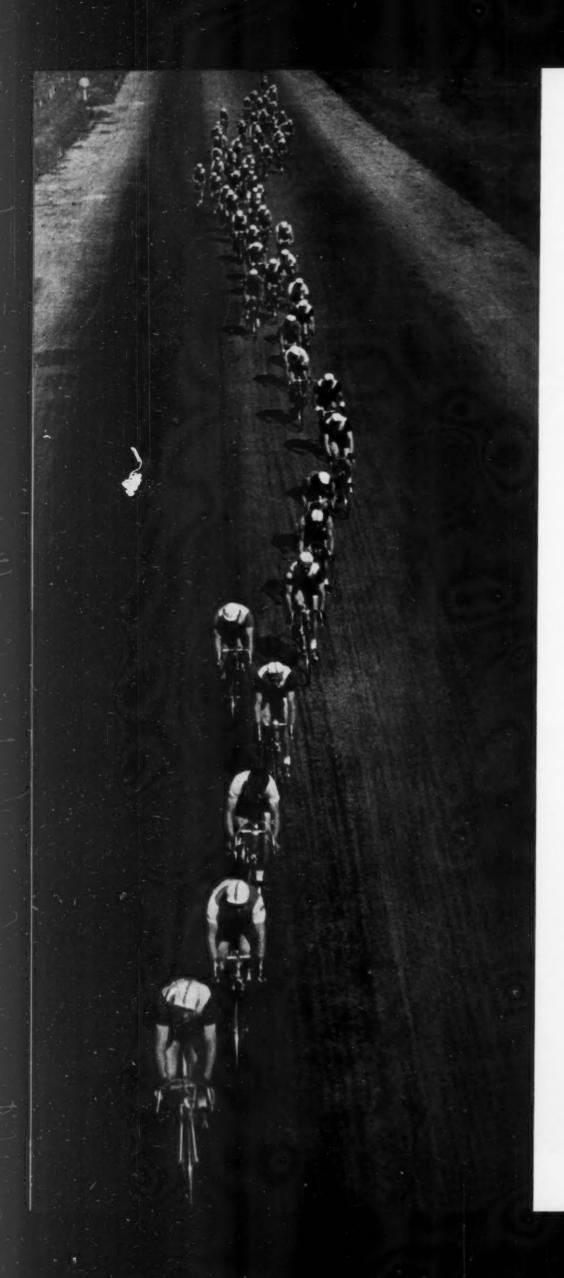
-From the magazine Musikalnaya Zhizn

Souvenir of the trip to remind the two guests of the miners' warm reception.









# CYCLING

CYCLING is a major sport in my country for young and old both, with thousands of fans joining the pedaling clan every year. There are now 850,000 of them, members in good and active standing of the cycling clubs.

As for contests, there are very few sports, with the exception of field and track, that match cycling for distances run and numbers of events. As many as 33 gold medals are fought for in Soviet championships.

There are three types of matches—track racing, road racing and cross-country runs. Each sets its own distances. Those on the track, for example, run from 200 meters to 100 kilometers.

The national title holder is Rostislav Vargashkin with a record of 200 meters in 11.3 seconds—only a tenth of a second short of the world mark held by Australia's Richard Plug.

In 1956 Gennadi Martynov set a global record in the 100-kilometer race, clocking 2 hours, 28 minutes, 31 seconds. A few months later, however, this record was broken by Italy's G. Zucchetti, who clipped 3 minutes, 2.4 seconds off the time.

The motor-paced track races are the spine chillers, with cyclists racing along behind motorcycles at speeds better than 45 miles an hour. Yuri Smirnov has held the USSR title in this event for four years now. But he and his pacemaker, Mikhail Zaitsev, have a lot of training ahead of them before they are likely to threaten the world champions. In the last international matches in Leipzig they only managed to place sixth.

A much better showing was made by our women racers in the world track racing championships run in Paris. Galina Yermolayeva won the 1958 world title in the 1,000 meters and Lyubov Kochetova finished first in the 3-kilometer pursuit race.

One-day and long-distance races are popular with Soviet cycle enthusiasts. Young cyclists usually begin with individual contests and work up to group and team events. A group run demands something more of a contestant than speed and stamina. It needs the kind of spirit that will sacrifice personal glory, if necessary, for team victory.

Our cyclists have done well in long-distance road races in international matches. Both in 1956 and in 1958 they placed first in the traditional Warsaw-Berlin-Prague Peace Race. In 1958, too, they won the Tour of Egypt.

Women road racers have also not done too badly. Tamara Novikova, national champion

# By Igor Ippolitov

USSR Cycling Champion, 1939-1951



LYUBOV KOCHETOVA, 1958 WINNER OF THE 3-KILOMETER PURSUIT RACE.

USSR FIRST, BELGIUM SECOND, IN GROUP CYCLING AT 1957 WORLD YOUTH GAMES.





CINDER TRACK RACING IS THE TAMEST OF THE THREE TYPES OF CYCLING CONTESTS.

CROSS-COUNTRY RACES ARE PLOTTED THROUGH A LOT OF ROUGH TERRAIN





Maria Lukshina, one of the country's top women racers, helps a fellow cycler with road trouble.

# CYCLING

a couple of times over, and her teammate, Maria Lukshina, finished second and third respectively in last year's matches. This year they are after the scalp of Jakobs of Luxembourg, who won the title.

Soviet cyclists are not overly pleased with their international showing. None of the men won a world championship—as yet. Training conditions present something of a special problem. The French and Italians, for instance, can train in the open even in the wintertime. But many of our roads are snow-covered as much as five months out of the year and racers train indoors.

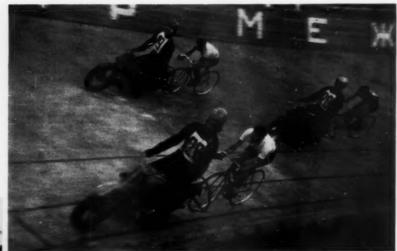
But snow or no snow, our cyclists have been training away like fury, and they may be offering very keen competition for the next world matches.



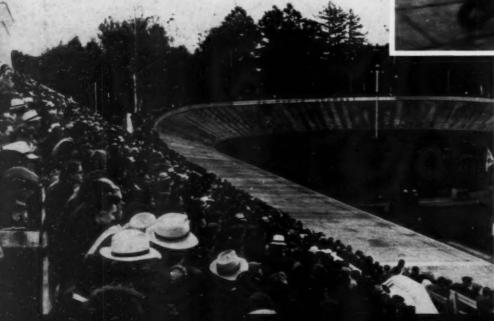
THE SOVIET TEAM CAME IN FIRST IN THE WARSAW-BERLIN-PRAGUE PEACE RACE IN BOTH 1956 AND 1958.



VETERAN CYCLISTS CELEBRATE THE SEVENTIETH ANNIVERSARY OF THEIR FAVORITE SPORT.



In the motor-paced track races, the cyclists do 45 mph and better. Below is the Tula track during the event.



Tandem racing is new in the country. Leonid Khmel and Anatoli Cherepovich are winners in the Moscow matches.



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