USSR

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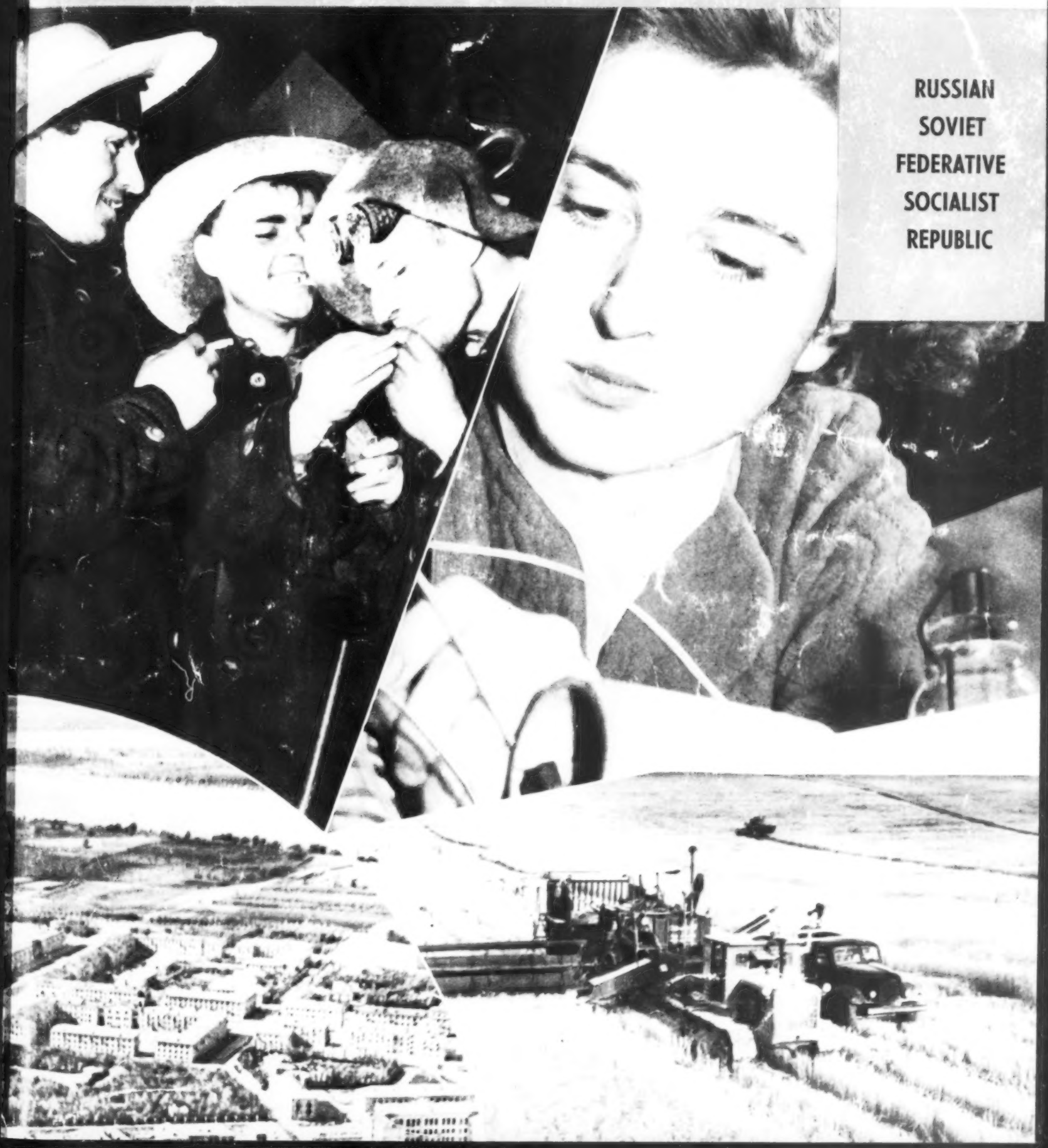
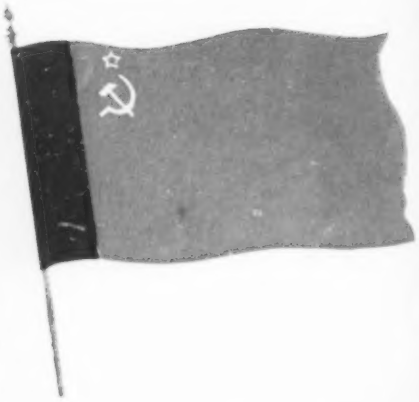
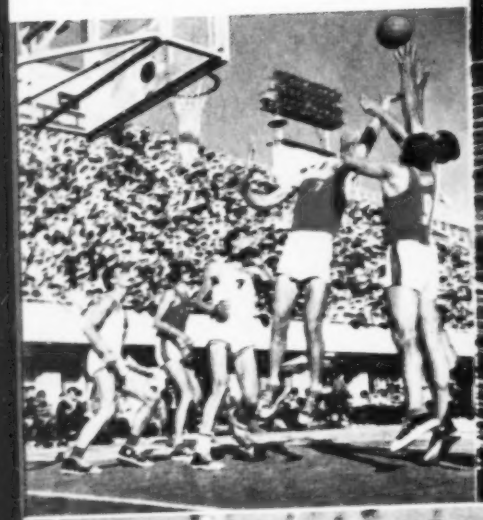


RUSSIAN SOVIET FEDERATIVE SOCIALIST REPUBLIC





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HERE IS A MAP of the Russian Soviet Federative Socialist Republic showing its national autonomies and major cities. The Republic, which most people know as Russia, is the largest of the 15 Soviet Socialist Republics which form the Union of Soviet Socialist Republics. Its territory takes up 6,590,950 of the USSR's total area of 8,647,172 square miles. Of the country's population of 209 million, Russia accounts for 117.5 million.

The RSFSR is not only a state of Russians, but a free federation of other peoples enjoying equal rights. Soviet socialist national autonomy exists in different forms, always corresponding to the level of development and the mode of life of the particular people and ensuring it the most rapid cultural and economic progress. Enjoying the status of sovereign socialist states are the Autonomous Soviet Socialist Republics (ASSR). Another form is the Autonomous National Region, which is independent with respect to local self-government, legal procedure and language.

As socialist statehood develops, one form of Soviet national autonomy changes into an-

THE RUSSIAN FEDERATION
NATIONAL AUTONOMIES AND TOWNS

other higher form. On the map you will find outlined in the middle of the European part of the RSFSR small areas numbered 2, 3 and 5: the Mari, Mordovian and Chuvash Autonomous Soviet Socialist Republics. Their territories range from 7,000 to 10,000 square miles, but they are relatively densely populated; the Mari ASSR has a population of 700,000, and the Mordovian and Chuvash republics 1,000,000 each.

For the most part, the various national groups settled together on a definite territory. However, the Soviet national autonomies are also adapted to the interests of the peoples who did not stay together but settled in many parts of the country. On the map you will find the Buryat people's state in Siberia—the Buryat-Mongolian ASSR—with a population of 670,000. But there are Buryat settlements in other parts of the Russian Federation. To the east of the Buryat ASSR the area numbered 10 shows the boundaries of the Aginsk-Buryat National Area, which has a population of 49,000, and to the west there is another Buryat National Area—the Ust Ordynsk—with a population of 133,000.

Of the peoples making up constituent national autonomies within the bounds of the RSFSR the most numerous are the Bashkirs (population, 3,400,000), the Tatars (population, 2,900,000), the Udmurts (population, 1,400,000), and the Daghestanians (population, 1,000,000). However, Soviet national autonomies have been set up regardless of the size of the territory inhabited by a particular people or of the population.

In the Caucasus, for instance, the territories on which some of the peoples live are so small that they could not even be seen on the map. The area marked No. 1 embraces a united autonomous republic of the mountain peoples called Kabardinians and Balkars—the Kabardinian-Balkar ASSR (area, 4,825 square miles; population, 420,000). The area marked No. 4 is a republic of Ossetians (the North Ossetian ASSR has an area of only 3,088 square miles and a population of 449,000), and the area marked No. 6 embraces the Adygei Autonomous Region, with an area of no more than 1,737 square miles and a population of 286,000. Adjacent to them are two more national autonomies: No. 8—the Karachayevo-Cherkess Autonomous Region (area, 5,400 square miles; population, 277,000) and No. 9—the Checheno-Ingush ASSR (area, 7,300 square miles; population 711,000).

In the eastern part of the country the section marked No. 7 shows the boundaries of the Jewish Autonomous Region (area, 13,900 square miles; population, 163,000; principal city, Birobidzhan).

The map shows famous ancient towns of Russia. But while their names are old, their appearance has changed radically. In the central part of Russia, the population of Ryazan has gone up from 95,000 to 213,000 in the last 20 years; of Vladimir, from 67,000 to 154,000; and of Lipetsk, from 67,000 to 156,000.

You will not find on maps of old Russia such towns as Magnitogorsk in the Urals, or Stalinsk and Norilsk in Siberia. Only the newest maps show the towns of Mezhdurechensk, Mariinsk, Kolpashevo or Bratsk in Siberia; Volzhsky or Novo-Kuibyshevsk on the Volga and other industrial centers, and every new map of Soviet Russia shows new canals and new railways, all the great changes taking place throughout the country.

THE COUNCIL OF MINISTERS OF THE RUSSIAN SOVIET FEDERATIVE SOCIALIST REPUBLIC, MOSCOW.

THE RUSSIAN FEDERATION

ITS PRESENT AND FUTURE

By Dmitri Polyansky

Chairman, Council of Ministers,
Russian Soviet Federative Socialist Republic

THE RUSSIAN REPUBLIC came into being on November 7, 1917 through the Socialist Revolution. Vladimir Lenin was the head of the Republic's government of workers and peasants, the first the world had ever seen.

At the end of 1922 the Ukrainian, Byelorussian and the Transcaucasian republics joined with the Russian Republic on a voluntary and equal basis to form the Union of Soviet Socialist Republics. The USSR now unites fifteen equal and sovereign republics. The largest in territory and population and the first in economic importance is the Russian Soviet Federative Socialist Republic (RSFSR).

Within the geographical boundaries of the RSFSR lie more than three-quarters of the country's entire territory, an area twice that of the United States. The republic's northern borders are washed by the Arctic Ocean, the southern by the Black Sea and the eastern by the Pacific Ocean. The Bering Strait, about 50 miles wide, separates the northeast corner of the Russian Federation from Alaska.

Nearly 60 per cent of all the Soviet people live in this republic. It has great reserves of coal, oil, natural gas, iron, gold, diamonds and other minerals. Its water power and forest resources are practically limitless, its soil incalculably fertile. Two-thirds of the entire country's industrial output and the greater part of its wheat and meat come from the RSFSR.

Although it is by far the most productive, this republic does not have a single privilege that is not shared by all the other fourteen. A com-

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ponent part of a fraternal union of republics, it gives help and cooperation freely to those which are smaller and less developed.

Russia is the homeland of many outstanding discoveries and technical inventions. From this part of the country have come many of the world's great men—the writers Leo Tolstoy and Fyodor Dostoyevsky; the composers Peter Tchaikovsky and Sergei Rachmaninov; Alexander Popov, the inventor of radio; the eminent chemist Dmitri Mendeleyev and the physiologist Ivan Pavlov.

Sixty Different Nationalities

The Russian Republic, a part of the multinational Soviet Union, is itself a multinational federative state inhabited by more than 60 different nationalities besides the Russians. After the October Revolution these nationalities, which for centuries under the czars had been subjected to the grossest discrimination, became equal members of the family of Soviet peoples.

When Nikita Khrushchev spoke to journalists at the National Press Club in Washington, he said: "In the Soviet Union the national question, in the sense that it is understood in your country, does not exist. All our nationalities live in friendship, all have equal rights. The attitude toward a person in our country is not determined by his nationality or the religion he observes, which we hold to be a question of conscience. First and foremost, we look at the individual. In our country all the nationalities—Russians, Ukrainians, Turkmenians, Uzbeks, Kazakhs,

(Upper) The Stalingrad Hydropower Station on the Volga River. (Center) The Bratsk power station on the Angara. (Lower) The Krasnoyarsk project on the Yenisei. These last two Siberian hydropower stations are in construction.

Byelorussians, Georgians, Armenians, Kalmyks, Jews—if I were to name all the people of the Soviet Union, it would take most of our allotted time—all of them live in peace and harmony. We are proud of the fact that such a multinational state as the Soviet Union is strong and growing successfully. All the peoples of our country trust one another and are marching as one toward the same goal—communism."

Democracy in Practice

In addition to the main nationality of a Union Republic, all the other peoples or national groups living within its boundaries enjoy autonomy in one form or another. The Russian Federation includes 15 national autonomous republics, six national autonomous regions and 10 national areas. There are besides these national formations six territories and 49 regions which have evolved as a result of similarity of regional characteristics.

Each national autonomous republic within the federation has its own constitution, makes its own laws, has its own executive and administrative bodies and specified territorial boundaries which cannot be altered without its consent. The autonomous republics and the autonomous regions are represented in the RSFSR Supreme Soviet through which the republic is governed. Deputies to the Supreme Soviet are elected for a four-year term. The Supreme Soviet appoints the Council of Ministers, which administers the government.

Deputies to the Soviets, whether on the national, republic, city or village level, are elected by and responsible to the people. A guarantee of the democratic character of these governing bodies is the fact that the deputies are predominantly workers, farmers and professional people. Almost half of the 835 deputies chosen at the last election to the RSFSR Supreme Soviet are workers and farmers, the rest are professional people and other intellectuals who, for the most part, came from worker and farmer backgrounds. One-third of the deputies to the republic's legislature are women—277 of them.

Nearly a million deputies were elected to the Supreme Soviets of the autonomous republics and to local government bodies at the 1959 elections. In addition to these elected representatives, there are many voluntary public organizations whose members serve on all sorts of public affairs committees. The aim is to keep broadening the democratic base, to involve more and more citizens in running their government.

As a sovereign republic, the Russian Federation retains all its independent governmental functions with the exception of those it has voluntarily and specifically delegated to the central authority—the Government of the USSR. It retains the right to secede from the union. The territory of the RSFSR cannot be changed without its consent. It may enter into agreements with foreign states and exchange diplomatic and consular representatives.

Within recent years, as part of a general process of decentralization to allow for greater local responsibility, the rights and powers of the republics have been expanded. The RSFSR now directly controls all the industrial, building and cultural enterprises, including the specialized secondary schools and colleges, within its territory.

Before 1957 industry and construction were managed from ministries at the nation's capital. This highly centralized supervision has been superseded by regional administrative bodies called Economic Councils. The Russian Federation has 68 such economic areas run by economic councils whose activities are determined by the tasks outlined in the state economic plan. These councils are responsible to the RSFSR Council of Ministers.

Industrial Growth

For generations progressive Russians dreamed of the time when the economy and culture of the nation would be developed for the betterment of its people. Vissarion Belinsky, the great Russian writer and democrat of the middle of the last century, foresaw Russia, mighty and strong, standing at the head of the educated world. His prediction has become a reality. The freed energy of the Soviet people has transformed the country.

During Soviet times the industrial output of the Russian Republic has increased more than 35-fold. The output of electric current in-

Vitali Marinin is one of the builders of the Nasarovsk electric station in Siberia. It will be fueled by local coal.

creased nearly 120 times and that of the engineering industry, 240 times, with every branch of engineering now represented.

Precision engineering and instrumentation and the manufacture of machine tools and automation equipment have been developed on a broad scale in the older industrial centers of Moscow, Leningrad and the Urals. Great new enterprises have arisen within a very short time—the Magnitogorsk, Kuznetsk, Nizhni-Tagil and Orsk-Khalilovo metallurgy combines, and the Chelyabinsk, Cherepovets and Novo-Lipetsk iron and steel mills. Large coal basins were developed in Siberia, the Urals, and near Moscow, in Rostov Region in the South and near the Pechora River in the Far North. Rich oil fields are being exploited in Tataria, Bashkiria and other parts of the country.

New industrial centers are rising fast. Since the Revolution 417 new towns and cities of sizable populations have been built. Magnitogorsk in the Urals, Komsomolsk on the Amur and Norilsk in Siberia are representative. Built during the postwar years were Angarsk with a present population of 134,000; Mezhdurechensk with 55,000; Bratsk in Siberia with 51,000; Volzhsky and Novo-Kuibyshevsk on the Volga with 67,000 and 63,000 respectively; Nakhodka in the Far East with 63,000; Vorkuta in the Far North with 55,000; and a good many others.

Industrialization has changed the nature of farming. Highly mechanized collective and state farms with hundreds of thousands of tractors, more than a quarter of a million harvester combines and as many trucks have replaced the millions of small peasant households.

Education, Housing, Public Health

The growth in industrial and farm production brought higher incomes and improved living conditions. In the past 40-odd years the republic has constructed a total of almost four billion square feet of urban housing. This is almost three times the total housing space available before the Revolution in what is now the Russian Federation. The present monthly rent is only four to five per cent of the family income.

This is a region where a large majority of the people were illiterate in prerevolutionary times. Now seven-year schooling is universal, the eight-year school is fairly general, and the direction is toward 11 years of schooling. Education at all levels is free. Nearly 18 million children are enrolled in the republic's general secondary schools and more than 2.5 million students attend specialized secondary schools and colleges. The number of engineers graduated in the RSFSR, quite aside from those in other republics, is double that of the United States.

The RSFSR sets impressive standards in public health with its large number of clinics and hospitals; kindergartens and nurseries; health and holiday resorts. In prerevolutionary Russia there were 15 hospital beds and one physician for every 10,000 people; today there are 76 beds and 18 physicians. Mortality has decreased more than fourfold, and average longevity has more than doubled. The republic's natural population increase is now higher than that of any of the economically developed capitalist countries.

The Seven-Year Plan

All this is a result of persistent and difficult labor, and the results become more evident every year. The present high level of achievement makes a great economic leap forward possible, a leap predicted in the target figures for the seven-year plan endorsed early in 1959 by the Twenty-first Congress of the Communist Party. Last year's production figures make it abundantly evident that the plan will be fulfilled much before the closing year—1965.

Since the RSFSR is the largest of the Soviet republics, it has been assigned the greatest part of the job. For the first nine months of 1959 the republic's gross output was four per cent greater than the plan called for. By comparison with the same period of 1958, its output was 11.5 per cent greater. The figure for output was higher than scheduled in practically all branches of the consumer goods industries—in cotton, woolen, linen and silk fabrics; in shoes; watches; furniture; motorcycles

The laboratory of an Omsk refinery. Large oil fields have been tapped in S beria and other parts of the Russian Republic and the oil is refined local

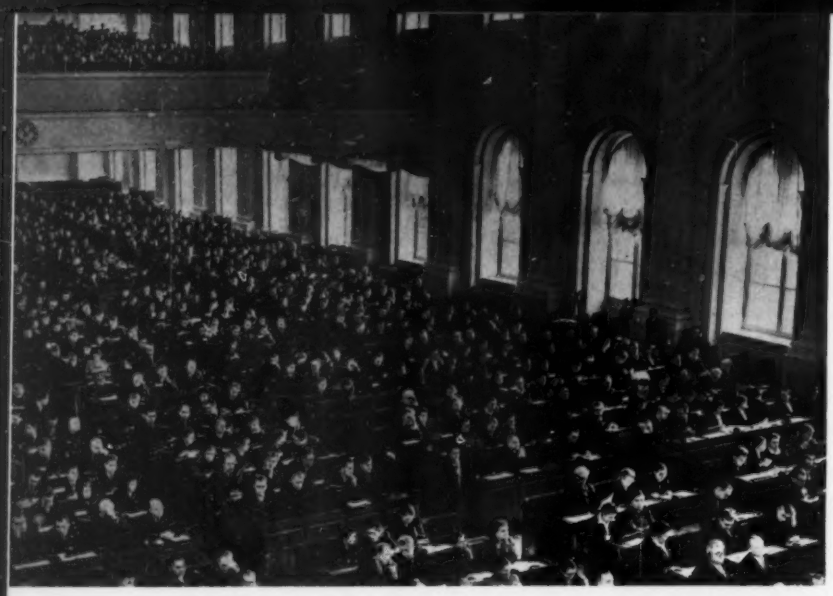
THE FORESTS OF SIBERIA STRETCH FOR ENDLESS MILES. SIBERIAN TIMBER FLOATED DOWN THE MANA RIVER TO THE CHEMICAL AND WOODWORKING PLANTS OF KRASNOYARSK.

At Abakan-Taishet. Siberian rail traffic is multiplying.

On the site of the hydropower station under construction near Krasnoyarsk.

Round the clock operation in Ukhta, the northern part of the RSFSR, where large oil deposits were found.

A gas processing installation going up in Bashkiria.



The Supreme Soviet of the Russian Soviet Federative Socialist Republic in session. About half of the 835 elected deputies are workers and farmers.

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ITS PRESENT AND FUTURE

and motor scooters; pianos; TV sets; vacuum cleaners; meat; butter; and others. As in previous years, a particularly rapid race was set for housing construction.

The year 1959 was a good farm year for the republic. In spite of drought conditions in several regions, 50 per cent more grain was harvested than in the best years before the virgin lands were opened to cultivation. Livestock breeders, too, reported progress in this first year of the plan. Compared with the corresponding period of 1958, in the first 11 months of 1959 the output of meat increased by 35 per cent; eggs, by 27 per cent; and milk, by 13 per cent. The country's best stockbreeders believe that while this rate of increase is good, it by no means exhausts the possibilities inherent in Soviet agriculture today, that the potential for topping it exists on both state and collective farms. Ryazan cattlemen—who challenged the country's stockbreeders to greater production—almost quadrupled their meat output in one year and more than doubled their originally scheduled quota of meat sales to government agencies. Procurement quotas for grain, livestock, vegetables and fruit were topped in the Urals, Bashkiria, Tataria, the Kuban and various parts of Siberia and the Volga valley.

Overfulfilling the Plan

Throughout the republic work is under way to fulfill the plan ahead of schedule.

Vladimir Region has found it more economical and speedier to modernize existing plants than to build new ones. Sverdlovsk estimates it can save a year by mechanizing and automating its industrial processes.

The basic industries are being developed at an accelerated rate—iron and steel, nonferrous metallurgy, engineering, oil, gas and particularly the chemical industry. These are all key elements in a greatly expanded program of consumer goods production.

Typical is the plan to increase output 18 times in Saratov's chemical industry. A huge complex for producing the most varied kinds of chemical products—synthetic rubber, fiber, silk and wool; mineral fertilizers and plastic—is being set up here and in other Volga regions. The southern part of the RSFSR is also destined for large-scale industrial chemical production.

Within the coming seven-year period the output of electric power will double—an increase greater than that of the whole previous 40-year period. The power engineering industry is designing steam turbines with capacities of 300,000, 400,000 and 600,000 kilowatts.

The machine-building industry is to double its output; in 1965 it will be producing in one day as much as Russia did in a whole prerevolutionary year.

The branches of industry which make it possible to further the development of heavy industry through mechanization and automation are progressing at an exceptionally rapid rate. The Urals Engineering Works, a typical large plant, is scheduled to turn out the same number of machines in these seven years as it did in the 18 before. Its big job is a walking excavator with a bucket volume of 65 cubic yards and a 410-foot jib. In 1963 the plant will be building an automatic blooming mill, the first of its kind, which will need only one operator.

An enormous amount of work is being done to automate the republic's industries. An oil field in the Tatar Autonomous Republic—a part of the RSFSR—is being completely mechanized. A staff of 100 will do the work that ordinarily requires 6,000 to 7,000 men. Automation is no threat to Soviet workers. Greater productivity brings with it a higher standard of living and a shorter workday. Both are predicated on the seven-year plan.

Greater consumer food requirements are being met by such efforts as the virgin land program. In recent years more than 37 million acres of long-fallow land in the Russian Federation have been turned up by the plow—more than the sown area of Britain and West Germany.

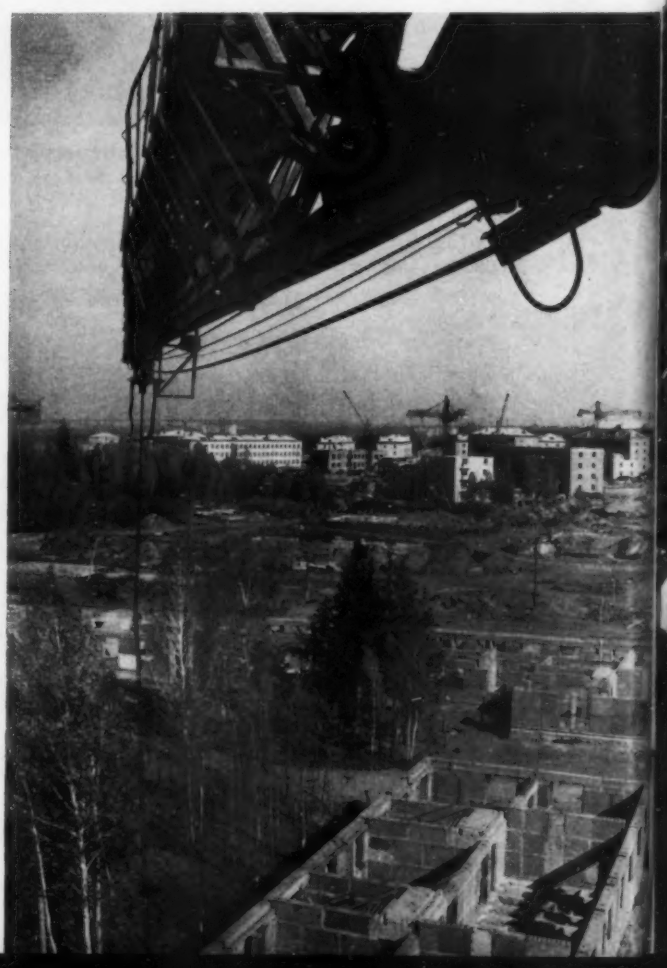
A twofold increase in the volume of production of many farm commodities is expected in the seven-year period. This extraordinary growth is made possible by highly-mechanized operations. By 1965 industry will have supplied the republic's farms with more than a million tractors, a quarter of a million combines, over half a million trucks, hundreds of thousands of cultivators and mowers, tens of thousands of bulldozers, stubbers, excavators and other machines. This, to a large degree, accounts for the confidence of collective farmers and state farm workers in many regions of the republic in their ability to complete the seven-year plan in five years.

Siberia and Its Resources

Siberia is part of the Russian Federation. It is a great region stretching from the Urals to the Far Eastern mountain chains, incalculably rich in coal, iron, diamonds, water and forest resources. It is a country which is undergoing extraordinary changes.

"Everybody who has visited you in Siberia," Nikita Khrushchev told

A city of scientists rising in the vicinity of Novosibirsk. It will house the Siberian branch of the Academy of Sciences.



the people of Krasnoyarsk not long ago, "talks admiringly about this wonderful part of the country which has changed so much during the Soviet period."

New towns are rising on Siberian soil. An astonishing amount of housing is going up in new towns and old. In Krasnoyarsk, for example, more new housing has been built than the whole town had in 1913.

The iron ore deposits found recently furnish the raw material for new iron and steel plants being built in Siberia. The Angara-Pitskoye reserves are estimated at a fabulous four to five billion tons.

Coal reserves of Siberia are estimated at even more startling figures —seven trillion tons! According to geologists, one basin alone—the Kansk-Achinsk in Krasnoyarsk Territory—is a deposit of more than a trillion tons of the cheapest coal in the country. It lies close to the surface and is near railway facilities.

Cheap coal is the reason that large thermal electric stations are being given construction priority in Siberia. But hydropower stations are not being neglected, by any manner of means. The great Siberian rivers—the Yenisei, Angara and Lena—have immense power potentials. The Bratsk Hydroelectric Plant with a capacity of 4.5 million kilowatts is going up on the Angara at the Padun Rapids. On the Yenisei the five-million-kilowatt Krasnoyarsk station has been started. When completed it will be generating current at half a kopeck per kilowatt-hour.

To use this cheap power large-scale aluminum, magnesium, titanium and other metal complexes will be developed. Krasnoyarsk Territory with its great sources of nepheline and high-grade limestone will be the aluminum center of the future.

Yakutia is a relatively recent discovery as a source for industrial diamonds. A large combine for mining and processing diamonds is now being built in Yakutia's Vilyui Basin. The production of diamonds, industrially important for their hardness, will multiply 15 or 16 times during the seven-year plan period—a boon for the engineering and mining and extracting industries.

Saw mills and woodworking plants, cellulose and paper factories, oil refineries and railroads—all these are being built in this region of great distances and enormous prospects.

The single objective of everything built, developed and created is to provide a fuller, richer and happier life for the Soviet people. Metal and cement do not mean only machines and factories; they mean more housing, more clothing, more meat, milk, vegetables and fruit.

For a Richer Life

The light and food industries of the republic have been growing fast. In 1965 the textile plants will be turning out almost 17,000 yards of cotton fabrics and 2,800 yards of silk every minute. A large sugar industry for the republic is in the offing with 45 new refineries to be built in the seven-year period in the Kuban, along the Volga and in Western Siberia. In various parts of the republic 140 meat-packing plants, 130 dairy-processessing establishments and 250 creameries are to be constructed.

New housing is to increase by almost 60 per cent—the equivalent of the housing in several dozen large cities, for whose construction centuries were required. The republic's budget allocation for housing is one-fifth of the total for all capital investment.

During the seven-year period the number of industrial and office workers in the RSFSR will rise by 20 per cent. Their real incomes—as well as those of farmers—will grow by 40 per cent. With the changeover to a seven-hour day completed throughout the country, steps will be taken toward another reduction in the workday without cutbacks in pay. The aim is to give the Soviet worker the highest living standard and the shortest workweek of any country in the world.

Public education is to be further expanded with larger enrollments in the secondary schools and colleges. A recent law grants additional paid vacation time to evening students who do creditably in their courses.

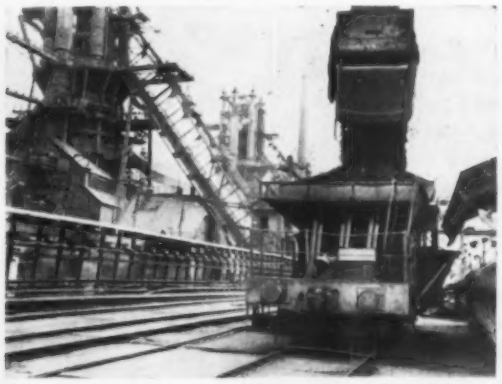
During the seven-year period the republic will be building more hospitals, maternity clinics, sanatoriums and holiday resorts. By 1965 the present 76 hospital beds per 10,000 of the population will have increased to 93.

New libraries, motion picture theaters and clubs are going up in the republic's towns and villages. Over 500 new movie houses will be constructed in the towns; the total number of movie facilities of all types will exceed 70,000. Hundreds of millions of books will be published in the languages of the many nationalities who live in the RSFSR. This is all a part of the republic's seven-year plan.

Fraternal friendship, cooperation and mutual aid, one and the same ideology, one and the same goal—the creation of a communist society—makes the Russian Federation, an integral and inseparable part of the Union of Soviet Socialist Republics.

Millions of books are published annually, printed in languages spoken in the RSFSR. Book fair in a Chelyabinsk factory.

A Kuznetsk metallurgy plant. In Soviet times the industrial output of the Republic has grown 35-fold.



A sugar refining plant built in Voronezh under Republic's 7-year plan.

The Kamyshin cotton mill in the Volga region, one of the largest light industry plants in the Soviet Union.

Virgin lands in Siberia brought to the RSFSR a good harvest in 1959.

FACE TO FACE WITH AMERICA

By Karl Nepomnyashchy

EVER SINCE that November day when Soviet newspapers first printed fragments from the book *Face to Face with America*, people began to pester both the authors and the publishers with telephone calls, wanting to know when the book would be out.

The demand for it was tremendous. Why? Because of the unfailing interest in N. S. Khrushchev's historic visit to the USA, the wish to know as much as possible about the unprecedented visit that the head of the government of the mightiest socialist power paid to the mightiest capitalist power—the United States.

Millions of Soviet readers are thoroughly familiar with the book *Let's Live in Peace and Friendship*, a collection of documents relating to N. S. Khrushchev's U.S. visit, and with the speeches he made there. *Face to Face with America* reproduces the situation in which the visit took place. It helps us to understand why this event was of such exceptional importance.

Event No. 1

In their foreword the authors write: "It is likely that time will obliterate some of the details, that the human mind will forget some of the episodes. But nothing can erase from the memory of millions the chief and main thing. Whatever course international developments take, and whatever character Soviet-American relations assume, the triumphant visit of the head of the Soviet Government to the United States will leave a most profound imprint on all international affairs."

Summing up the past twelve months the

AMERICANS BY THE HUNDREDS OF THOUSANDS GREETED NIKITA KHRUSHCHEV EVERYWHERE HE TRAVELED IN THE USA.

world press called this visit International Event No. 1. This is no exaggeration. The reader realizes it again and again as he thumbs through the book and follows in his mind's eye every one of the thirteen unforgettable days of the visit.

It is said that the great is often seen better from afar. And, indeed, the more time separates us from the Soviet Chairman's visit to the United States, the more we realize the vast and beneficial impact it has already had and will yet have on international developments. This visit not only made the international climate milder, compelling the barometer, as N. S. Khrushchev said, to swing from cloudy to fair; it also ushered in a new chapter in Soviet-American relations, bringing our countries closer together.

This becomes even more obvious as one reads *Face to Face with America*, a pulsating eye-witness account of stirring events. The authors emphasize that "we made it a hard-and-fast rule to stick to the facts. And we did." The book is now being translated into English and Americans will soon have the opportunity of reading it.

Factual Account

One of the book's chief merits is its scrupulous exactness, its appealing documentary character. But what is every bit as important is that all the facts are presented against the sweeping background of history—that when the narration requires it, the authors pause to give historical sidelights or comments to explain one thing or another.

Thus, we find in the book a portrayal of the ordinary American, a characterization of the American press and television, an analysis of trade union activity, and so on. The authors explain how the "cold war" policy took shape, why this policy became discredited and was compelled to give way more and more to the policy of peaceful coexistence, the most sober and sane and the only proper and right policy under present conditions. Besides analyzing Soviet-American relations the book also comments on other international highlights.

Soviet readers find the book interesting because it helps to satisfy a desire to know Americans better and to learn about their way of life, their psychology and aspirations.

Americans will find in the book answers to many of their questions. They will learn that the Soviet people see the United States realistically and that they have warm feelings for the Americans. They will also find out how the Soviet Union developed from a backward and illiterate land into a most enlightened country, how it increased the pace of its economic development to such peak levels, and what makes its ideals so appealing.

The Man, the President

Most important, though, readers will find many of the remarks N. S. Khrushchev made during his visit that were not covered in the press. Thus, there is a splendid description of the Camp David talks which brought so many wonderful hopes into being. In both this chapter and others the authors sympathetically describe Dwight D. Eisenhower, the man, and Dwight D. Eisenhower, the President of the United States.

They write with great warmth of the now widely-known conversation N. S. Khrushchev had with the President and his grandchildren, during which it was decided that Eisenhower would visit the Soviet Union next spring.

"Nikita Sergeyevich asked the President's grandchildren if they wanted to go to Russia. 'Yes, we do!' they chorused in reply. Then the question arose as to which season would be most suitable. Nikita Sergeyevich said the best time for it would be summer or spring, when everything is in blossom and there is fragrance in the air, when no cold autumn or winter winds blow. 'That's right,' the children agreed. 'So spring then?' And that is what they decided then in all seriousness together with their grandfather, Dwight D. Eisenhower himself."

Recalling this at a news conference the President said that this had been "the kind of heart-warming family scene that any American would like to see taking place between his grandchildren and a stranger."

Hearty Meetings

The authors note the hospitality and peaceableness of the American people and President Eisenhower. In vivid, warm and heartfelt words they describe the meetings N. S. Khrushchev had with Americans in San Francisco, the state of Iowa and Pittsburgh, the heart of the American steel industry. The quoted dialogues are dynamic and ripple with humor. And even when the reader is familiar with them, he re-reads them with pleasure, finding new and deeper meaning each time.

Throughout the nearly seven-hundred-page book there runs like a thread the idea that everything it speaks of and deals with is exceedingly important for the future of peace. It makes one feel most profoundly grateful to N. S. Khrushchev who shows such tireless energy when the fate of peace is at stake.

This is how the authors describe the turnabout in the American public's attitude toward the Soviet people's envoy:

"Victimized by senseless propaganda, the Americans thought they would see a tough, hot-tempered angry doctrinaire who doled out his words when it came to speaking in plain everyday language. Instead they saw a simple sociable man who willingly sought direct contact with the people and elbowed his guard

(Top photo) The two heads of states at Camp David on the eve of their epoch-making talks.

The Soviet Premier and Pittsburgh workers are both very pleased to say hello to each other.

Chairman Khrushchev makes an unscheduled stop to check through a San Francisco supermarket.

The theme of Chairman Khrushchev's televised message to millions of Americans was coexistence.

"IT IS THE VOICE OF REASON . . . CALLING ON PEOPLE TO PAUSE AND THINK, TO SETTLE THEIR QUARRELS PEACEABLY."

FACE TO FACE WITH AMERICA

away to have a friendly chat with the American man on the street. They saw a man who remonstrated against being driven around in a closed car, a man eager to talk and ready to argue when it was necessary. They liked tremendously the passion and ardor with which N. S. Khrushchev defended his ideas, letting no one cast slurs at them, and also the tolerance he showed for the convictions of others. People came to have confidence and to feel sympathetic, and when they learned of the proposals the head of the Soviet Government had put forward in his desire to strengthen peace, they said:

"'No, that is not propaganda! He is a sincere man and one is able to believe him.'

"That was how the customary, standard idea of Americans about the Soviet Union changed. And people were not ashamed to say so. In one frank conversation a middle-aged newspaperwoman accompanying N. S. Khrushchev spoke of herself in a way that unwittingly reflected the process taking place at the time in the minds of many Americans:

"'I always felt hostile toward the Soviet Union. And like many others, I believed what was said and written here. But I happened

to accompany Khrushchev on his amazing tour. I took a close look at him, listened to his speeches with a critical ear and contested his arguments in my mind. Suddenly I realized that all the notions we had entertained over so many years had to be thrown out as rubbish. I saw that he was a real human being, that he was suggesting things which are serious and, even more important, quite feasible. You can take it or leave it, but now this man has my sympathy.' "

Work En Route

This book makes one ponder over many things. It has much of instructive worth apart from having purely informative value. One learns, for instance, how N. S. Khrushchev prepares his speeches, each of which holds the attention of millions both inside and outside the Soviet Union. The atmosphere of a statesman's office—into which the cabin of the TU-114 airliner had been turned during the trans-Atlantic flight home—is expressively conveyed.

"The stenographers," we read, "are all ears. Nikita Sergeyevich takes the chair, ready for work again. One would never think he had just had a grueling day. . . . As is his habit, Nikita Sergeyevich has a cleared table in front of him. He prepares all his speeches very thoroughly, in advance, going into the smallest detail. And now again, as he dictates, his phrases roll out one after another, crisp and concise. He has already long contemplated the thoughts he is now giving shape. At times he goes back to what he has said before to clarify a point. But he never seeks to round off his expressions and fit them to the truisms many orators fancy. His speech is live, from the heart, having a style of its own, a style the people like so much."

Fight for Peace

Again, as the reader thumbs through the pages of this book, he finds more and more important observations and ideas that he would like to think over and re-read. "Men and women all over the world, black, yellow, white," we read, "Christians, Mohammedans, Buddhists or atheists, of whatever political party or social status, want, yearn, fight for peace.

"For the first time in the thousands of years civilized society has been in existence, man, nature's king and master, has created a weapon so deadly that reason and intellect cry out against it. Yes, man's reason and intellect! It is this voice of reason that has rung out to the ends of the world, calling on the people to pause and think, to settle their quarrels in peace.

"It was from the socialist world, from a country which everyone knows has the most formidable total weapon, that the offer came to disarm for all time to come—it was from here that this calm and reassuring voice carried to the ends of the world. What could ever be pitted against this great and humane call? What could ever mute it, this clarion call inspired by the love of man?"

"Nothing," the reader replies.

The book is written in the best traditions of Soviet journalism. Its language is alive and stirring. And though it is the concerted effort of 12 men—Alexei Adzhubei, Nikolai Gribachev, Georgi Zhukov, Leonid Ilyichev, Vladimir Lebedev, Yevgeni Litoshko, Vikenti Matveyev, Vladimir Orlov, Pavel Satyukov, Oleg Troyanovsky, Andrei Shevchenko and Grigori Shuisky—there is no patchiness in style. This good, clever, heartfelt book is permeated with one noble aim. This is to bring the USSR and the USA closer together, to help them understand each other better and thus banish the threat of war forever.

Though the book has 12 authors on its title page, it actually has far more. In the final chapters a few of the countless letters N. S. Khrushchev received from both Soviet people and people from other countries, including letters from ordinary Americans, are published. Each is a stirring human document that comes straight from the heart.

Here are only two. One was written by a Soviet citizen, the other by an American.

V. Sklyarenko of Karasuk in Novosibirsk Region writes: "All heard your voice, the voice of a representative of a free and happy people. You express the thoughts and sentiments of the ordinary man, the working man, whose hands—whether they be the hands of Russians, Ukrainians, Turkmens, Byelorussians, Georgians or of any other peoples populating our vast country—fashion everything around us.

The second letter comes from Washington. It was written by Matthew P. Highland who introduces himself as the father of a family and a World War II veteran.

"Dear Mr. Chairman," he writes, "Your wonderful proposal for complete disarmament is certainly a step worthy of the age of space conquest and corresponds to the real facts of international life. May the American and Russian peoples go down in history as the peoples that paved the way to the realization of your ideas, to the release of our planet from militarism and war for all time."

The spring of 1960 is on the way. Again the world public bids Nikita Khrushchev *bon voyage*, as he sets out on state visits to Southeast Asia and France. The people are also impatiently looking forward to the "spring" visit of President Eisenhower to the Soviet Union. Men and women of good will pin great hopes on the long-awaited "May in Paris" Big Four meeting. The spring in international relations, melting the "cold war" ice, is largely due to the thirteen unforgettable days N. S. Khrushchev so fruitfully spent in the United States, to that historic visit so sympathetically described in the book *Face to Face with America*.

KHRUSHCHEV AT THE UNITED NATIONS GENERAL ASSEMBLY FOR HIS SPEECH PROPOSING GENERAL DISARMAMENT.

SOVIET AGRICULTUREM

By Berta Olkhovskaya

IN THE COURSE of a single year the Communist Party of the Soviet Union devoted three of its major meetings to a discussion of farming—in December 1958 at a Plenary Meeting of its Central Committee, in January 1959 at the 21st Congress, and again in December 1959 at the Plenary Meeting of the Central Committee.

Why so much concern with the country's agriculture? Are the Soviet farms doing poorly? Nikita Khrushchev, in his speech at the last Plenary Meeting, phrased the question and answered it this way. "On the contrary. Things are going well with us, very well indeed. . . . And now with this very good state of affairs, we can go ahead to still greater successes."

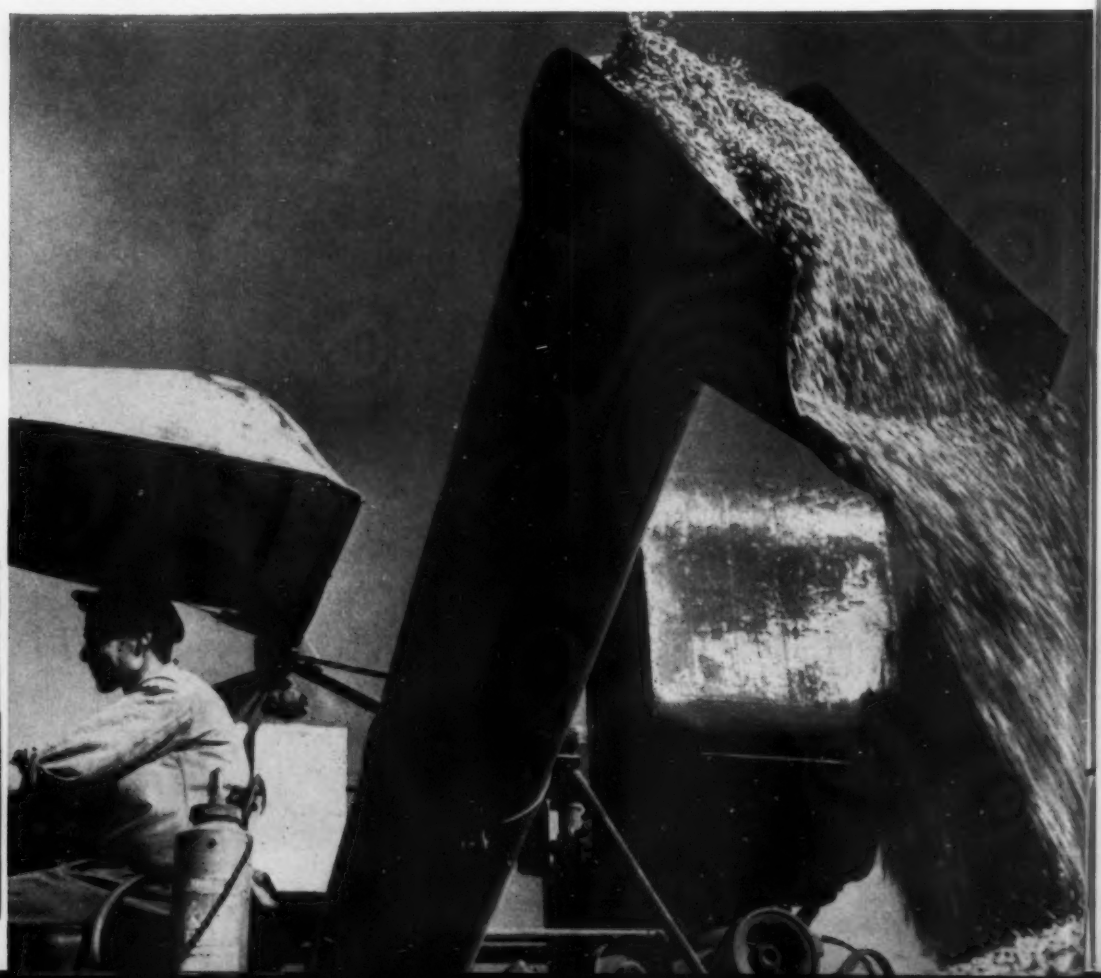
These successes are very evident. In 1959, the first year of the seven-year plan, in spite of drought conditions in many of the grain-growing areas, the country harvested an adequate supply of wheat.

Animal husbandry also made progress. During the first 11 months of 1959 meat output rose by 32 per cent and milk output by 15 per cent as compared with the previous year. There was a substantial increase in butter production—to 845,000 tons. The cotton crop—4,669,000 tons—reached an all-time high.

To move ahead from good to better—that, says the Communist Party, is the present job. And its Central Committee, assembled in plenary session on December 25, outlined the concrete steps.

Besides the members of the Central Committee who were elected at the last Party Congress, numbers of other people were invited to attend, among them collective farm chairmen, tractor operators, dairy workers, stockbreeders, scientists and industrial workers and executives. This is general procedure at such major conferences and keeps the Party in close touch with the people. Decisions are made with the active participation of non-Party people.

THE GREAT EFFORT TO OPEN THE VIRGIN AND LONG-FALLOW LAND 'IN SIBERIA AND KAZAKHSTAN WAS AMPLY REPAID.



REMOVES AHEAD

THE CHART SHOWS THE GROWTH OF COLLECTIVE FARM INCOME (IN BILLIONS OF RUBLES)

At this plenary meeting the speeches of tractor operator Alexander Gitalov, swine-breeder Yaroslav Chizh, field crop worker Yevgenia Dolinyuk, dairyhand Vera Lyubachek were listened to with the same close attention and were as widely publicized over press and radio as the speeches of the party leaders and government officials.

These and other rank-and-file farmers, speaking from a valuable background of experience, suggested concrete measures to step up farm production. They were sharply critical of the work of some of the ministries and departments. Through the Plenary Meeting, their know-how was broadcast to the entire country.

For extraordinary achievements in their fields of work, some of the farmers were honored with the award Hero of Socialist Labor at ceremonies held in the Grand Kremlin Palace. One of those so honored was Yevgenia Andreyeva, chairman of a collective farm in Tambov Region. She pioneered the effort, now duplicated very generally by Soviet farmers, to outproduce the United States in meat, milk and butter per head of the population.

Soviet farmers use "centners per 100 hectares" as a yardstick in the way that American farmers talk of "bushels per acre." A centner equals 220.46 pounds and a hectare, roughly, two and a half acres. Yevgenia started a movement to increase the annual yield to 100 metric centners of meat and 300 to 400 centners of milk per 100 hectares of land.

On behalf of the members of her collective farm she pledged a 1960 yield of 170 centners of meat and 340 centners of milk per 100 hectares of land. At the time, this was considered a very bold promise. But by the close of 1959, more than a year ahead of the promised date, the farm announced that it had bettered the figures—the output was 171 centners of meat and 350 centners of milk per 100 hectares. The meat output was 4.5 times as large as the 1956 figure.

Nor was Yevgenia's farm the only one to chalk up such gains. A year ago, not one but hundreds of the collective farms in Ryazan Region pledged to raise their meat output 3.8 times by 1960. This region in Central Russia is not blessed by nature with any special advantages. Moreover, not too long before it had been lagging behind the national showing. Nevertheless the Ryazan farmers made their words good in a remarkable burst of creative activity which can be attributed only to the vast potential of farming carried on in a socialist country by farmers who are working collectively for the common good.

If this great leap forward was possible for Ryazan, concluded the Plenary Meeting, it is possible for other parts of the country. The possibility is grounded on such government measures, adopted within recent years to spur agriculture, as larger quantities of farm machines, higher wholesale prices for staple crops alongside a cut in retail prices, lower farm taxes, and large government appropriations for agriculture.

More than 300,000 specialists with a secondary or higher technical education are now employed on collective and state farms. More than half of the collective farm chairmen and nearly 90 per cent of the directors of state farms have a specialized secondary or higher education.

The achievements of the leading farms are undeniable proof that the target figures for the country as a whole will be reached ahead of schedule. Stimulated by the reports and discussion at the Plenary Meeting, each of the farm districts is now working out ways and means of raising output of crops and livestock, and reducing manpower by more efficient management and integrated mechanization.

Speakers at the Plenary Meeting made it apparent that Soviet farmers were working hard to top American farm output. In 1959 the USSR bettered American per capita butter production. The gross milk output was also larger than that of American dairymen. This is a promise and a forecast for other foodstuffs.

The decision of the Plenary Meeting of the Central Committee of the Communist Party to mark the second year of the seven-year plan with new and greater farm achievements was welcomed with enthusiasm throughout the country.

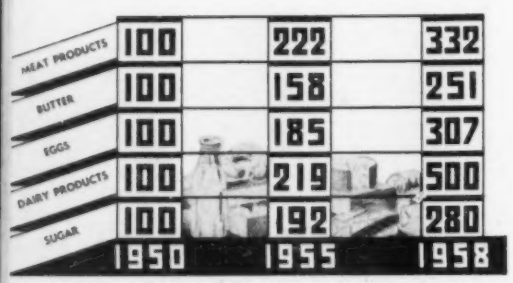
More and more farm products at lower prices for the consumer—this is the slogan of the Communist Party and of the farmer, industrial worker, scientist, government official and everyone else in the country as well.

It needs a tall man on a stepladder to reach this corn grow in Uzbekistan.

Here is a very modern type of incubator in use at the Tomilin Poultry Farm.

The chart shows growth of farm mechanization (in millions of horsepower).

A battery of farm machines ready for the second spring of the 7-year plan.



Rise in the quantity of farm foodstuffs sold. The chart uses 1950 as base year.

Dairy section of multi-million-ruble collective farm *Druzhba* near Kiev.

MANUKOVSKY'S SCHOOL

By Mikhail Aleksandrov

FARM TRACTOR DRIVER Nikolai Manukovsky runs an unusual type of school, with students coming from every farm region in the country. It has been featured in special television programs and newsreels and was the cause of a good deal of comment at the recent Plenary Meeting of the Central Committee described in the article *Soviet Agriculture Moves Ahead*.

During a six-month period last year almost 2,000 collective farm chairmen, agronomists and tractor operators stopped in for lessons with Manukovsky at the Kirov Collective Farm in Voronezh Region where he lives and works. Besides that he lectured at various farm villages and before scientific groups. This busy teacher and lecturer is a collective farm tractor driver who has learned how to get the maximum production from a plot of land at minimum cost. Manukovsky, with the help of one assistant, is doing the job of 40 men. Last year the two took care of a 375-acre plot sown to corn and an 185-acre sunflower plot with no help other than machinery. In three years they saved their farm 348,000 rubles.

They do it by using the square-hill method of planting exclusively. This enables them to work the soil by machine in two crisscross directions. Manukovsky is a past master at the art.

At about the same time Manukovsky worked out his technique, another tractor driver, the Ukrainian, Alexander Gitalov, mechanized all his corn-growing operations. Gitalov had learned American techniques from hybrid seed expert Roswell Garst on two visits to the Iowan's farm.

The work of both Manukovsky and Gitalov was warmly commended by Nikita Khrushchev who thought it had great possibilities for raising farm output. He suggested that other farmers apply the techniques, and thousands of growers did. Millions of acres of corn are now grown by the square-hill method with hand labor replaced by comprehensive mechanization. The square-hill method is also being used now to raise sunflower, sugar beet, potato and cotton crops.

New Lands to Conquer

Comprehensive mechanization has taken hold for all crops. Introduced originally for corn, it has spread to cereals, sunflowers and potatoes, thereby releasing scores of collective farmers for other types of work—for cattle breeding, fruit growing and farm construction.

Manukovsky, a restless man, began to turn his energies to other areas. He was impatient with the wasteful and arduous manual labor used in livestock breeding. There was no reason for backbreaking work, he thought, now that there was plenty of machinery for sale. The farm was netting an annual income of more than three million rubles and could afford the best machines available. And it had, besides, its own expert drivers and maintenance men.

This picture, as a matter of fact, is now true for the entire country. There are some two and a half million tractor operators, technicians and engineers presently working on Soviet farms. Collective farm income keeps growing. And industry keeps putting out more and more tractors, corn harvesters, cotton picking combines, self-propelled carriages, mounted implements and a host of other machines.

Last fall Manukovsky began pushing for comprehensive mechanization of all farm operations. The idea was formally approved by the farm board and things got moving.

Comprehensive Mechanization

A tractor team with Manukovsky at its head was provided with ten tractors, six harvester combines and other machines. The farm board also allocated funds for another tractor, a corn and grain-harvester combine, mounted plows, a bulldozer and some other machines.

Besides driving their machines, the 31 collective farm members on the team help to mechanize field and cattle-breeding jobs and to put up farm outbuildings.

A new pattern of work organization was called for. With the help of Voronezh engineers the collective farm drew up what in industry would be called flow charts. They give the sequence of operational steps and specify which machine is to be used and which man is responsible for operation and servicing.

The team plans to mechanize all the sugar beet, truck garden and orchard jobs. The main emphasis, though, is on livestock. Milking, the preparation and distribution of feed, water supply, cleaning the manure out of the sheds and carrying it to the fields—all these operations will be completely mechanized.

Things are no longer to be done by rule of

thumb; all the requirements of scientific farming will now be met strictly. This will make for the most rational and efficient use of manpower. The team expects to reduce the amount of labor spent on sugar beet cultivation by 77.3 per cent, on sunflowers by 60 per cent, on cereals by 50 per cent and more than that on breeding livestock.

The plan was taken up by other farms as soon as it was made public. Alexander Gitalov was especially enthusiastic. His comment was: "All of us here in the Ukraine go along with Nikolai when he calls for comprehensive farm mechanization. We want to tell him that he has started a big movement and that our men are not going to be far behind him."

People in other parts of the country said the same thing in different language. There is a heavy demand for machinery from farms in the Kuban, the Don, Stavropol Territory and Tambov Region, Georgia, Byelorussia, Moldavia and other places that have embarked on a project for comprehensive mechanization.

Manpower Freed

The Soviet farmer will be producing more with less effort—that is the purpose of mechanization. The manpower freed will be gratefully employed in such fast growing branches of agriculture as livestock breeding, truck gardening and fruit growing. Rural building is expanding and needs plenty of skilled hands. In 1960 about a million rural housing units—as many as in the two previous years combined—are scheduled to be built. Those who want to will train for jobs in industry, trade or other branches of the national economy.

There is this ironbound factor to take into account. A collective farmer cannot be fired from his job. Together with the other members, he owns the farm. He works elsewhere, and at another job, only if and when he wishes to.

Comprehensive mechanization will mean more than just lighter work and more output. Because it will cost less to grow wheat, beef, pork and the rest, the retail price of bread, meat, milk will be lower. No matter how retail prices drop, however, collective farm incomes will continue to rise. The government, which is the basic buyer of farm produce, when fixing procurement prices, takes into consideration the fact that the collective farm must meet expenses and have enough left over both for expanding its operation and paying its members more and more for their labor.

Hence comprehensive mechanization for the Soviet farm is profitable both to producer and to consumer. Consider these confirmatory figures. Between 1950 and 1959 Soviet farm machine power grew from 55 million to 132 million horsepower. The cash income of the collective farms rose from 34 billion to 132 billion rubles. In the same period state retail food prices dropped by 32 per cent. Meat and poultry prices were cut by 34 per cent, butter by 35 per cent and bread by 42 per cent.

A major goal of the Communist Party and the government is to produce an abundance of foodstuffs retailed at the lowest possible prices. The national effort sparked off by Nikolai Manukovsky to mechanize all farm operations brings that goal appreciably closer.

Shortly after the Plenary Meeting Manukovsky was honored with the title Hero of Socialist Labor.

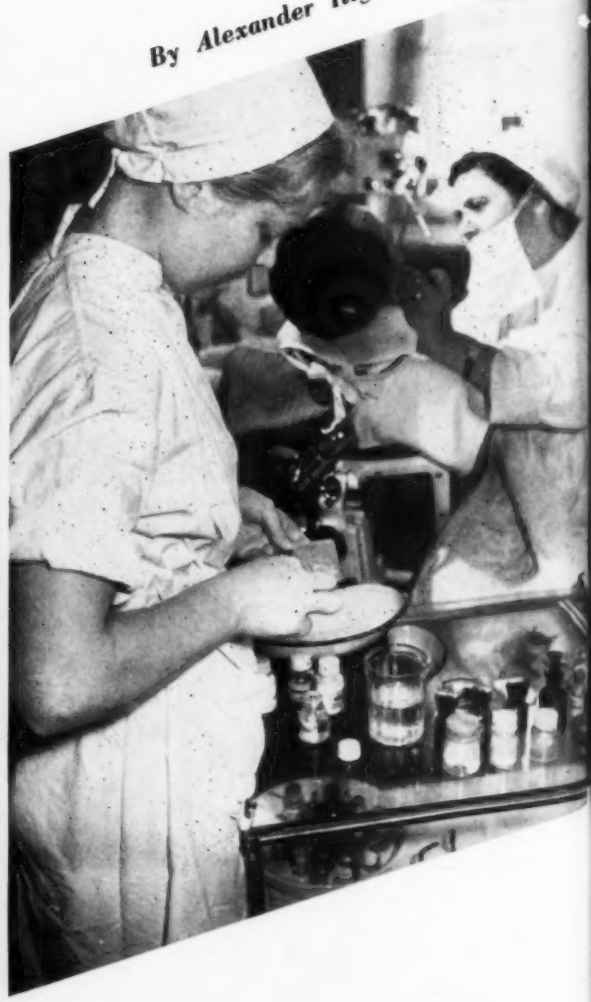
NIKOLAI MANUKOVSKY AND ONE OF HIS STUDENTS.

THE CENTRAL COMMITTEE'S PRESIDIUM WITH PARTICIPANTS OF THE PLENARY MEETING ON FARMING. MANUKOVSKY IS SEATED ON THE FAR RIGHT.

The Leningrad Metal Plant where four generations of Bugrovs have worked for more than a hundred years.

WORKERS' DYNASTY

By *Alexander Itigin*



Upper left. George, family head, is a foreman. Boris, like his father, follows the family tradition. Here he assembles a hydropower turbine. Daughter Ludmila is a nurse at the same plant. (Right) George—junior member of the dynasty

A DYNASTY of Bugrovs? Any historian, on hearing that, would merely shrug his shoulders in bewilderment. He could understand someone speaking of the royal Bourbon dynasty in France, or the Hapsburgs in Austria, and the imperial Romanov dynasty in Russia was well-known for hundreds of years. But the Bugrov dynasty? There isn't a word in the history textbooks about it. But it exists and, in distinction to all the crowned dynasties of history, it enjoys deep, sincere respect.

The Bugrovs have long been known not only in Leningrad, but throughout the Soviet Union. Old man Ivan Bugrov was outstanding, and his son Alexander, his grandson and great-grandson have also earned enviable reputations as workers. Nine-year-old great-great-grandson George is also growing up but his place, at the moment, is in school.

Photos by Alexander Mokletsov

The Vyborg Side

More than a hundred years ago carpenter Ivan Bugrov, a former serf living in Tver Gubernia, arrived in St. Petersburg. He found a job in merchant Rasteryaev's metal-working shops which day and night smoked up the Vyborg side, then one of the distant outskirts of the city.

It could be said that actually two cities existed simultaneously in St. Petersburg, the former capital of old Russia. One of them was the aristocratic St. Petersburg, with its resplendent Nevsky Prospect, its palaces of the czars, the marble mansions of its high-born princes, factory owners and financiers, and with its famous stock exchange where, within half an hour, fortunes extending into the millions passed from hand to hand.

And there was the other St. Petersburg, the gloomy, watchful city of the poor workers on the outskirts in the Nevskaya, Narvskaya and Moskovskaya Zastavas, and the Vyborg side. One could not see the sky above the factory buildings because of the smog. The narrow, dirty lanes were lined with ramshackle little wooden houses that seemed to be pasted to one another. Occasionally one could see a faintly twinkling kerosene street lantern attached to rickety poles.

According to official statistics the mortality rate on the Vyborg side in those days was four times what it was in the center of the city. The reports said: "Every large city must have two kinds of suburbs: summer places with beautiful mansions abounding in greenery, and slums for the scum of the city population." And the St. Petersburg "city fathers" considered the workers living on the outskirts as part of that scum.

But that was long ago. In the 42 years of Soviet power this workers' district has changed beyond recognition. It has straight, wide streets and avenues, tall new buildings, paved sidewalks and roads, glittering advertisements of moving picture theaters and stores, and public squares full of greenery. It is no longer a cast-off slum but an integral part of the city, just as the working class is an integral part of the administration of the state.

The Middle Bugrov

The foreman was completely absorbed in his work. He was tall and had the physique of an athlete. His eyes were dark and expressive, his forehead high, his temples slightly touched with gray. Were it not for his glasses, which he put on from time to time to get a better look at a drawing, one would never have taken him for a day over 50.

George Bugrov was finishing the assembly of a powerful turbine for one of the hydroelectric power stations on the Volga River. The turbine was so large that, together with the generator, it stood half as high as the famous St. Isaac's Cathedral in Leningrad. Throwing back his head, Bugrov attentively watched the mechanics slowly walk around the cover of the gate apparatus, their hammers tapping at each blade to check how it turned.

Every now and then, placing his hands to his mouth and shouting to make himself heard at the top, he would order:

"Check the third and seventh blade again. Can you hear me up there?"

And from up above came the words:

"We hear you! Everything's in order."

Assembly and testing always worried George Bugrov. He considered a well-made turbine a matter of honor for him as a worker and also for his numerous pupils, scores of young assemblers whom he had trained, taught, and with whom he had shared all his experience, teaching them in a fatherly way everything he himself knew and was able to do. Besides, he was the godfather of almost every new turbine. Engineers introduced constructive changes on his advice, thus saving the plant metal, electric power and money.

George Bugrov has worked at this plant for about 30 years. His father, Alexander Bugrov, a mechanic in this very shop and the son of Ivan Bugrov, the founder of the dynasty, had brought him here. George never forgot what his father had said to him at the time: "Work conscientiously. Remember that it is our plant now. Work and learn."

There was special reason for adding that last word. George was the first in the Bugrov family to get an education. He finished high school, continued his studies at a specialized secondary school in the evening, and was admitted to the technical institute which had been opened at the metal-working plant.

During these years George Bugrov developed into an outstanding specialist. Almost all Soviet turbines, from the very first of the Soviet electrification program, the one at the Volkhov Hydroelectric Station, to the Dneproges, the Kuibyshev, the Stalingrad and many other large hydropower stations, had passed under his scrutiny.

The Old Guard

The Bugrovs live in a new house which the plant put up for its workers. They have a spacious apartment and are always at home to visitors. People are always dropping in, not only because the host and hostess are so cordial, but also because they are such interesting people. Typical topics for an evening's discussion might be some new pictures recently exhibited in the Hermitage, the latest theories on education and rearing children, a new novel which was read by the whole family, or international events.

An especially frequent guest of the Bugrovs is one of the plant's oldest engineers, Alexander Korotkov, a gray-haired man of average height, whose physical appearance in no way attracts particular attention. He is a friend of Alexander Bugrov's.

In 1917, during the Socialist Revolution, the two, both mechanics at the plant, took part in the storming of the Winter Palace in the fight for a new and happy life.

Ivan Bugrov, the founder of the dynasty, and his grandson George also have revolutionary service to their credit. In 1917 George was a youngster but he went along with the adults who scoured the police precincts in February and freed the arrested workers. In one of the police stations he accidentally discovered a faded sheet of paper covered with the handwriting of some stool pigeon who had reported that "Ivan Bugrov, a worker at the metal plant, is an insolent troublemaker."

The Junior Bugrovs

George Bugrov and I are old acquaintances. I first met him when I was writing an article about the men who designed the Soviet hydraulic turbine which won a first prize at the World's Fair in Brussels.

The shift at the metal plant had ended. A

WORKERS' DYNASTY

Two of the Bugrovs working on a rotor for the Stalingrad Power Station. (Above) Time out for a chat with a family friend.

Boris has been studying evenings and expects to enter the Metal Institute. Here too he follows the precedent set by his father (with glasses).

young worker in clean overalls and rolled up sleeves came over to us. His face looked familiar.

"This is my son Boris," Bugrov Senior said as he presented his son to me. I understood why the youth had seemed so familiar. He was the image of his father.

"What kind of work do you do, Boris?" I asked.

He grinned when he said: "The Bugrov specialty."

"Meaning?"

"Don't tell me you don't know. All the Bugrovs have been assemblers of turbines here."

"You're wrong there," his father interrupted. "Your great-grandfather didn't even know the word 'turbine.' He made the forms for the church cupola castings. And, you know, they still support the vaults of the Winter Palace. What skill!" George Bugrov concluded with a feeling of pride he could not conceal, "and he handed down his ability to his son."

"Which son?" I asked so as not to mix the generations of the dynasty.

"My father, Alexander Bugrov. That man really knew how to work. But his life was almost over before he had a chance to show what he could do. That was at the beginning of the thirties when we were making our first turbines. They were only little things. If only he were with us now to help us build these giant turbines of 300,000 and 400,000 kilowatts! And if he could see his grandson, Boris, he'd be delighted at the kind of work this young man is entrusted with."

Boris was not very communicative when he himself was the subject of conversation. He has been working at the plant for more than six years. Before that he had served in the Navy taking part in the postwar mine-clearing of the Baltic Sea. His childhood was a difficult one: hunger in blockaded Leningrad, evacuation with his mother, irregular schooling. Just before he was demobilized he received a letter from his father in which he wrote, "Your place is at our plant."

Briefly, this is the story of the past five years. Boris has the highest rating as a turbine assembler, he finished evening secondary school and is now preparing to take examinations for admission to the machine-building secondary school. Boris' wife is a telephone operator at the same plant, and their nine-year-old son, a strong little fellow named George, is in the third grade.

There is another representative of the Bugrov family who works at the plant. But she is not engaged in assembling turbines. She works as a nurse's aide in the plant's polyclinic. Slender, with a touch of pink in her cheeks and a shock of golden hair, she is quite a contrast to the Bugrov clan, who are powerful-looking and heavyset. Ludmila Bugrova finished high school recently and intends to continue her studies at the Medical Institute, but for the time being she is working as a nurse's aide to make sure that she really wants a career in medicine. And, of course, she is acquiring practical experience.

But Ludmila has another dream, her cherished one. "I want to travel all over the world. Meanwhile, I'm compromising by going on hikes in the country with my knapsack on my back."

Visiting in the Country

Some of Ludmila's dreams, as I learned, have already come true. I discovered it last autumn when I again visited the Bugrov family. This time our encounter took place not in the city, but at their country home outside of Leningrad. Their cozy little house is situated in a huge dense pine grove, on the shore of a vast blue lake which is edged with high rushes.

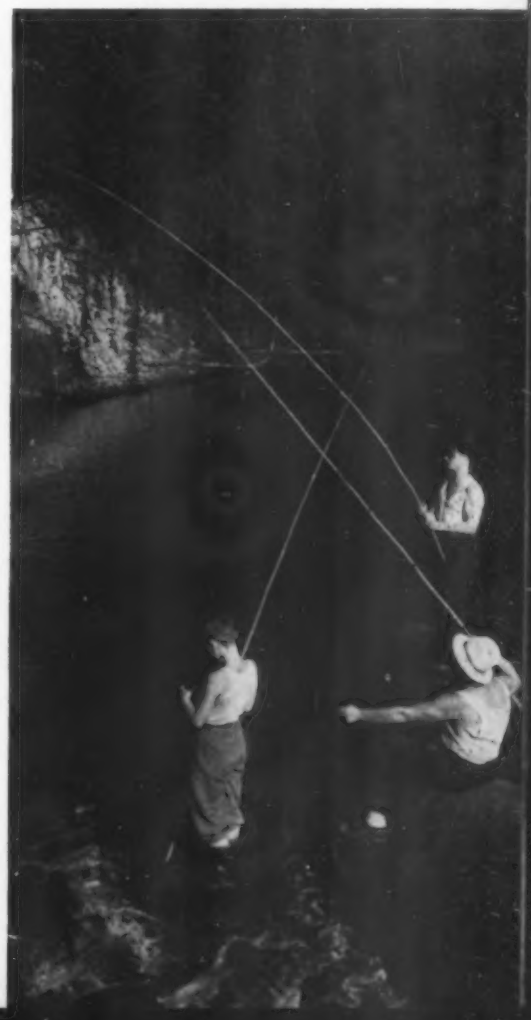
They greeted me like a long lost friend. Passionate fishermen, they handed me tackle and bait and off we went. In the evening we built a fire and ate the most marvelous chowder while we talked.

There was relatively little family news to relate. They had put in an orchard on a plot of land given them by their plant. Boris had received a new apartment in town and had already moved into it. And Ludmila had passed her exams for the Medical Institute. Bugrov Senior, his son and the other workers of his team had finished assembling the last turbines for the Stalingrad Hydroelectric Station.

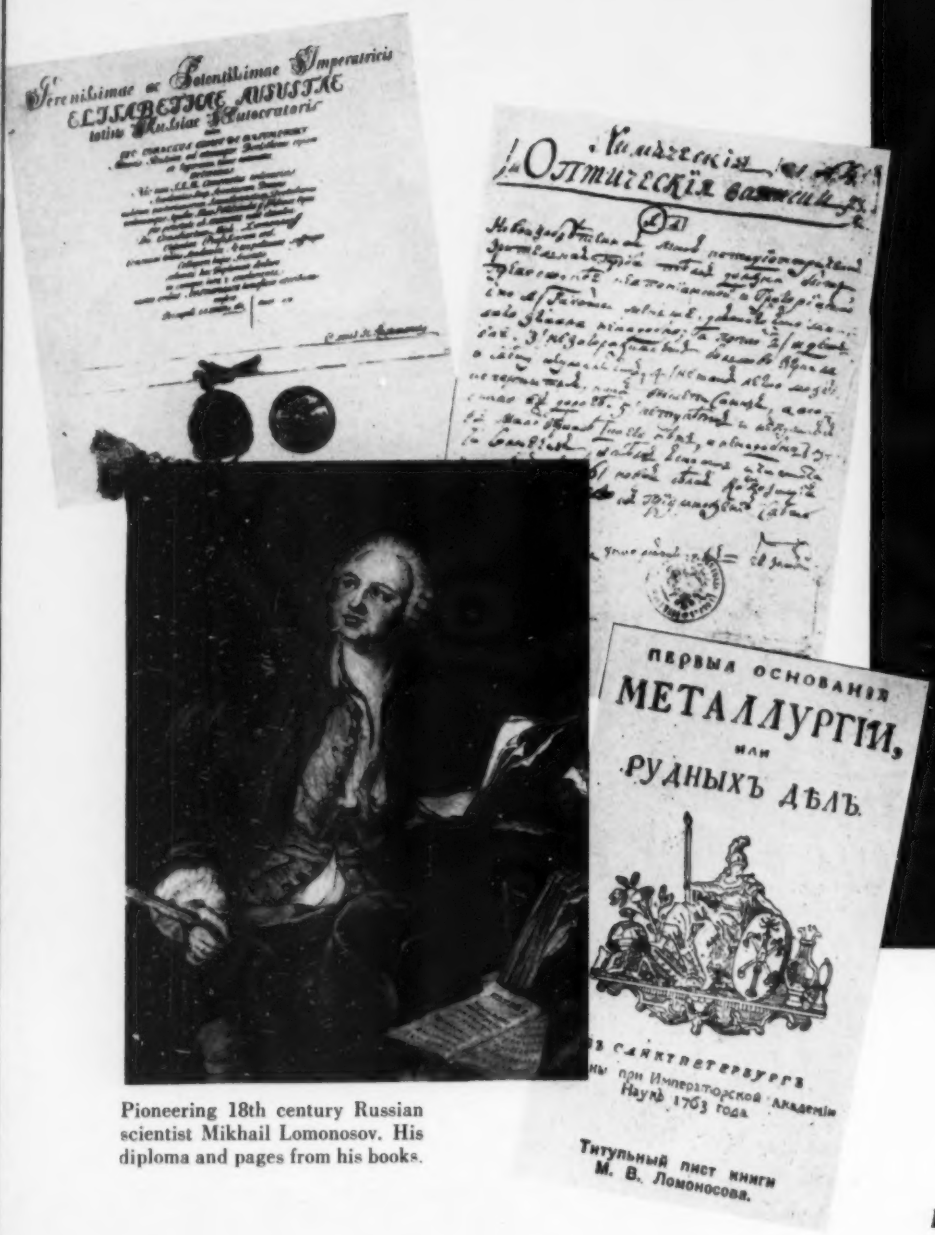
When I was about to leave, George Bugrov said: "If you write about us, don't forget to give our heartiest greetings to the Americans. They're good people and we wish them the best of everything."

The Bugrovs have a cottage in the country outside of Leningrad. It's set in this pine grove.

Fishing in the blue lake which edges their grove. This is a traditional family hobby.



Russian Science



Pioneering 18th century Russian scientist Mikhail Lomonosov. His diploma and pages from his books.

ITS PAST, P

By Oleg Pisarzhevsky

Kliment Timiryazev, biologist, after whom the leading Russian Agricultural Academy was named.

IT WAS NOT until the second half of the 19th century, when Dmitri Mendeleyev discovered the periodic law and compiled his table of chemical elements, that the world became aware of the contributions earlier Russian scientists had made.

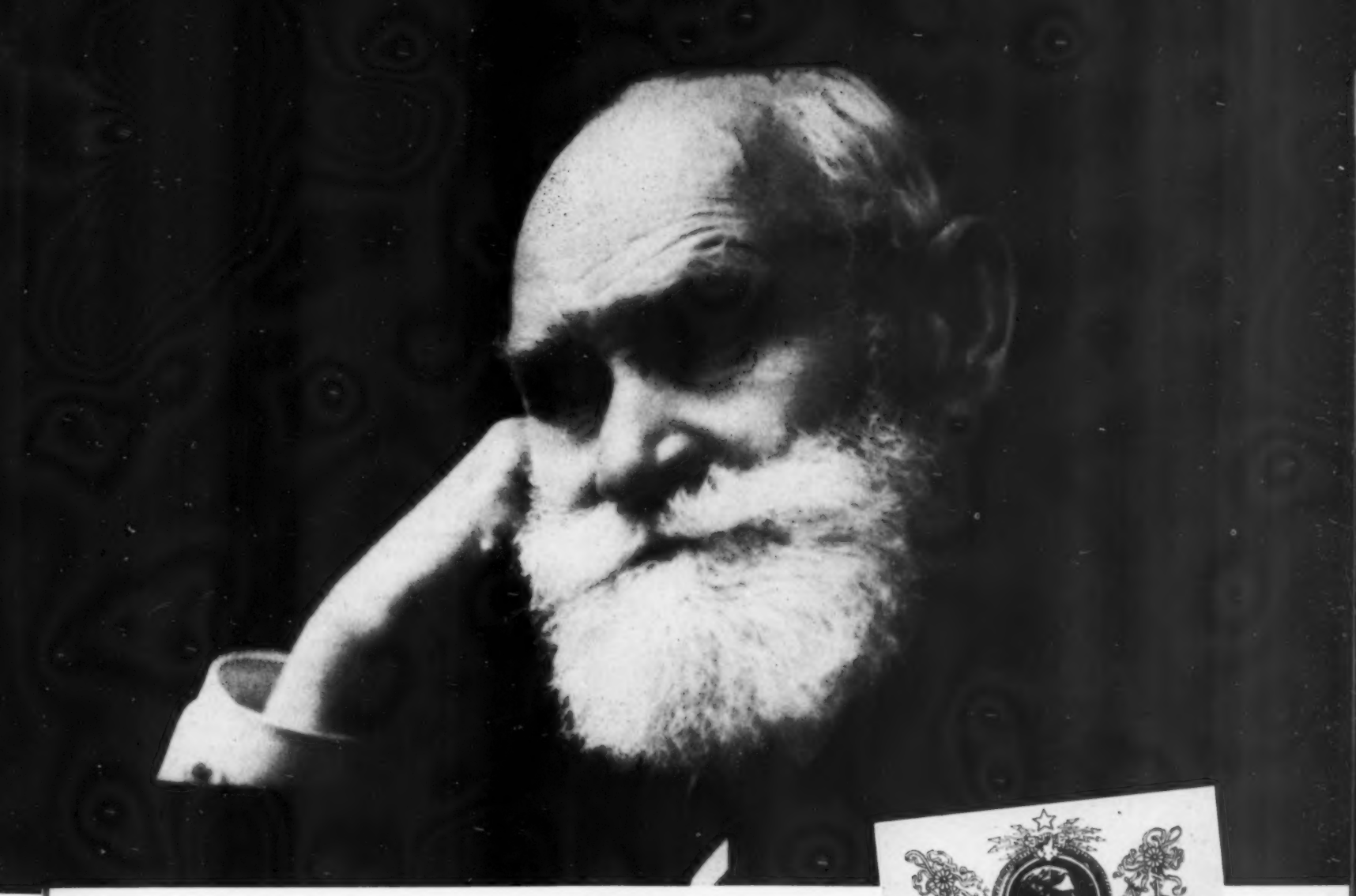
The life and work of Mikhail Lomonosov, for whom Moscow University is named, and in whose memory prizes are awarded for major scientific research in the USSR, illustrates this point. This outstanding 18th century scholar, born in northern Russia, led a full and eventful life of scientific work. His findings in physics, chemistry and electricity were far in advance of his time, but they remained unknown to the scientific world until much later.

Lomonosov's research anticipated the law of the conservation of matter. For this alone, not to speak of his brilliant and wide-ranging studies in fields as varied as oceanography and linguistics, he deserved the world's respect and honor.

Lomonosov's unfortunate obscurity was shared to some degree by another Russian scientist who is frequently called the Copernicus of mathematics. It was he who revolutionized that field of study by founding non-Euclidean geometry. In the early 19th century, there were few people outside of Russia who knew anything about the modest mathematician, Nikolai Lobachevsky, rector of the University of Kazan.

There were others—obscure men of genius, like 18th century Ivan Polzunov—who deserved more recognition in their time. He was a self-taught man who should rank with James Watt as the inventor of the steam engine. Polzunov died unknown and in poverty in what was then the very remote Siberian town of Barnaul.

Mendeleyev's discovery of the periodic law of chemical elements has often been compared to Newton's discovery of gravitation for its stimulating effect upon the sciences. With Mendeleyev Russian science made its public appearance. Subsequently the chemist Alexander Butlerov formulated his theory of the chemical structure of matter which served as foundation upon which to build modern or-



Ivan Pavlov, Russian physiologist, opened an enormously fruitful area of study with his discovery of the conditioned reflex which controls all vital brain processes.

T, PRESENT AND FUTURE

ganic chemistry and the chemistry of polymers. Then at the turn of the century Alexander Popov invented wireless telegraphy.

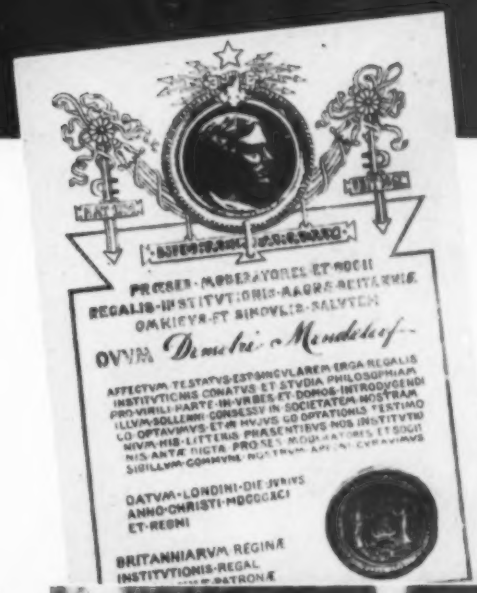
Ivan Pavlov, the Russian physiologist, opened an enormously fruitful area of studies with his discovery of conditioned reflex, the mechanism by which the brain controls all vital processes. Vladimir Vernadsky laid the basis for modern geo-chemistry with his studies in geology and mineralogy.

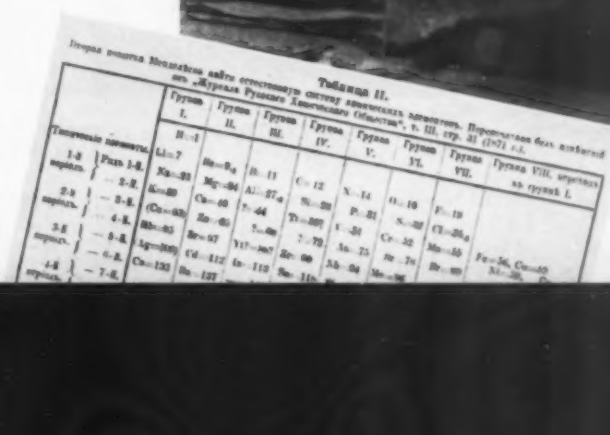
Humanist Science

There are many others whose instruments and writings will have an honored place in that international museum of the history of scientific thought which the world will perhaps some day build. There is the apparatus which Pyotr Lebedev used in his experiments with sunrays to prove the ponderability of light; and the two-horse cart with iron wheels that Vasili Dokuchayev, the founder of modern soil science, drove through the Central Russian steppes looking for ways to make this once fertile land blossom again.

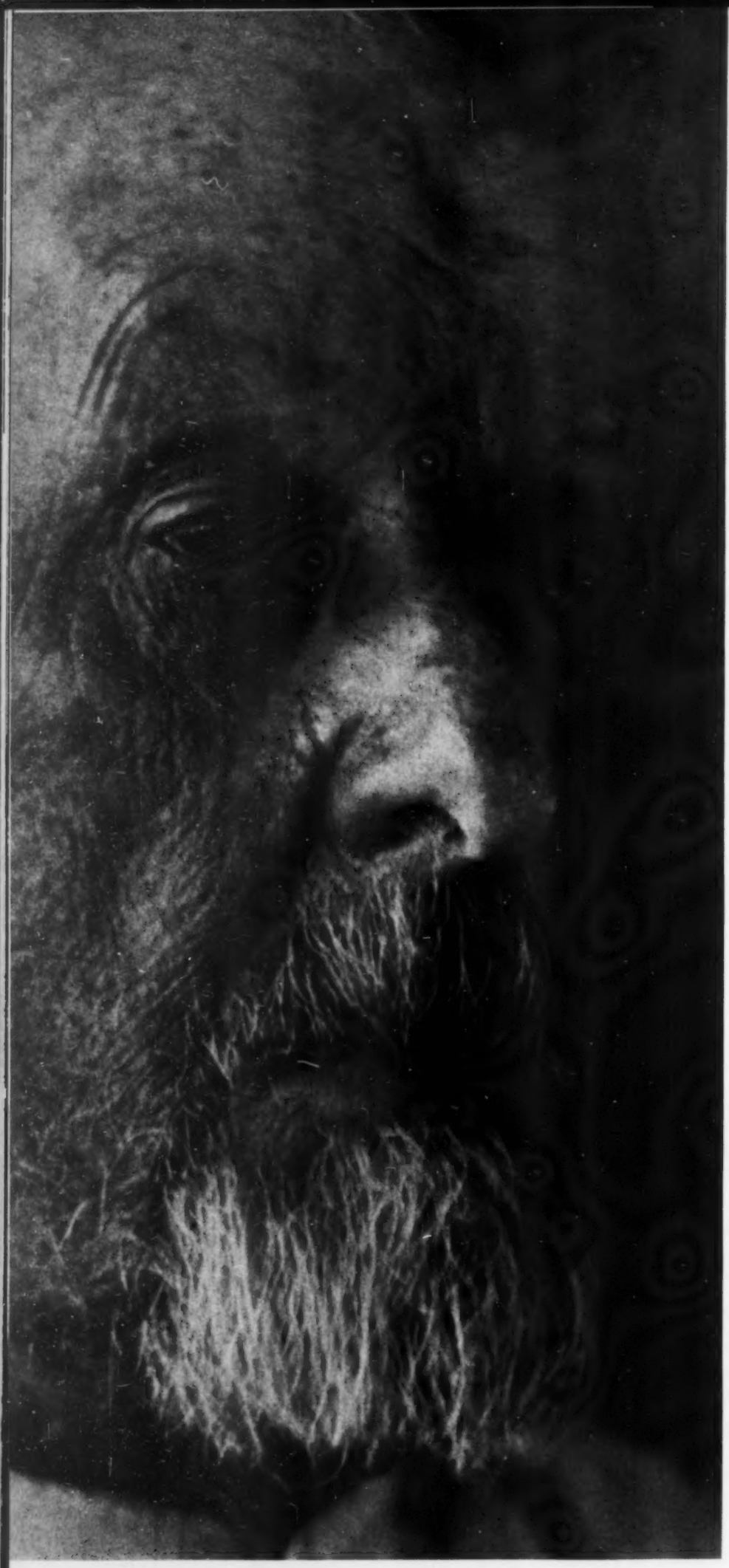
What impelled Dokuchayev, no longer young, to drive through heat and frost across this marginal land chopped up into its millions of tiny peasant holdings? It was a dream he believed in, a dream of ending hunger, an eager dream of an abundance of the fruits of free labor, a passionate desire to provide for the well-being of the people.

This humanism and purposefulness has always been a specific characteristic of Russian science. But in the Russia of the czars the scientist was isolated from the people and their needs. There was no relation between science and the people, or science and the government, or science and industry. These were all separate elements that had no way of complementing and enriching one another.





Dmitri Mendeleyev, the Periodic Table of Elements he discovered and an honorary British diploma.



Konstantin Tsiolkovsky developed the theory of jet propulsion at the turn of the century. His monumental work was published only after the October Socialist Revolution of 1917.

Russian Science

The Socialist Revolution in October 1917 was the catalyst that enabled these elements to combine. Out of the alloy the Soviet sputniks and luniks, the proton synchrotron and the first atomic icebreaker were all built.

It was Vladimir Lenin, the founder of the Communist Party and the Soviet state, who showed the modern world how to create this alloy that transformed Russia from a benighted and poverty-stricken agrarian country into the industrial power it is today.

He recognized that one of the major tasks of the newly founded republic was to win over the scientists and engineers who had been trained in czarist Russia. They had to be impelled by the grandeur of the job to be done. Lenin said to Maxim Gorky at the time: "Speak to the intelligentsia, tell them to come over to us. You say that they sincerely wish to serve the cause that is just. What is the trouble, then? Isn't it we who have taken on the colossal task of putting the country on its feet . . . we who are pointing the way to a decent, a human life, a way out of slavery, poverty, degradation?"

The most important scientists in the country did "come over" and began to work with the people's government. In 1918 the eminent geologist Alexander Karpinsky, President of the Academy of Sciences, wrote that scientists, persuaded by life itself, had come to the conclusion that "pure science" had to ally itself with applied science and technology.

In that same year, Lenin published his "Draft of a Plan of Scientific and Technical Work." This was not merely an appeal by the head of the Soviet government to the Academy of Sciences; it was, more significantly, the first document on long-range socialist planning of a nation's economy. Both pure and applied scientists were asked to outline a plan, as quickly as possible, for the reorganization of industry and the economic development of the country. They had to decide such questions as the most rational distribution of industry, the most efficient type of factory concentration, the most productive kind of power tooling. What scientists were being asked to do—for the first time in any country's history—was to chart the direction of the development of the national economy.

"Dreamer in the Kremlin"

Their first major job was to draw up an overall electric power plan. This first power planning commission which enlisted the aid of many well-known Russian power engineers, was headed by the eminent Gleb Krzhizhanovsky, a future academician and Lenin's comrade-in-arms.

When the power plan was made public, even visionaries like H. G. Wells were skeptical. He called Lenin "the dreamer in the Kremlin." But "the dreamer" dreamed well and ably and

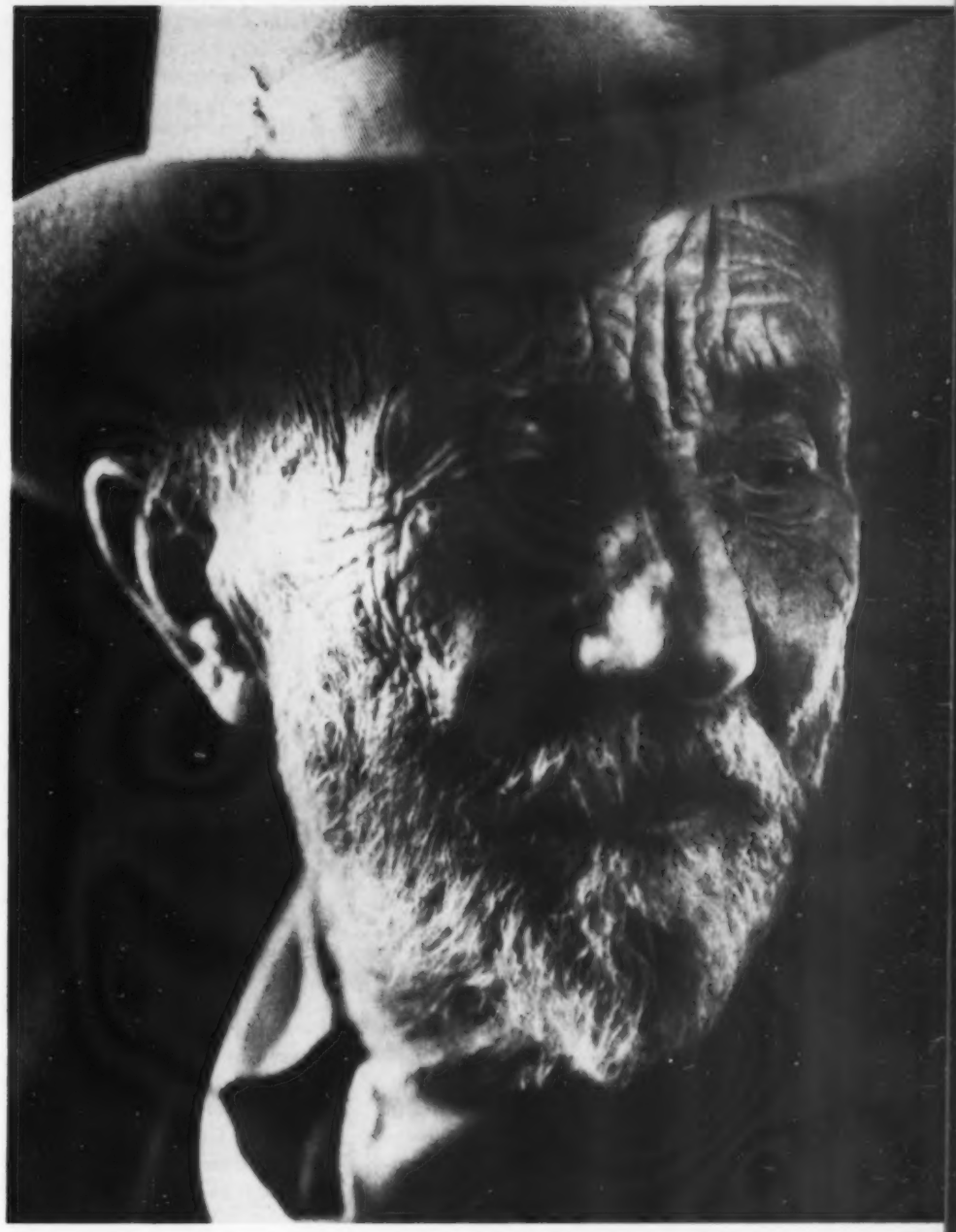
with his eyes wide open. In 1935, fifteen years later, the plan for electrification had almost tripled its scheduled goal, thanks to the devoted efforts of a whole people. And in 1955, the annual power output of the country exceeded the target figures of the original plan almost 20 times.

Lenin's plan for the socialist reconstruction of Russia included, of course, a cultural revolution. Within a brief historical period illiteracy was to be wiped out and thousands of future Lomonosovs, Mendeleyevs and Dokuchayevs trained. New scientific institutes opened everywhere in the country, prompted by the urgent need for trained workers.

Specialized engineering schools were founded as particular industries developed. The Institute of Chemical Technology in Moscow, for example, was founded when the country was beginning to produce its own industrial chemicals. The birth of the Moscow Institute of Machine Tools and Instruments coincided with the manufacture of the first Soviet-made turning lathe of an advanced design, which had the symbolic name "Overtake and Surpass." In the course of study of the Mining Institute a new specialty was introduced when the industry needed mining-mechanization engineers. Experts in the most modern branches of electrical engineering were trained at new communications institutes.

What were the results of this astonishing and altogether unparalleled effort to educate a nation? In old Russia, where education was the monopoly of those who could afford it, there were schools on the college level in only 16 of the largest cities in the central part of the country. At present, there are schools for higher education in 270 cities with branches and consultation centers in 558 other places. There are more than four million students in the Soviet Union today, as compared with 181,000 in prerevolutionary Russia.

The number of specialists with an advanced education has multiplied 21 times since the Revolution. In old Russia there were fewer than 200,000 qualified workers with a higher



The studies of Ivan Michurin, the eminent Russian selectionist, made it possible to direct the growth and development of plants. He created more than 300 kinds of fruit varieties.

Nikolai Semyonov (left) won the Nobel Prize for his nuclear chain reaction theory. He is shown in his laboratory at the Academy of Sciences.

This gigantic radio telescope records radio radiation from the sun and stars.

Experiments on artificial climate at the Academy of Agricultural Sciences.

Russian Science

or a specialized secondary education. There are more than six million working today in one or another productive area. Highly qualified specialists they are in every sense of the word—a new intelligentsia arisen from working class and farm families and dedicated to serve the people.

Many of the most gifted of this new Soviet intelligentsia have gone into scientific research and are enriching the tradition established by Lomonosov and other forerunners. There are more than 284,000 scientific workers in the Soviet Union today—gray-haired academicians and youthful assistants, some brilliantly talented and others run-of-the-mill technicians. Both the number of scientific workers and their methods of thought and work demonstrate that they are products of a new creative humanism—the socialist way of life born of the Socialist Revolution.

Open Doors to Education

The Socialist Revolution expanded the territorial limits of Russian science. Once confined to a few large cities, it now spread to outlying regions that had been hidebound by ancient superstition. Science was brought to the most remote parts of the country by groups of exploring geologists. Medical research began and developed in newly-established centers in the heart of Soviet Asia. Scientists opened schools and laboratories in the country districts. They had, in some places, to create a new alphabet so that textbooks could be written in the native tongue.

Simultaneously with this movement of science to parts of the country long isolated from knowledge and educational opportunity, there was a movement in the opposite direction by young and eager people—from the remote provinces to the university towns in Central Russia, where the doors to scientific knowledge, once closed to all but the very few, had been thrown wide open to all the peoples of the Soviet Union.

When a group of educators from the United States visited the Kazakh University in Alma-Ata not long ago, they expressed amazement at this very normal thing in the Soviet Union —that there were 37 different nationalities represented in the student body.

The growth of scientific education in the Soviet Union and the process by which it was directed to serve the people in all fields of endeavor was a slow and difficult one. But the fruits of this growth have been rewarding enough.

The Soviet physicist and chemist Nikolai Semyonov, a Nobel Prize winner, developed the theory of branching chain reactions. Working from his theory, Soviet scholars Yakov Zeldovich and Yuly Khariton made the first basically correct calculation of the nuclear chain reactions for the fission of uranium, which immediately preceded the experimental construction of the first nuclear reactors.

Pyotr Kapitsa and his co-workers made fundamental studies of the behavior of matter at temperatures closely approaching absolute zero which have been used by Academician Nikolai Bogolyubov for a new theory of superfluidity and superconductivity.

In the thirties the physicist Pavel Cherenkov discovered the phenomenon now known as "Cherenkov radiation." This opened a new page in the optics of super-velocities, important for determining the properties of atomic nuclei and for devising super-sensitive instruments to detect nuclear radiation. For discovering the phenomenon and elaborating the theory Cherenkov and two other Soviet scientists, Igor Tamm and Ilya Frank, were awarded the Nobel Prize in 1958.

Vladimir Veksler worked out a new principle of acceleration of charged particles which multiplied the limits of attainable energy a thousand times. The 10 billion electron volts synchrophasotron, the world's largest accelerator, works on Veksler's principle.

The most striking of Soviet scientific achievements is, of course, the successful launching of the three sputniks and the three luniks. They were the result of complex development and integration of many branches of physics, chemistry, radio engineering and cybernetics.

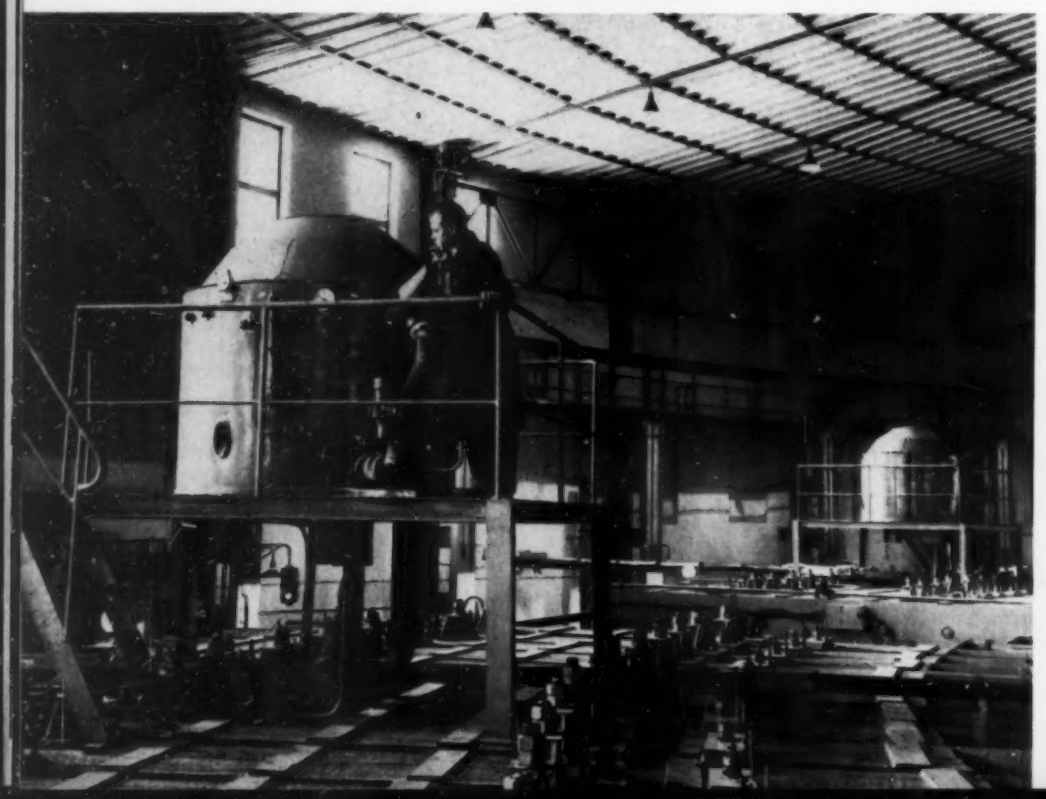
Today's Research Problems

The Soviet Union, by virtue of the fact that it is a socialist state, has the unlimited potentials—both human and material—for the steady creative growth of science and technology. The amount allocated in the national budget for scientific research is continually rising. Expenditures for science in the 1950 budget were 5.4 billion rubles; in the 1958 budget, they rose to 17 billion. In 1960 they will total 32.6 billion, a rise of 15.4 per cent over last year's figure.

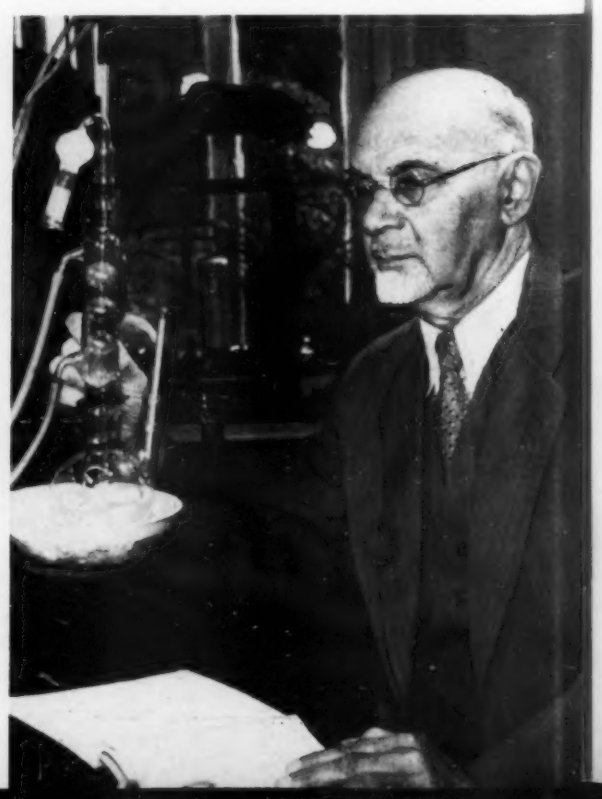
Scientists themselves participate in delegating these huge funds for research. Basic research has priority. Emphasis is on intensified study of the sciences which are fundamental to all of modern knowledge—physics, mathematics, chemistry and biology.

In physics, aside from work connected with the construction of atomic power stations and units, Soviet scientists are doing research on controlled thermonuclear reactions. In these reactions, energy is obtained not from the fission of the nuclei of uranium and thorium, of which there are limited supplies, but by the formation of helium from the nuclei of such light elements as deuterium, which

The laboratory of the Joint Institute of Nuclear Research in the town of Dubna, where the world's largest synchrophasotron generating 10 billion electron volts is used for atomic research.



Academician Alexander Arbuzov has been doing successful research on the chemistry of high polymers.



At the headquarters of the USSR Academy of Sciences the Presidents of the Academies of Sciences of the national republics meet to coordinate their research. Standing on the right is Alexander Nesmeyanov, President of the USSR Academy. Vasili Kuprevich of the Byelorussian Academy is speaking.

are widespread in nature. Once this problem is solved there will never be any need to search for new sources of energy.

The expanding use of semi-conductor instruments calls for greater experimental and theoretical research in the field. More studies are required for new work in radio and electrical engineering related to the single high-voltage power grid that will ultimately tie in all Soviet power lines—research on long-distance electric transmission lines, for example, and on new types of electronic computing machines.

Intensive development of chemical research is stressed in the current seven-year plan. This is necessary for more reasons than the quantitative growth of the valued and varied output of the chemical industry. In the USSR the development of chemistry means not only new substances and materials for industrial and consumer use, but a radical change in the technology of production that will accelerate the general rate of economic growth. Soviet scientists, for example, are working on fuels which can be burned even after their most valuable chemical elements are extracted.

A striking example of the complex technological use of minerals is the process used by the Volkhov Aluminum Plant. This plant does not derive its aluminum from bauxites, which is still in world-wide use, but from nepheline. But in addition to aluminum, alkalies (soda and potash) are extracted as well and the residue is used to manufacture high-grade cement.

Mendeleyev's dream of the underground gasification of coal, of the transformation of petroleum into a universal chemical raw material, would seem to be coming true.

The widest horizons—almost literally—are open for high-speed electronic computer development. Without these amazing machines, moon-flights could not be considered. They are invaluable in the physics of the atomic nucleus and in innumerable other research areas. Soviet scientists are now trying to develop faster computers and to adapt them to the most varied uses in science and technology.

In biology, aside from the direct applications of the science to crops and livestock, research is proceeding on heredity, on the most common disabling and killing diseases and on means of prolonging human life.

These and many other important problems posed not alone by science, but by life itself, will be solved in time, and a time not far distant, if we are to judge by the work which Soviet science has already done in a brief four decades.

Researcher in the Institute of Oncology and Cancer of the Academy of Sciences.

Digging a drainage canal on the Bolshevik Collective Farm in Central Russia. By 1955 the farm will have added another 5,000 acres of reclaimed land to its 12,500-acre holding, all of which was totally unsuited for cultivation thirty years ago.

Akim Gorshkov, the farm's chairman for 30 years, is also one of the region's deputies to the Supreme Soviet of the Russian Federation.

The reclaimed land yields rich fodder crops for the farm's large herds of livestock, which account for 50 per cent of its annual income.

IT WAS ONCE SWAMP COUNTRY

By Mikhail Sukhanov

Photos by Igor Vinogradov

Agronomist Svetlana Smirnova, in charge of all field work, keeps the farmers informed of the latest scientific methods used in agriculture.

Stableman Boris Levochkin, one of the Bolshevik Farm board members, is very vocal and active in helping to manage the farm's affairs.

Bookkeeper Semyon Smirnov's job is getting harder each year, with the farm's annual income steadily climbing to the five-million ruble mark.

VLADIMIR REGION, which lies between the Klyazma River and the Oka, a tributary of the Volga, is very old land. It is heavily wooded country with railroads and highways cutting through the dark forest tracts like endless corridors.

Mikula Selyaninovich, the hero of a Russian legend who sowed giant crops, was supposed to have been born in this region to the northeast of Moscow that for centuries raised little else but marginal rye crops, barely enough to last through the year.

The ash-like, sandy soil was basically rich but it needed intensive working and large amounts of fertilizer. For the pre-revolutionary Vladimir peasant with his small holding and his primitive tools proper care of the soil was virtually impossible. Without fertilizer, the poorly-tilled land became exhausted and the swamps, which were an ever-present threat, took over.

This is lowland country with slow flowing rivers and quiet backwaters that in the spring floods leave a residue of swamped land.

It was here, amidst the swamps and woods, that seven poor farm families from the village of Narmuch founded a collective farm thirty years ago and named it the Bolshevik.

They elected Akim Gorshkov chairman of the farm's managing board. The son of a farm hand, and a farm laborer himself, Gorshkov, a Communist, had fought for the Revolution and had defended its gains with gun in hand.

These first collective farmers went out to the woods near the village of Narmuch, cut the trees, pulled the stumps and cleared new land for tillage.

Looking back 30 years at those pioneering days, Akim Gorshkov relates:

"Our tiny collective farm received a loan from the government. We bought horses, plows and drills and began to build our houses. It was hard at first, but the members of our collective were men and women who had seen plenty of hard times before. When things were especially difficult they encouraged each other. Often, after a hard day's work, I remember that we'd get together in one of the tents—this was before we got our houses put up—and we'd sit there around a smoky oil lamp talking—dreaming would be a better word—of fine and spacious homes, of electric power and machines tilling the land, of fruitful acres stretching on all sides."

A Dream Comes True

It took time and backbreaking work and the great power of that dream to produce the rich and prosperous farm that the Bolshevik Collective Farm is now.

Today the farm has 12,500 acres, granted to it by the state without cost and in perpetuity. About 1,750 acres, wrung from the swamps and forests, is plowland. The rest is meadow, hay and woodland.

The tractors, combines, trucks and other machines owned by the farm have almost completely replaced hand labor in the fields. Bulldozers and excavators are now used for consistent reclamation work. In the past two years about 500 acres of swampland have been turned into arable land.

Fertilizer is used plentifully. The farmers learn the best growing methods from highly trained agronomists like Svetlana Smirnova who gives regular courses to keep them up to date.

All this shows up in the farm's very high wheat and corn yields. Corn is now raised in bumper crops; it grows thick and tall. It was a new crop for the region and took special care. But this kind of special care is routine now. Vegetables, not grown at all before, are now raised the year round, in the open fields in summer and in hothouses in the winter.

Fodder corn, any farmer will tell you, is often a decisive crop. And so it has turned out to be for the Bolshevik Collective Farm. It made possible highly productive livestock breeding on a large scale. As a matter of fact,

AMONG THE FARM'S AUXILIARY BUILDINGS ARE TWO FLOUR MILLS, A SAWMILL, CARPENTRY AND MACHINE SHOPS, BESIDES MODERN CATTLE SHEDS AND FEED KITCHENS.

Along with the land reclamation program, the Bolshevik collective farmers are rapidly building new houses with modern conveniences. This is part of their own seven-year program which ties in with the huge national plan to provide seven million houses in rural areas during the 7-year plan.

◀ A year's earnings and an interest-free loan made it possible for Alexander Savonin to present his bride with a new house completely furnished.

IT WAS ONCE SWAMP COUNTRY

Sasha Gorshkov likes his new house so much that he forgot to put up the usual battle when his grandmother announced it was bath time.

livestock breeding is now the farm's principal occupation. Cows, sheep and pigs, as well as poultry account for more than 50 per cent of present income. The milk yield per cow has better than doubled in the last half dozen years.

As is true in field work, the machine has replaced much of the laborious hand chores that used to go to raise stock. Automatic bowls, mechanical feed conveyers, electric milkers and mechanical feed kitchens are used in the cattle sheds. Fluorescent lamps are used in the poultry houses. Electrically-operated apparatus is used to process grain, run the two flour mills, the sawmill, the carpentry and machine shop.

It is a long way from the forty rubles, the three cows and the few hand tools which the original seven founding families pooled when they set up the collective farm thirty years ago. The farm membership is 220 families today, and its operating fund is five million rubles.

Thriving Farm Village

Not at all unique in the general run of member farmers is Praskovia Tsybakova, who works in the dairy division. Her milking record is one of many that explains the farm's continuing prosperous growth. Last year she got nearly 1,300 gallons of milk from each cow; this year she expects 1,400.

The farm's prosperity affects the well-being of each member very immediately and directly. Simple proof of this is the farm's accounting figures for the past five years, during which time the annual income of the farm as a whole more than trebled—from 1,331,000 to 4,500,000 rubles. The earnings of members during the same period multiplied eight times over—from 218,000 to 1,600,000 rubles.

Take a stroll through the farm village and you see additional proof of thriving growth on every hand. At the far end of the main street is forest, a reminder of the heavy woods and swamp out of which the collective farm was carved three decades ago.

Along the village street, shaded by poplars, stand slate-roofed cottages built of big logs ornamented in the Russian style. The large buildings house the community center, kindergarten and school. The community center, or the club, as the farmers call it, has a 5,000-volume library, an auditorium where both amateur and professional theater groups perform and a radio station.

The public buildings were built and are maintained out of collective farm funds owned in common. The farmers' cottages, equipped with major utilities, running water and electricity, were also built by the collective farm originally and then sold to individual members on installment loans with no interest charged.

Housing loans are the most usual, but occasionally the farm board will be approached for a somewhat less usual type. Akim Gorshkov tells of this one recently made to Alexander Savonin.

Alexander got married this year and in preparation he'd built and furnished his own home. As collective farm driver, he had earned nearly 17,000 rubles in cash in addi-

tion to a large quantity of produce in kind. For house and furnishings he spent 12,000 rubles of his own money and took a loan from the board of 10,500 rubles repayable in 10 years, this without interest.

When it came to the wedding expenses, he'd just about reached the bottom of his pocket. But both he and his future bride wanted to get married in the traditional and very hospitable old Russian style. The farm board thought Alexander had a point when he asked—how many times in one lifetime does a man get married? They voted him the additional loan.

Farmer-Legislator

In addition to his job as farm chairman, Akim Gorshkov is a deputy to the Supreme Soviet of the Russian Federative Republic —a tribute to his three decades of tireless work on behalf of the Bolshevik Collective Farm.

As deputy from this farm area he is concerned with developing the region as a whole. His experience with the Bolshevik Farm, particularly with swamp reclamation, serves him in good stead.

Here is a pertinent extract from a speech he recently made at a parliamentary session in the Grand Kremlin Palace with reference to drainage of the Meshchera lowland in Vladimir Region:

"There are great potentialities for raising farm output in the Meshchera lowland," he said. "Preparatory work for developing this land has already been done and the plan for reclamation all worked out. The drainage project will bring under cultivation 170,000 acres of fertile virgin land and permit us to make better use of another 350,000 acres of long fallow low-yield land. Present estimates indicate that we can recoup all the cost of draining these lowlands in no more than three to four years."

This ambitious reclamation project was incorporated into the seven-year plan for the region, a plan which the Bolshevik Farm helped to work out.

Plans for the Future

The farm has its own development plan for 1959-65, besides. The draft was originally prepared by the farm board with the active collaboration of the farm agronomists, zootechnicians, the accountant, mechanics and other specialists. All the reserves and possibilities for expansion were carefully discussed. The draft was then presented to the general farm membership at a series of meetings. It was amended, a number of new ideas and suggestions were incorporated and the final version was then voted upon.

The Bolshevik Collective Farm took the responsibility for draining and clearing some 5,000 acres of swampland. The job of excavating and building drainage canals has been under way for some time now.

At the same time the collective farm, with the help of scientists from the Moscow Timiryazev Agricultural Academy, the oldest and one of the country's leading agricultural schools, is preparing a soil map which plots the chemical and physical properties of the various soils so as to use the land to maximum advantage.

Part of the newly-cultivated land has been turned into orchard to increase the fruit crop. The added acreage that has been reclaimed and more scientific use of the older acreage are expected to more than double the yield of wheat and vegetables as well as corn and forage crops for the growing herds of livestock.

Larger farm output will mean larger incomes for individual farm members. Even the most modest estimates show that their earnings will double by the time the seven-year plan is completed.

The ancient villages of this once poverty-stricken central Russian region are being re-created. During the past few years several small adjacent collective farms have merged with the Bolshevik. Under the seven-year plan these villages will be rebuilt from the ground up by these hardy people who have transformed swamp and wasteland into flourishing farm lands.

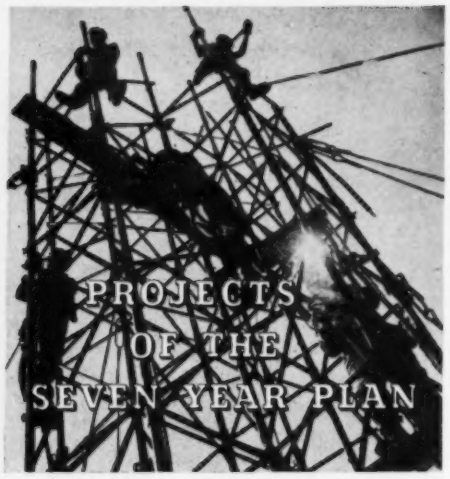
A staff of teachers and nurses provide daytime care at the farm kindergarten for the preschool age children of the collective farmers.

The village club, which also houses a 5,000-volume library, is the center of community activity. The farmers get together here for a meeting of one of the amateur art groups, an evening of music, a movie, or perhaps just to have a lively discussion with a neighbor on a current book of interest.

Most people who come to the library know what they want, but those who don't can always rely on Lydia Skopobogatov's infallible judgment.

Among the most popular entertainers at the community center is the amateur folk instrument orchestra made up of local collective farmers.

Experienced construction worker Pavel Shevchenko is head of suction dredge operators' team.



By Boris Yurin

ALMOST two hundred years ago Academician Pyotr Inokhodtsev first noticed that near the old Russian city of Kursk the compass needle, instead of pointing North, swung off violently and incomprehensibly. Later on it became apparent that this strange reaction was caused by great iron deposits that came to be known as the Kursk Magnetic Anomaly.

Not much attention was paid to the buried treasure in technically backward prerevolutionary Russia. Only occasionally did the magnetic anomaly attract attention, when the compass needles of scientists exploring the area began to oscillate in a curious way.

The tapping of the rich iron ore reserve of the Kursk Magnetic Anomaly was first projected by Lenin, founder of the Soviet state. He envisaged the great potentialities of the region for industrial development.

The initial step taken was to search out those areas where the ore lay relatively close to the surface. As the exploration continued, the deposits proved to be so vast that even to this day no one yet knows how extensive they are. Actual discoveries to date lead geologists to believe that the Kursk Magnetic Anomaly is the world's largest store of iron ore. Some estimates place it at 700 billion metric tons. But yesterday's estimates may be wrong tomorrow because new geological surveys keep adding to the former discoveries.

Extensive preparatory work had to be done before extraction of ore started in earnest. Every year now brings new advances in unearthing the countless treasures hidden in the Kursk soil.

Two Major Events of 1959

The seven-year plan provides for the development of the Kursk Magnetic Anomaly as a large-scale mining industry complex. The barren steppe with small farm villages here and there is rapidly changing its age-old appearance.

The first year of the plan, 1959, was marked by two major events in the history of the Kursk Magnetic Anomaly. One was the completion of the South Korobkovsky mine and ore concentration plant in the area of the Stary Oskol deposit. Ore is extracted here by the underground method, and the annual capacity of the mine is up to three million tons. The miners and plant workers live in the new city of Gubkin, named after the prominent geologist Ivan Gubkin who did a great deal of research on the Kursk Magnetic Anomaly.

The first ore shipment from the South Korobkovsky mine was made in April. And late in December a new success was announced—the extraction of ore was begun in the Lebedinsky quarry built nearby on the same Stary Oskol deposit. The ore seams here are closer to the surface than at the South Korobkovsky mine and the content of pure iron is higher. The quarry is located on the banks of the Oskolets River and the ore is mined by the open-pit method.

When the miners began working, nearly 300 feet of sand, clay and limestone lay between the ore and the surface. They had to haul out more than 30 million cubic yards of soil. By the end of the year the 15-foot seam of ore had been laid bare.

The ore mined at the Lebedinsky quarry is so rich it needs no dressing and is shipped directly to the iron and steel plants. During 1960 an estimated 1.5 million tons will be mined here. By 1965, the concluding year of the seven-year plan, the annual output will be six million tons. More than 50 railroad trains daily will be hauling the iron ore away from the quarry.

IRON ORE by the BILLION TONS

Lebedinsky quarry on the Oskolets River, where ore is mined by the open-pit method. A layer of 300 feet of earth had to be removed to uncover a seam so rich that the ore does not even need dressing.

South Korobkovsky mine, the first major project of the 7-year plan built to tap the Kursk ore.

New Deposits Discovered

Accessible deposits are constantly being uncovered in the Kursk Magnetic Anomaly. Work is now in full swing at the construction site of the Mikhailovsky quarry where the ore will be mined by the open-pit method. It will be completed in 1960, one year ahead of the original schedule.

A group prospecting during the summer of 1958 found a deposit estimated at 10 billion tons near the village of Yakovlevo on the highway between Moscow and the Crimea. This is more than two and a half times greater than all the reserves of the famous Krivoi Rog Basin in the Ukraine, which has been worked for more than 75 years. The Yakovlevo ore has 62 per cent of pure iron. Incidentally, the ore from the Ruhr Basin, which feeds the whole of the West German steel industry, has only 26 per cent.

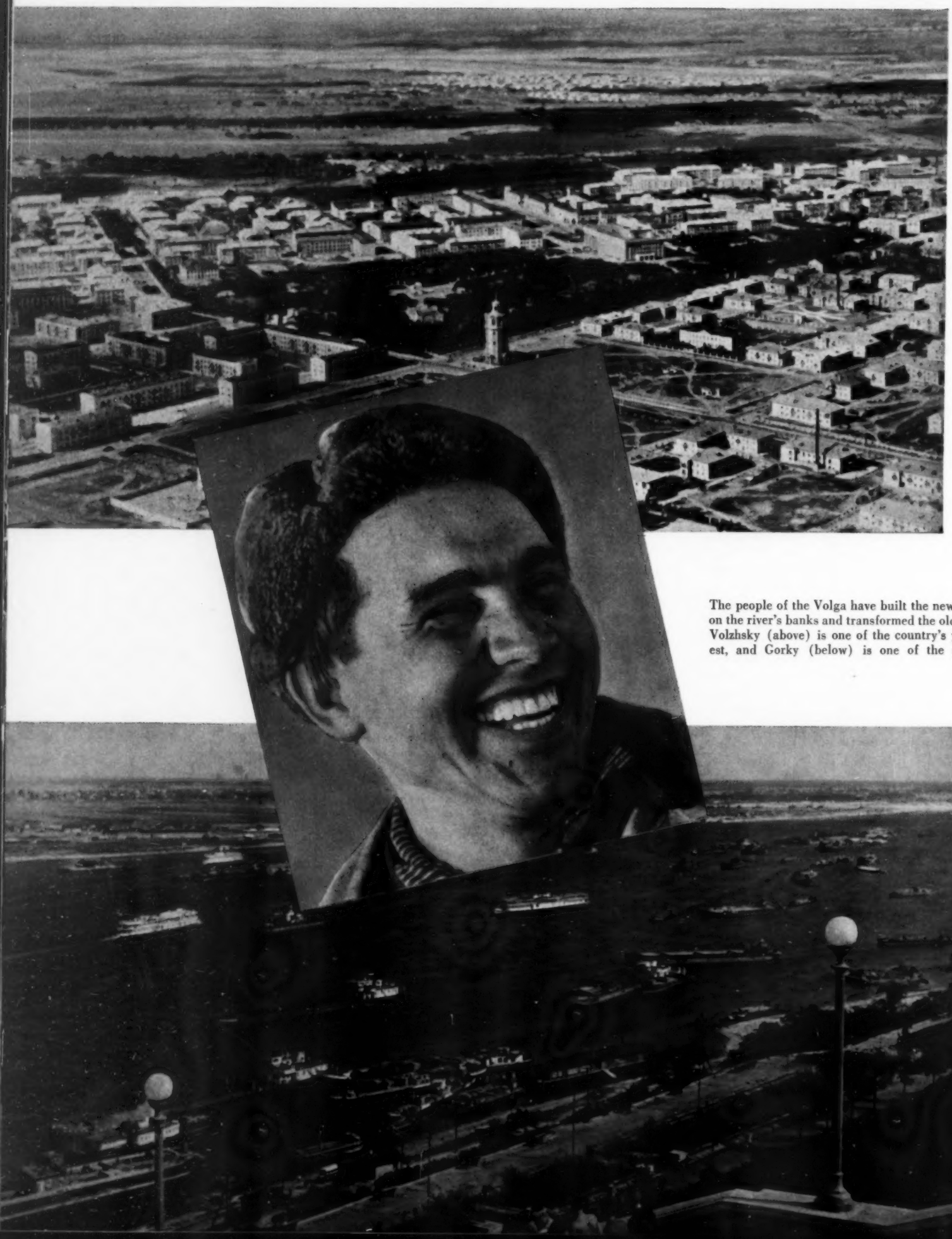
Quite recently prospectors uncovered the Gostishchevo deposit, which is even richer than the nearby Yakovlevo. There are other deposits—the Khokhlovskoye, Olkhovatskoye, Teterevinskoye, Malinovskoye, Korochanskoye and Shebekinskoye—which have been charted by geologists and are awaiting miners to start ore extraction.

The Kursk Magnetic Anomaly will be supplying ore to the Novo-Lipetsk Iron and Steel Mills going up close by. The capacity of this new plant will equal that of Magnitogorsk in the Urals, the country's largest. In the near future the Kursk Magnetic Anomaly and the Novo-Lipetsk plant will be the major suppliers of metal for the central and southern regions of the European part of the Soviet Union.

South Korobkovsky miners live in the nearby city of Gubkin, named for the geologist who did much research on the Kursk Magnetic Anomaly.

The Novo-Lipetsk Iron and Steel Mills now being constructed near the Kursk Magnetic Anomaly will be the major metal suppliers for the central and southern regions of the European part of the country.

THE GREAT RUSSIAN RIVER VOLGA



The people of the Volga have built the new cities on the river's banks and transformed the old ones. Volzhsky (above) is one of the country's youngest, and Gorky (below) is one of the oldest.

By Vadim Pokshishevsky
Professor of Geography

FOR 2,500 MILES the Volga flows through lands that have been inhabited by Russians since time immemorial. It is the "Mother Volga," the "Bountiful Volga" of Russian legend and folklore. Its majesty and beauty have been extolled in song and story, its charm has been captured by artists on their canvases and by writers in their books.

More than a quarter of the Soviet Union's total population lives in the Volga basin, and it is now one of the most highly developed regions of the country.

The Volga's influence upon the entire life of the nation has been as profound as that of the Mississippi in the United States. The great Russian river is more bountiful and beautiful than ever today by virtue of the changes wrought these past decades. A trip down the Volga from its source to its estuary reveals a living panorama of progress. Both industry and farming on its shores have been altering so rapidly, so completely and on so grand a scale that this seems a new land with every visit.

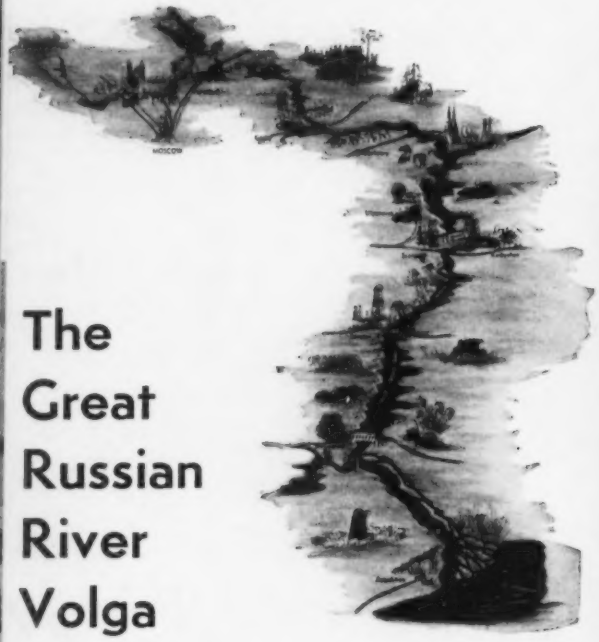
Trip Begins in Moscow

The Volga has its source in a wooded elevation midway between Moscow and Leningrad. Its upper reaches are linked with these two major Soviet cities by rail, highway and water.

A trip down the Volga usually begins at one of the piers on the Moscow River in the nation's capital. Before a ship can reach the Volga it must be raised 120 feet in the locks of the Moscow-Volga Canal completed in 1937. It is deep enough for lake-size ships and is equipped with fast-operating mechanized locks and automatic signal systems. This is a busy artery accounting for about one-tenth of the country's river freight traffic.

Along with the canal, large reservoirs were built to supply fresh water to Moscow and nearby cities. To augment power supply, several hydroelectric plants were also built on the upper Volga, but they are of com-

The Great Russian River Volga



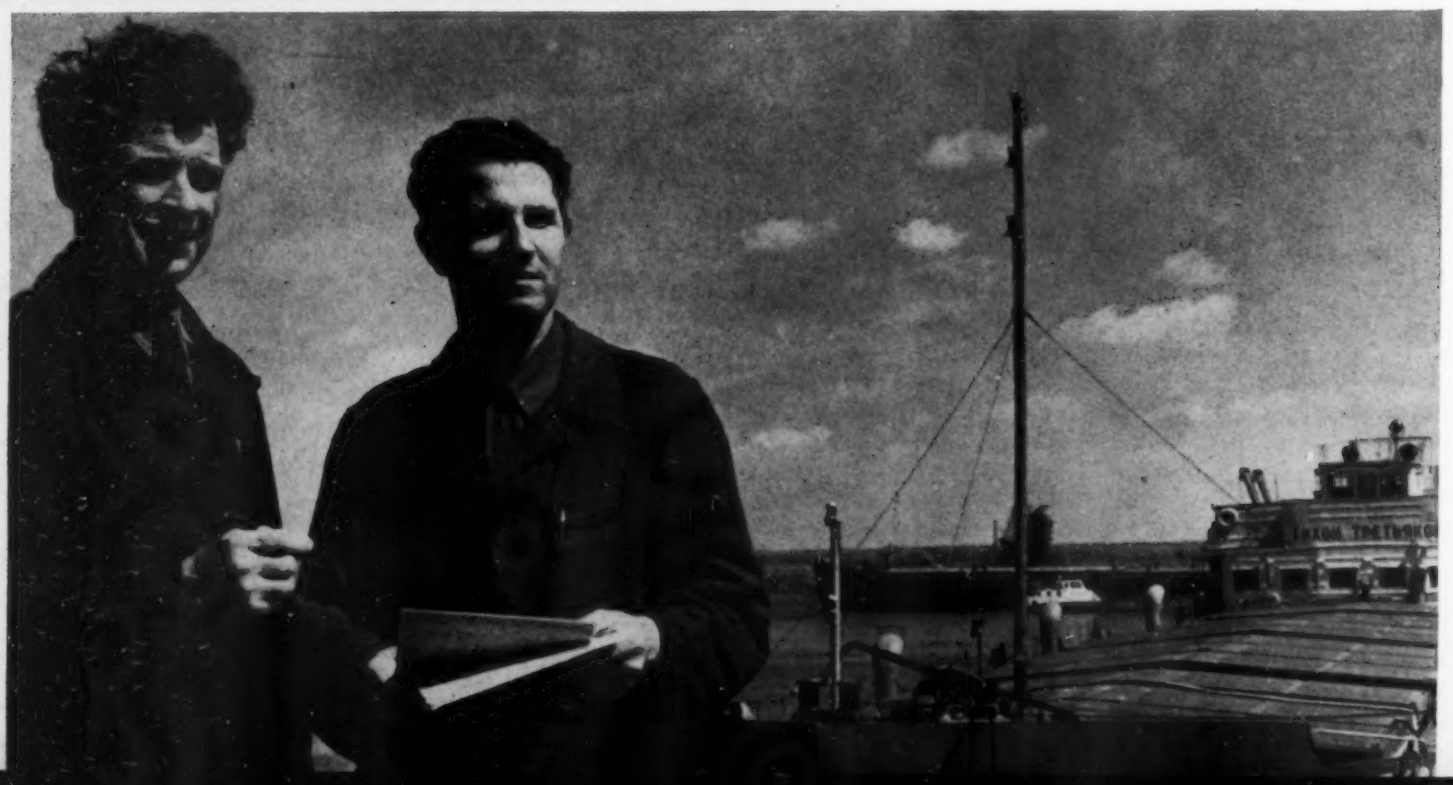
Gorky is a bustling city of varied industry. Its 30-year-old auto plant mass-produces the *Volga* cars.

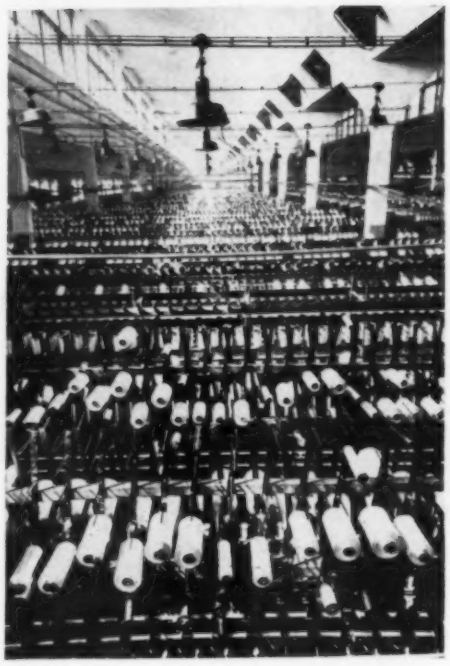
paratively small capacity compared with today's giants.

Emerging from the canal, ships sail along a stretch of hilly, wooded banks. The Volga flows generally west to east and then turns to flow southeast to south.

It was in this region that several medieval Russian princedoms merged into a single state which later united all other Russian lands under the Moscow government. It was also in this region that ancient crafts and trades laid a foundation for subsequent industrial development. Before the Revolution more than a third of the country's industry was concentrated here, and geographers called this region the Industrial or the Old Industrial Center.

Tankers like the *Tikhon Tretyakov*, named after a shipworker, dock at the 100-year-old Sormovo yards.





Kalinin is one of the oldest textile centers but now it also makes synthetic fibers and chemicals.

Only 17 years ago heroic Stalingrad lay in ruins. Now it is a new city of wide tree-lined streets.

The Old and the New

This region has played a most crucial role in the industrialization of the entire country. Scores of large factories and plants were built here in Soviet time, the engineering and chemical industries growing with particular speed. The machinery and equipment manufactured in this region go to every part of the Soviet Union.

The new trend in industrial development is evident in a city like Kalinin—its old name was Tver. This ancient city on the upper Volga, formerly known as a textile center, now manufactures railway cars and its newly-built chemical factories turn out rubber goods, synthetic fiber and artificial leather.

Farther downstream lies the city of Kimry, whose ancient cobbler shops have grown into big shoe factories.

As we continue our trip down the river we become increasingly conscious of the fact that the old and the new are curiously interwoven all along the upper reaches of the Volga. Here is the very modern hydropower station, one of the many projects of the Volga cascade, adjoining the city of Uglich with its carefully preserved ancient churches and other architectural relics of the past centuries. They stand in striking contrast to the nearby engineering plant that turns out bulldozers, suction dredges and other big machines. Uglich also manufactures parts for wrist watches and has a modern creamery famous for its cheeses.

The old city of Rybinsk is known for the river ships built at its new docks. It also has a huge new plant that manufactures printing equipment.

Yaroslavl, famous for its ancient architectural monuments, has grown into a large industrial center, and now has a population of more than 406,000. In addition to its textile industry, traditional for the upper Volga, it has new plants manufacturing heavy trucks, tires and paints.

The next cities downstream are Kostroma, a textile and machine-building center; Kineshma, with chemical and textile plants; and Balakhna, with spreading wood-pulp and paper mills that get their raw materials from forests beyond the Volga. Then comes Gorky, the largest of the Volga cities, with a population of 942,000.

At Gorky—old Nizhni-Novgorod—the Volga is joined by the Oka, one of its major tributaries. From that point onward the river is more than a mile wide. The high bank where Gorky's ancient Kremlin stands, dating back to the 13th century, commands a wide view of the distant forests beyond the Volga, of the port below and of the river junction.

Nearing completion at Stalingrad on the Volga is the world's largest hydroelectric power station.

The tractor plant in Stalingrad was built in the early 30's with the help of American technicians.

The Great Russian River Volga

THERE ARE BEAUTIFUL PARKS IN EVERY VOLGA CITY, WITH OLD SHADE TREES AND COLORFUL FLOWER BEDS.

IN ANCIENT UGLICH, ON THE UPPER VOLGA, VENERABLE CATHEDRALS NUDGE A MODERN HYDROPOWER PLANT.

Gorky has scores of very large plants, the most famous among them are the Sormovo shipyards founded more than a hundred years ago, and the auto plant built less than 30 years ago which makes the Volga and Chaika cars that were displayed at last year's Soviet Exhibition in New York.

A whole galaxy of satellite cities and towns, whose industries are coordinated with those of Gorky, have grown up around it in these past decades. Bor is a large-scale glass producer; Pavlov manufactures buses and parts for tractors; Dzerzhinsk is an important chemical center. This industrial network is very favorably located, close to rail and river routes to Moscow and the Urals.

Great Chain of Lakes

Sailing down the Volga you will get the impression that beginning almost from its source, the river has been turned into a chain of lakes hemmed in by the great dams of the hydropower stations.

The uppermost is Ivankovskaya, whose reservoir extends upstream to the city of Kalinin which can now be reached by large river boats. Somewhat lower lie the Uglich and then the Rybinsk hydropower plants. The Rybinsk dam has created a reservoir of impressive size. With an area of 1,775 square miles, it is almost as large as the Great Salt Lake in the United States.

The chain of reservoirs continues below Rybinsk. They are linked by short stretches of the river proper having a greater than normal depth. These man-made reservoirs deserve to be called seas for their shores are often too distant to be seen and in rough weather their waves are ocean high.

From the Sea of Rybinsk almost to Gorky, the level of the Volga is raised by the dam

DAMMED OFF AT THE LENIN HYDROPOWER STATION NEAR KUIBYSHEV IS A 370-MILE MAN-MADE SEA, ONE OF MANY IN THE VOLGA CASCADE OF POWER PROJECTS.

of the hydropower station near Gorodets, some 25 miles upstream from Gorky. A vast reservoir, the Sea of Kuibyshev, 370 miles long and 25 miles wide, is formed in the Middle Volga by the dam of the Lenin Hydropower Station. This reservoir takes in the estuary of the Kama River, the largest of the Volga's tributaries flowing from the Urals.

The Volga is a smooth-flowing valley river and a dam only 85 feet high was sufficient to form a reservoir at Kuibyshev. Here is the site of the Lenin Station, whose capacity of 2.3 million kilowatts has not yet been exceeded anywhere. This is due to the unusual quantity of flow—an average of more than 10,000 cubic yards per second.

The Stalingrad Hydropower Station farther downstream now nearing completion will have an even greater output—2.5 million kilowatts—and will form a reservoir spreading north from its dam for hundreds of miles.

This system of Volga reservoirs has ended the danger of spring flood, and since the turbines are provided with an even flow the year round the generators can work to capacity regardless of season.

A part of the electric power generated by the Volga plants is transmitted to the Moscow industrial area, another part goes to the Urals and the Ukraine, but a sizable part is retained for the new industrial centers of the Volga Region itself.

The construction of the Volga hydropower cascade necessitated the removal of enterprises and homes from the sites of the reservoirs. In many cases whole villages had to be evacuated. Where valuable structures could not be moved, protective dams were built around them. From the area of the Sea of Stalingrad alone, about 100,000 people were resettled and 120 villages shifted to new sites. Great structures were built to protect the city of Saratov from being inundated. The expense of the evacuation of the people and their property and the aid for resettlement in new places were all paid for from the national budget.

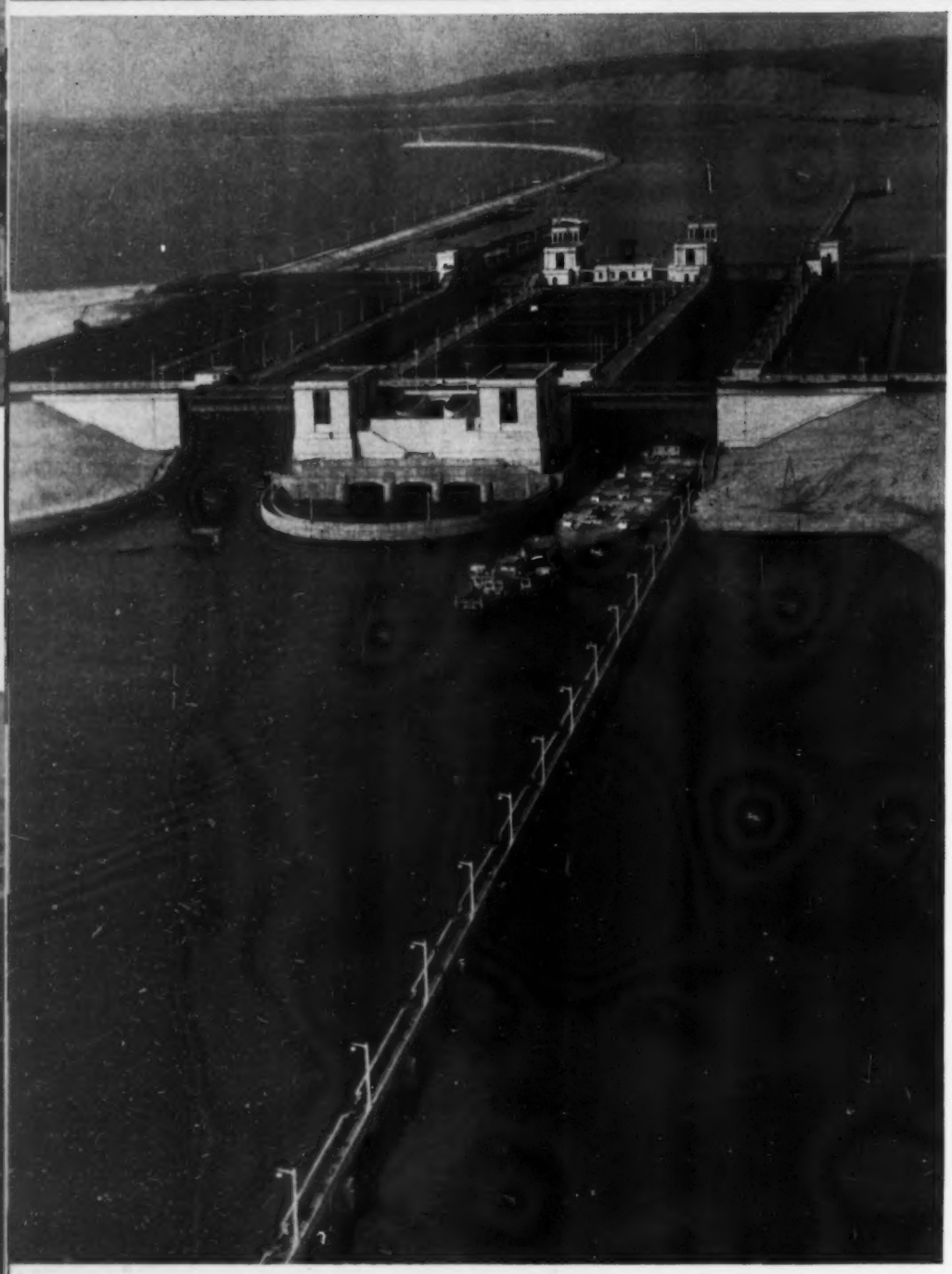
The transformed river provides multiple advantages—billions of additional kilowatt-hours of electric power, deep waterways that carry seagoing ships, and irrigation facilities for the arid lands in the Lower Volga region.

Soviet scientists are now studying the Volga with an eye to increasing its flow by channeling part of the waters of the northern rivers to its basin. This would make it possible to regulate the level of the Caspian Sea which has no source of water other than the Volga. The level of the Caspian Sea has been falling consistently for the past decades to the detriment of fishing and shipping.

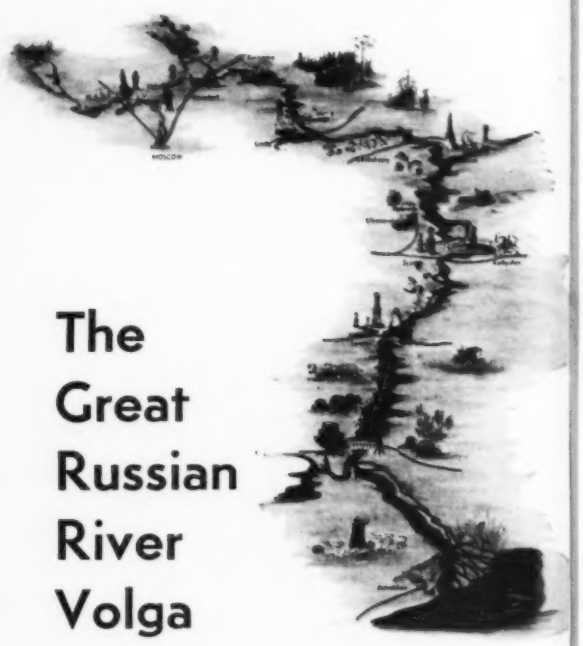
The fascinating problem of modifying nature in man's interest is now being worked out on the Volga banks.

National dress for people of the Mordovian Autonomous Republic which is in the Volga Basin.

A trip down the Volga is a living panorama of progress. Here is the dam of the Lenin Hydroelectric Station.



The transformed river provides multiple advantages—billions of kilowatt-hours of electric power, deep waterways that carry seagoing ships and irrigation facilities for arid lands.



The Great Russian River Volga

The Middle and Lower Volga

Ships sailing from Gorky down the Volga pass Cheboksary, capital of the Chuvash Autonomous Republic. Once a small provincial town, it is known now for its electrical equipment and textiles. Then comes Kazan, capital of the Tatar Autonomous Republic. This is a large industrial center whose population has increased from 398,000 in 1939 to the present 643,000. Kazan is surrounded by a number of small cities with chemical and machine-building plants, tanneries, fur-processing and shoe factories.

Farther downstream lies Ulyanovsk, the birthplace of Lenin, founder of the Soviet state. From a small provincial town it has grown into a big engineering center. Then

The sandy beach in Kuibyshev, adjoining the downtown section of the city. Although the Volga region is a highly industrialized area, it is full of excellent facilities for rest and recreation.

A netful of Volga products. Astrakhan, at the river's estuary, is famous for its fish and caviar.

comes a series of cities—large and small, old and new. The largest city in this group is Kuibyshev, second in size on the Volga with a population of 806,000. The next large city is Saratov with varied machine-building, oil-chemical plants and nearby gas wells. Then follows Stalingrad, the never-to-be-forgotten city which turned the tide of the last war. The southernmost Volga city is Astrakhan, a fishing center known for its shipyards and canneries.

The Middle Volga region has become the country's chief source of oil these past few years. The large oil fields tapped between the Volga and the Urals in the postwar period have proved very rich, a single well yielding many more gallons of cheap oil than the very famous Baku deposits in Azerbaijan or the Grozny deposits in the Northern Caucasus.

Oil derricks now dot the Zhiguli Hills near Kuibyshev, the areas near Saratov and Stalingrad. The Middle Volga region also has abundant reserves of natural gas which is piped to Moscow and other centers.

At Kazan the Volga emerges from the forest zone into the great steppe region that extends to Astrakhan. The land here is fertile and it gets a great deal of sun but little rain. The plowed steppes therefore are alternated with planted forest belts which help retain moisture and protect the crops from arid winds. The network of irrigation canals also has done much to help boost crop yields in the Volga steppes.

The Middle Volga region, its rich black earth worked by machine, is an important grain center which accounts for about one-eighth of the grain harvested in the Russian Federation. South of Stalingrad, the Volga flows through semi-desert country, but its banks, and those of a tributary, the Akhtuba, form a continuous oasis of moist soil in which the collective farms grow large vegetable crops.

Where Is the River's End?

The map indicates that the Volga flows into the Caspian Sea at Astrakhan. Actually, in its lower reaches, it becomes two rivers thanks to the Volga-Don Canal finished seven years ago. Now ships from the Volga can sail also to the Sea of Azov, and the river's second "estuary" is at Rostov-on-Don.

The trip along the canal begins at Stalingrad. This hero city, devastated by the war, has been completely rebuilt and now has a population of 600,000. It extends along the Volga like a wide ribbon for almost 45 miles from its northern end where the Stalingrad Hydropower Station stands, to its southern end where the Volga-Don Canal begins.

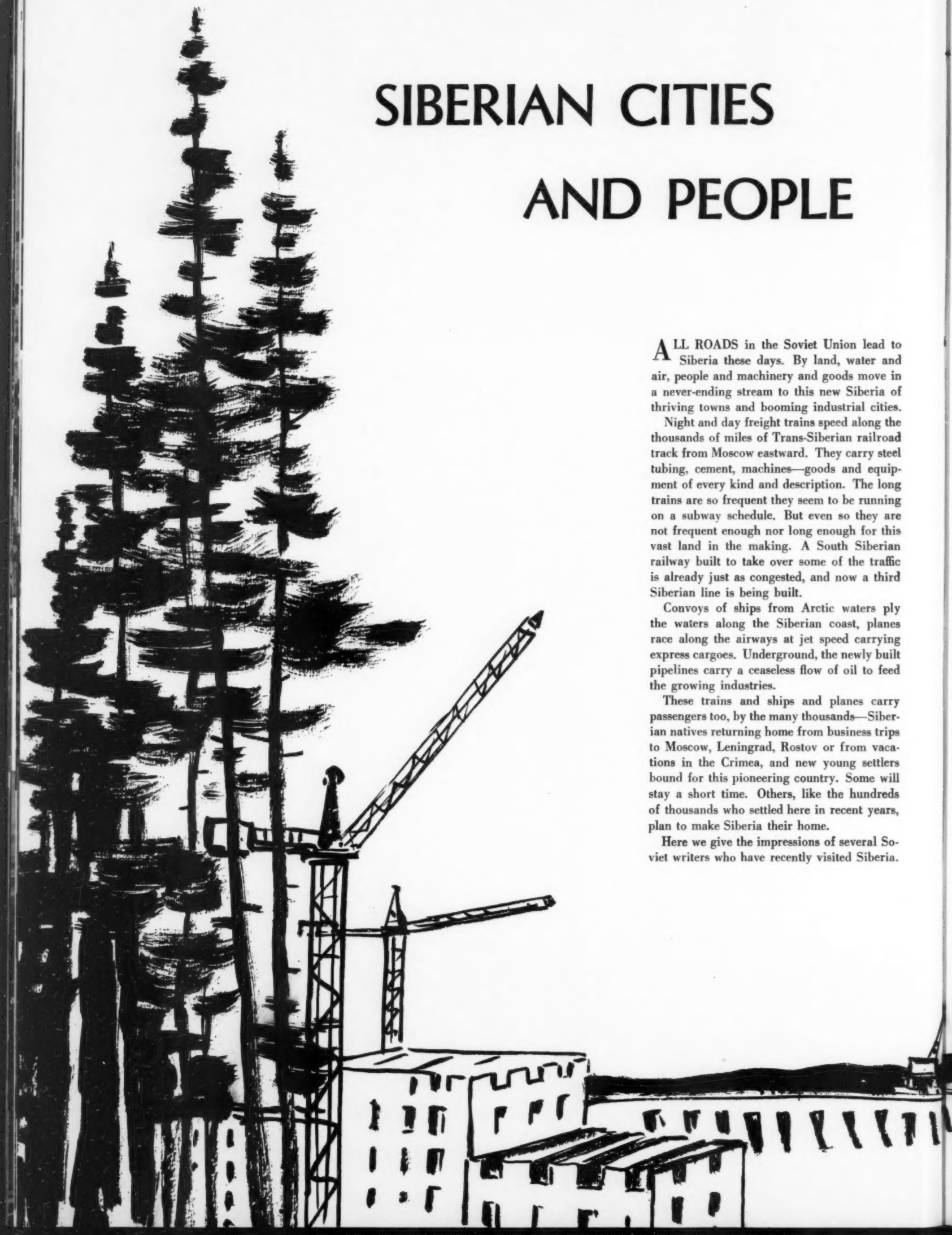
Ships sailing to Rostov along the canal must climb a ladder of automatic locks rising 288 feet above the level of the Volga. Powerful pumps move the water through the canal from the Don whose level is 144 feet higher than the Volga.

The last reservoir the ships pass before entering the Don is formed by an eight-mile dam at Tsimlyanskaya. This dam has raised the level of the Don and regulates its water flow. Tsimlyanskaya is the site of a 160,000-kilowatt hydropower plant.

The Volga-Don Canal is an illustration—one among many in the Soviet Union—of the all-round approach to the problem of transforming nature and tapping its resources. The canal provides a new route connecting the Donbas industrial area in the Ukraine with the Volga Region, but that is only one of its values. There are also the hydropower plant and the irrigation system.

The busy life on the banks of the Volga is a never-ending process. The river, now even more beautiful than ancient legend relates, is infinitely more useful. Man, whose labor has transformed it beyond recognition, is abundantly rewarded by the great Russian river.

The Middle Volga region with its rich fields is now the country's chief oil and gas producer.



SIBERIAN CITIES AND PEOPLE

ALL ROADS in the Soviet Union lead to Siberia these days. By land, water and air, people and machinery and goods move in a never-ending stream to this new Siberia of thriving towns and booming industrial cities.

Night and day freight trains speed along the thousands of miles of Trans-Siberian railroad track from Moscow eastward. They carry steel tubing, cement, machines—goods and equipment of every kind and description. The long trains are so frequent they seem to be running on a subway schedule. But even so they are not frequent enough nor long enough for this vast land in the making. A South Siberian railway built to take over some of the traffic is already just as congested, and now a third Siberian line is being built.

Convoys of ships from Arctic waters ply the waters along the Siberian coast, planes race along the airways at jet speed carrying express cargoes. Underground, the newly built pipelines carry a ceaseless flow of oil to feed the growing industries.

These trains and ships and planes carry passengers too, by the many thousands—Siberian natives returning home from business trips to Moscow, Leningrad, Rostov or from vacations in the Crimea, and new young settlers bound for this pioneering country. Some will stay a short time. Others, like the hundreds of thousands who settled here in recent years, plan to make Siberia their home.

Here we give the impressions of several Soviet writers who have recently visited Siberia.

50,000 Amateur Prospectors

By Vasili Zakharchenko

EVERYWHERE IN SIBERIA you see building going on. Between now and 1965 more than 40 per cent of the country's capital investments will be devoted to development of this huge eastern region lying between the Ural Mountains and the Pacific Coast. Power stations are being built, factories of all kinds are rising and every place you go geologists are searching for mineral deposits hidden in the taiga, the mountain rock and the river banks.

The geologists, whether professional or amateur, are men of importance in this mineral storehouse of a country. Prospectors are constantly cutting their way through the primeval taiga or flying above it in planes and helicopters to spot unusual furrows and promising rock formations. Laboratory instruments to detect the invisible radiation of disintegrating elements are now standard travel equipment, packed in knapsacks or tied to a saddle or bundled in tough cross-country vehicles.

The Siberian amateur geologist is a new and very interesting character. There were 20,000 of them in 1958 who joined non-professional expeditions during their vacations or school holidays. In this one year these amateur explorers put in 200 claims for mineral discoveries. A hundred of the claims have so far been tested by specialists and 27 were found to be exceptionally valuable.

In 1959 there were as many as 50,000 amateurs at work in the Irkutsk Region. They are mostly young working people, collective farmers, and college students—there are older school children, too—who set out for 20-day trips through the taiga covering a planned route. Each group, made up of 10 to 15 explorers, is given careful instructions and provided with all the necessary equipment—tents, radiometers, charts. Factories and collective farms along the way are kept informed in the event that emergency assistance is needed. There are also smaller groups that go out for two- or three-day expeditions and are sometimes as successful as those that stay away longer.

A group of school children discovered manganese on the banks of the Lena. Young people in Sludyanka, a town on the shores of Lake Baikal, found a valuable source of raw material for the aluminum industry in a river valley. North of Lake Baikal in the Vitim highlands hunters found rich veins of mica.

This moving letter came from an old hunter, Miron Zarubin, who lives in the Nijni Ilim district, northeast of the town of Bratsk.

"I am an old man and my sight is going. From the newspaper and radio I learned that expeditions searching for minerals are going to be in my neighborhood. I know a spot where, years ago when I was looking for gold, I found minerals. Please send a geologist to see me so I can tell him where to look. I want to see the place explored before I die."

Displayed in Irkutsk are specimens of minerals, little bags containing earth, bits of rock crystal, oblong plates of mica, dyes, aluminum imbedded in limestone, magnesium ore, chips of stone containing rare metals, brown chunks of iron ore. You look at these "visiting cards" of nature, specimens from newly-found deposits, and you visualize new mines blasted in rock to reveal immense stores of natural wealth.

The land taken up by the Omsk oil refinery spreads along the banks of the Irtysh River. The workers call it "our refinery." Here are lined up the big silver cylinders in which the oil is stored. Behind the neat rows of smokestacks and the fantastic tangle of girders one catches a glimpse of the sloping glass roofs of hothouses.

"Our Refinery"

Alexander Maluntsev, the director of this big oil-processing installation, explains what the oil workers mean by the term "our refinery."

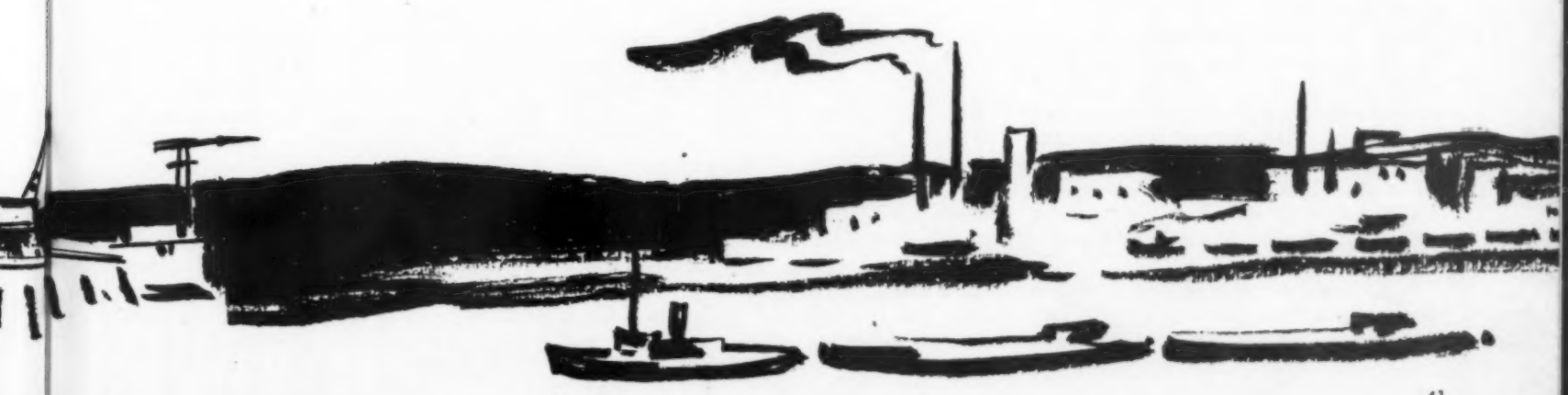
"When we talk of 'our refinery' we don't mean the buildings or the big pipelines alone. We also mean the town that's springing up (the refinery just allocated six million rubles from its budget for building it)—the cottages, the Palace of Culture, the hot-houses, that grow our fresh fruits and vegetables, the athletic field, the Young Pioneers camp. We mean more than that even—our day-to-day lives, our prospects and future, our happiness, are all included in the term."

At the refinery there are many varied educational opportunities—an evening university where 164 workers study, college preparatory courses for another 150 workers, a study center which gives a technical background to secondary school graduates, an evening school for general studies and a music school.

Education is the big thing at "our refinery." Speak to 27-year-old Mikhail Butenko. He and the eleven other members of his team work on a production line where paraffin is extracted from oils. Butenko will tell you he is taking the correspondence course at the Oil Institute. Every member of this team is studying, some at technical schools and colleges, others at evening classes organized by the plant for young workers.

Years ago—and not too many at that—a worker had to have a dozen years of experience behind him to operate a much simpler production line. Not any more. Today the refinery's production lines are manned mostly by young people like Butenko. As you stand at the control panel of one of these lines and look through the square and round lens of the self-recording machine, you forget for the moment that complicated chemical processes are taking place.

It all seems so easy. The machine controls the process and the operator serves as supervisor of production. Man here is not enslaved by the machine—he is its master. Here is an instance of the benefits derived from modern technology when used by a socialist society.



The Yenisei Is His River

By Olga Bergoltz

EVEN before I left for Krasnoyarsk in Siberia people in Moscow were telling me about Ivan Nazarov. They called him "Master of the Yenisei"—he is in charge of the State Yenisei Steamship Line.

It seemed to me a rather overwhelming title for the very cordial and friendly man I met. Ivan Nazarov is getting on in years although his hair is still dark. He has a ruddy, weather-beaten face beaming with good humor. He seems to radiate the kind of goodness which strong and warm-hearted people do. It's in the way he talks and listens, the way he asks questions, the way he answers those you ask, the way he gives orders to the men working under him.

It didn't take long to see that Ivan was doing the job of a half dozen men and was looking for more to do. He was endlessly active with his work on the river, his meetings with the crews of the ships and with a new project he had taken on—to beautify the river banks.

At the time I was in Krasnoyarsk he was busy choosing 30-year-old pines that he proposed to plant on the boulevard that runs along the river.

"We don't want saplings," he told me. "It takes too long for them to grow tall and beautiful and we don't want to have to wait a long time to enjoy the beauty. And so I thought transplanting 30-year-old pines would be a better idea. We'll plant them in even rows and they'll look stately, won't they?"

"They surely will," I said, "as a frame for the river."

It's his river that the "Master of the Yenisei" is decorating. The pines are to be planted along the river on which Ivan has worked for more than three decades, as stevedore and sailor. He is full of information about the Yenisei and the people who live on its shores. Some of this he wrote into his book *On the Yenisei*, which leaves the reader with the feeling that Ivan Nazarov has made the life of that great river his own.

SIBERIAN CITIES AND PEOPLE

City in the Wilderness

By Yevgeni Ryabchikov

THE TAIGA—not the little pine or birch groves you find in Central Russia but the wild bush with its tangle of fallen wood and its dense forests tracked by wild animals—reaches to the very borders of Krasnoyarsk. Cutting through the center of the town is the turbulent Yenisei. The mountains looming over the town, the wilderness on its outskirts and the rushing river—that is Siberia.

Krasnoyarsk impresses one less by this natural wildness, however, than by the structures man himself has built—the industrial plants and laboratories, the new schools and houses on new streets lit up of an evening, the trim vessels sailing up and down the river, the electrified railway, the scaffolding and tall cranes on the site of the giant Krasnoyarsk power station with its five-million-kilowatt capacity.

This new power station is being built some distance from Krasnoyarsk at a spot where the mountains hem the river in. At first sight the place looks desolate, the impression is heightened by the echo of the roaring water. But then near the village of Shumika one sees the outlines of a new and beautiful town called Divnogorsk where the construction workers live.

To the west of the river, near a rich coal deposit discovered recently, you can see another huge power station rising—the Nazarov. Engineers describe it as an amazingly interesting structure, as they do the Tuymaza-Irkutsk oil lines with its huge pipes running from the Ural Mountains to the banks of the Yenisei.

This great stretch of Siberian land known as Krasnoyarsk Territory has been completely transformed. It is now a thriving center of industry and agriculture. And so much effort and capital is being poured into the region as a concentration point of the seven-year plan that in a short time it will rank with the world's leading industrial centers.

This territory, with Krasnoyarsk as its throbbing center, stretches for thousands and thousands of miles from the snow-capped Sayan Mountains to the Arctic Ocean in the Far North. It is larger than a number of the big European countries put together. During the time of year when the fragrant bird-cherry blooms in the southern part of the territory and the lilac bush has spread its fragrance, snowstorms rage in the Arctic part of the territory.

Krasnoyarsk is growing industrially with incredible speed. It has a heavy-machine plant, a combine-building plant, synthetic rubber and artificial fiber plants, a television factory and many other enterprises.

In Krasnoyarsk you see the new models of ships sailing up the Yenisei to the Sayan Mountains and down the river to the Arctic Ocean. Here new tools like the radio-operated tractor are designed. Here you feel the quickened pulse-beat of new Siberian construction.

Construction Man on the Move

By Boris Polevoi

FYODOR SAPPA was waiting for me on his doorstep, together with his comely blond wife. He insisted I take a good look around his new three-room apartment. With characteristic frankness, he told me that he kept coming across people who still thought of Siberia as pictured by prerevolutionary writers—a wilderness where men slept with bears, shaved with skinning knives and warmed their frozen hands around smoking campfires.

This, obviously, was a different Siberia. Fyodor lived in one of many new houses as good as any I had seen in Moscow or Kiev. He complained a little that he couldn't grow watermelons in his kitchen garden but as far as vegetables were concerned, he said, they grew just as well here as they did in the Ukraine where he had come from.

Fyodor was born in Zaporozhye. He's a fair-haired man of medium height, a steam shovel operator by trade. He has worked on sites all over the country, in many of the republics. He served in the army during the war and wound up in Berlin where, as he put it, he signed his name with a rifle on one of the columns of the Nazi Reichstag.

It would be too long to list all the towns and construction sites where he taught apprentices his building methods. Fyodor Sappa has a long life behind him and he has traveled a long way from his native Ukraine to Bratsk in Siberia. But he brought with him his love for Ukrainian songs and a native accent which still colors his Russian.

Fyodor—although not an expansive man by nature—spoke with great enthusiasm of his Siberian construction job and the new cities that were springing up all over the taiga.

He and his two brothers are working on the Bratsk hydropower project on the Angara River. He spoke easily about the great prospects that the project opened up for this country. But when the talk turned on himself he grew tongue-tied. It was obvious that he thought his personal life and the things he had done were unimportant by comparison with the great things that were happening around him.

I tried to draw him out by telling him that I thought people like himself and his brothers Ivan and Grigori were responsible for the great things that were happening.

They are striking examples of the new type of Soviet construction workers who move from one site to another, depending upon where their talents are most needed. When one job is done, they move on to the next, roughing it, getting water from forest rivulets, living in tents. They do it because they like the feeling of building up the country.

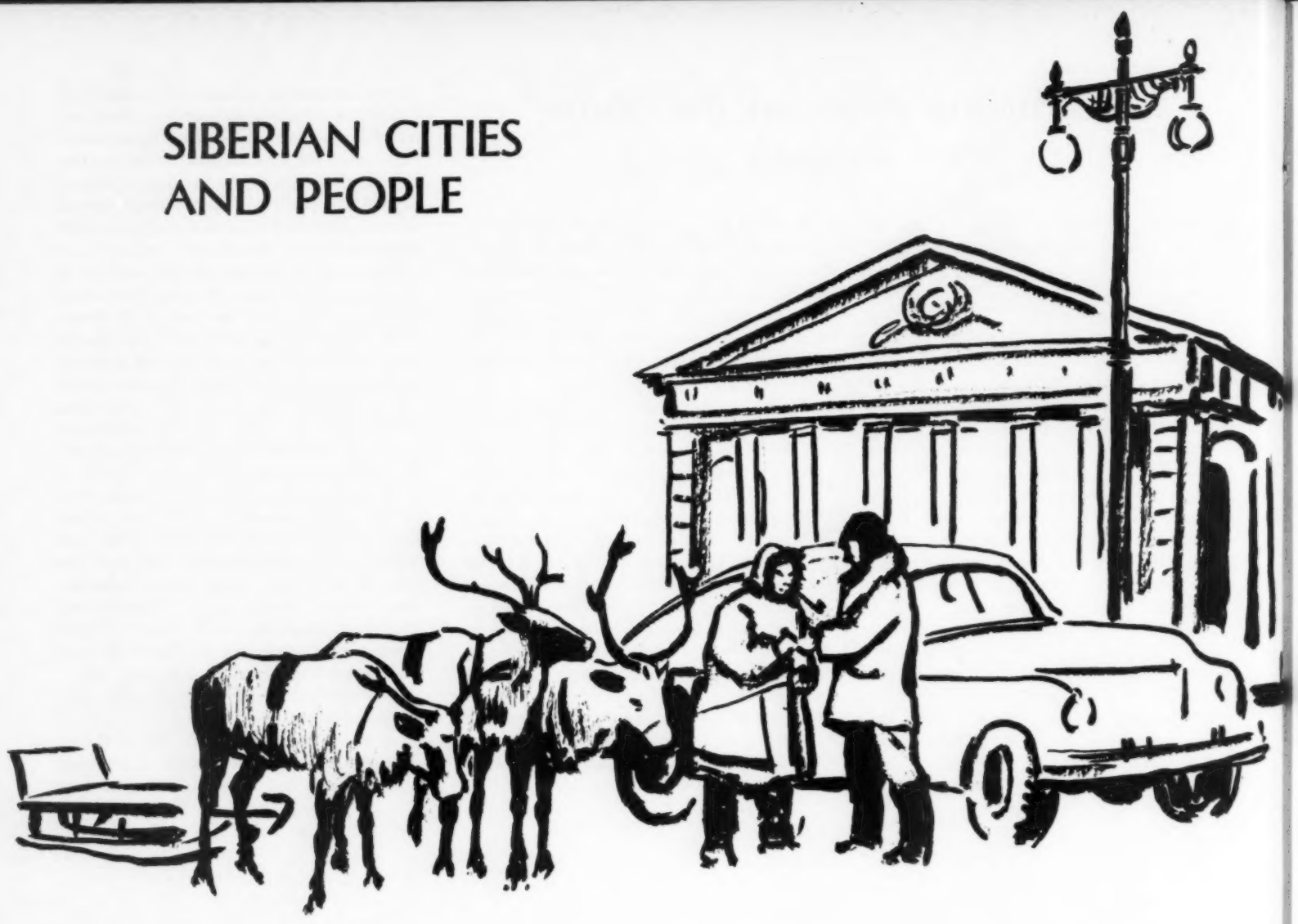
Fyodor's first building job was on a power project on the Dnieper. He came there from the country as a lad, and learned the trade. Since then building has been in his blood. And any number of times he has uprooted himself from a comfortable city home to get on the move and take up his old job as steam shovel operator. His original excavation quota, a rather stiff one, was 915 cubic yards. He has brought it up to 1,960.

"How much do you earn?" I asked him.

"It depends, sometimes 3,000 and sometimes as much as 3,500 rubles. But," he added quickly, perhaps not wanting me to go away thinking that he had come to these distant parts to make big money, "it's not money that brings people here. I've earned as much at other construction jobs as I have here. And I've been working here six years now."

Why did he come here? I ask again.

Fyodor Sappa had trouble putting his answer into words, but what he said added up to a very strong desire to build up his country, a country that he feels belongs to him.



Theater Near the Pole

By Sergei Mikhalkov and Anatoli Alexin

IT WAS EARLY JULY when we came to Norilsk but the snow still lay here and there on the mountainsides. Beyond the mountains that loom above Norilsk the wild Arctic tundra stretches for thousands of miles. The town is in the valley, connected with the world by the Dudinka-Norilsk railway, the northernmost spur in the world., Norilsk is a large industrial town with stone houses, factories, mines, theaters, clubhouses and a music school. Its well-paved streets are rarely free of bus and automobile traffic.

Building this big town in rigorous Arctic conditions was no simple task and the citizens of Norilsk are more than usually proud of their city. A visitor has hardly gotten off the train before he is showered with invitations to visit this or that point of special interest.

"Have you seen the new stadium? And our new television station? Our smelting plant? And our theater?" These are the questions everyone asks you in Norilsk. And, of course, "What do you think of our city?"

The Norilsk theater certainly deserved a visit after the director, Vladimir Vengerov, told us this:

"It may sound unbelievable but our actors play to standing-room-only houses even when the polar night is at its height, the thermometer drops to 50 below zero and there's a storm raging outside. The wind blows so hard sometimes that it takes an hour and a half to cover the mile from house to theater. But we're still full up."

The posters we saw all round the town telling about the new amateur dramatic groups being formed certainly supported the director's statement. They were put up alongside posters publicizing factories that had overfulfilled their production targets and detailing the area's accelerated construction plan. It was obvious at a glance that these Siberians take both their work and their leisure time activities seriously.

We met Ludmila Lebedeva at the smelting shop. She is a young metallurgy engineer and the town's most popular amateur singer.

We were also introduced to Inna Nazarova, graduate of the Moscow Timiryazev Agricultural Academy who is now doing research at a local farm institute. Inna is generally considered the city's best ballet dancer—she's known as the "Ulanova of the Polar Regions." The *Polar Pravda* prints reviews of her performances, and local ballet enthusiasts are very proud of her.

This Siberian town has its own television center which broadcasts amateur films in addition to the usual program material. We saw one of them—a documentary on the building of Norilsk which could stand comparison with many more professional films.

We were guests at a ball given at the iron and steel workers' cultural center, and a very lively affair it was with both folk and ballroom dancing about equally favored. The next day we were invited to help celebrate the opening of the town's sports stadium. We found Norilsk a very busy, active, interesting town.

Before we left we asked what our Norilsk friends told us was the routine question—one they had come to expect from all visitors.

"Many of you have come to the Arctic from the South—the Ukraine and Kuban and other parts of the country. Don't you find it hard to bear the rigors of the North with its long polar night? Don't you get homesick?"

And they gave us the same answer they had repeated scores of times, and one no less true for the repetition. "We don't mind roughing it. We're doing the work we like. We're with people we like. And as far as free time is concerned, you see for yourselves that there is no problem about how to spend it."

The Siberian Academy of Sciences

By Savva Kozhevnikov

ACADEMICIAN Mikhail Lavrentiev is a familiar figure in Novosibirsk. This eminent Russian mathematician and authority on mechanics has made the city his home.

When Lavrentiev was first seen in these parts, nobody thought twice about it. He has a reputation for turning up in out-of-the-way places, and everybody thought he had come on some scientific mission. But it turned out that this was no temporary visit. The Academician had come to Novosibirsk to head a branch of the USSR Academy of Sciences, a new large scientific center in the heart of Siberia still in process of construction. It is being built on a great tract near Novosibirsk in a region covered with dense pine forests. When completed the buildings of the research institutes, the university, library and residential district will form a harmonious architectural whole. That is for the future of this city of science. But what about the present?

When the question arose as to whether scientists ought to move to Novosibirsk at once and rough it or wait until all the buildings were up, Mikhail Lavrentiev's answer was, "I'm going now."

Trucks loaded with scientific apparatus pulled into the city and up to a four-story building, moved the apparatus in, and the Siberian Academy of Sciences was at work. Hand printed signs on doors identified the Institute of Mathematics, Institute of Geology and Geophysics, and so forth, in their very temporary and very crowded quarters, and more crowded every day since scientists kept arriving from Moscow, Leningrad, Kiev, Lvov and other places to join the institute staff.

Among the arrivals were some of the most eminent scientists in the country. Sergei Khristianovich is a brilliant mathematician and physicist. At 35 he was elected a member of the USSR Academy of Sciences. "Here," he says of Siberia, "are practically limitless possibilities for the research scientist."

Sergei Sobolev is also a newly-settled Siberian. When elected to the Academy he was its youngest member. Now at 50, his work in mathematics has won him a reputation far outside the country's boundaries.

Vladimir Sobolev—no relation—is a geologist and petrologist whose theoretical work predicted the existence of diamonds in Yakutia a short while before they were discovered.

Pelageya Kochina has won a world reputation for her research on the theory of filtration.

These are all great names in research. These scientists are now investigating the untapped resources of this immense land.

That much misused word "colossal" suits Siberia. It is a country where less extravagant adjectives do not seem to fit—vast territory, enormously rich mineral resources, the world's biggest rivers. Mention lumber and you are told that Siberia has 80 per cent of the country's total. Talk of coal and here are 90 per cent of the country's coal deposits. Siberia's iron ore has an annual output potential of 70 to 75 million tons. Here have been found great deposits of gases, diamond fields, raw material sources for aluminum.

We went to visit the site of the new science city. We drove through Institute Street and Academic Street. Except for the building machinery clattering away, you would have taken these for large clearings in the woods.

At the end of what is to be Academic Street we caught sight of a handful of wooden buildings on a hill near the river. Standing dwarfed by the birches and great pines, these lonesome cabins looked like a miner's settlement.

This is where some of the scientists, following the lead of Mikhail Lavrentiev, decided to set up shop. Lavrentiev was too impatient to wait in Novosibirsk until the institute buildings were up. He wanted to be on the spot. Other scientists joined him. And so the institutes are already doing research in these cabins of the Siberian science city.

A NEW WORK-STUDY UNIVERSITY

By Yuri Sergeyev

LIKE MOST OF THE STUDENTS ENROLLED IN THE UNIVERSITY, ANATOLI KUBAKOV (LEFT) AND SEMYON LYAPUNOV WENT TO WORK AFTER GRADUATING FROM HIGH SCHOOL.

A NEW state university was opened this year in Siberia, about 18 miles from the industrial city of Novosibirsk. The university buildings are not yet completely finished but students are already enrolled and busy in the science departments.

Two-thirds are young people who have a considerable work background in laboratories, factories or on construction projects of one kind or another. They have chosen their specialties with conscious deliberation and bring to their studies the maturity that comes from experience on a job. One of the requirements for college entrance, now being introduced

The teachers are outstanding scientists like Ilya Vekua, university president, and Sergei Sobolev, head of the Academy's Mathematics Institute.

Model of the buildings and campus of Novosibirsk University, which is sponsored by the Siberian branch of the USSR Academy of Sciences.

Four young people representative of the student body (from the top): toolmaker Lilia Usupova, assembler Yuri Romashchenko, plasterer and house painter Elvira Kaminskaya, and construction worker Vladimir Kharitonov.

generally in the Soviet Union, is a stint of work at a factory, farm or other productive enterprise.

Anatoli Kurbakov and Semyon Lyapunov are fairly representative of the student body at Novosibirsk University. They are longtime friends and both became interested in physics while in secondary school. Kurbakov worked on the assembly of the turbines at the Novosibirsk Hydropower Station and Lyapunov was a steam shovel operator at the university site. They decided to go in for science seriously and now both are students in the physics department.

Svetlana Zhelyabovskaya comes from Rostov-on-Don and has decided to become a chemist. She completed a course of training at a specialized secondary school and worked as a technologist before entering the university.

Antonia Ustich came to Siberia from the North Caucasus. She has been on a number of geological expeditions and is studying geophysics.

Others of the Novosibirsk freshmen are Boris Nenashev, a mason; Yuri Tsesarenko, a concrete worker; and Elvira Kaminskaya, a plasterer and house painter. There are dozens of others like them—young men and women who have learned what productive physical work means by having done it. A major goal of Soviet education is to instill in every student a respect for labor and an understanding of the values of manual work. The intent is to break down the false separation of mental and manual labor with all the artificial values that are implied by the distinction.

The Novosibirsk University has 175 students in day-time attendance preparing for specialization in mechanics, mathematics, physics, chemistry and geology. Instruction is, of course, free of charge, as it is for all Soviet students. Some 150 students who work on industrial or construction jobs during the day attend evening classes.

Many of the professors are eminent scientists who came to Novosibirsk to found the Siberian branch of the USSR Academy of Sciences. Among the academicians teaching are Mikhail Lavrentiev, who gives a course in mathematical analysis; Andrei Bitsadze, Corresponding Member, who teaches analytic geometry; and Academician Andrei Trofimchuk, who teaches geology.

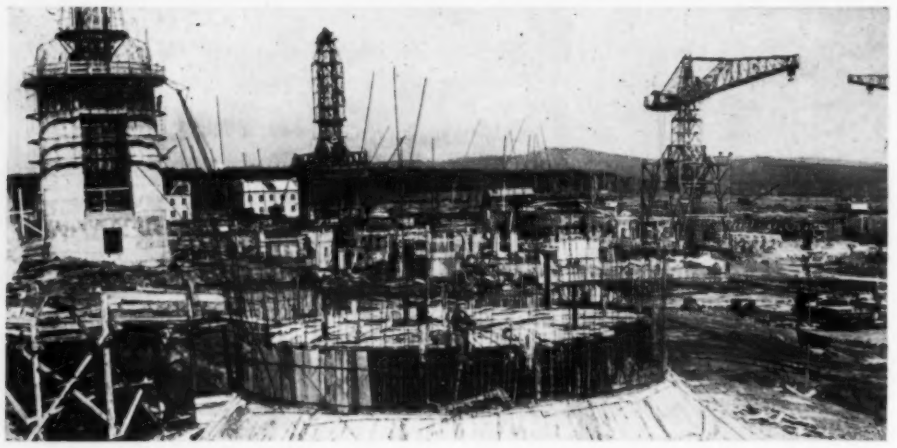
This university in Siberia opens at a time when all Soviet higher schools are redesigning their courses of study to tie in study more closely with life. This newly developing region with its multiplicity of research problems is ideal for the work-study approach.

Academician Ilya Vekua, the president of Novosibirsk University, said: "Our University is the third in Siberia. We are in entire agreement with the idea of combining theory and practice. Our students will not only take courses in theory but will also be doing practical work in research institutes, in industrial laboratories and in the city's designing offices. They will be using the most modern apparatus in their work and study and will be helping the Siberian branch of the Academy of Sciences in such areas as the development of power resources, the search for valuable minerals, and industrial building."

WALKER CISLER RECEIVED A WARM WELCOME FROM THE BRATSK CONSTRUCTION WORKERS.

AMERICANS VIEW SOVIET POWER DEVELOPMENT

THE AMERICAN EXPERTS VISITED THE NAZAROVSKAYA THERMAL POWER PLANT NOW BEING BUILT IN SIBERIA.



By Nikolai Galochkin

WORLD LEADERSHIP in the development of hydroelectric power is shifting to the Soviet Union. This flat-footed appraisal was made by a group of American senators and power experts who visited the Soviet Union last October and inspected ten hydroelectric stations being built on seven rivers all across the country from the Ukraine to Siberia.

The senators' group was one of two power delegations to visit the Soviet Union last year under the USA-USSR exchange agreement. The other group was headed by Walker Cisler, President of Detroit Edison.

The Senators' Report

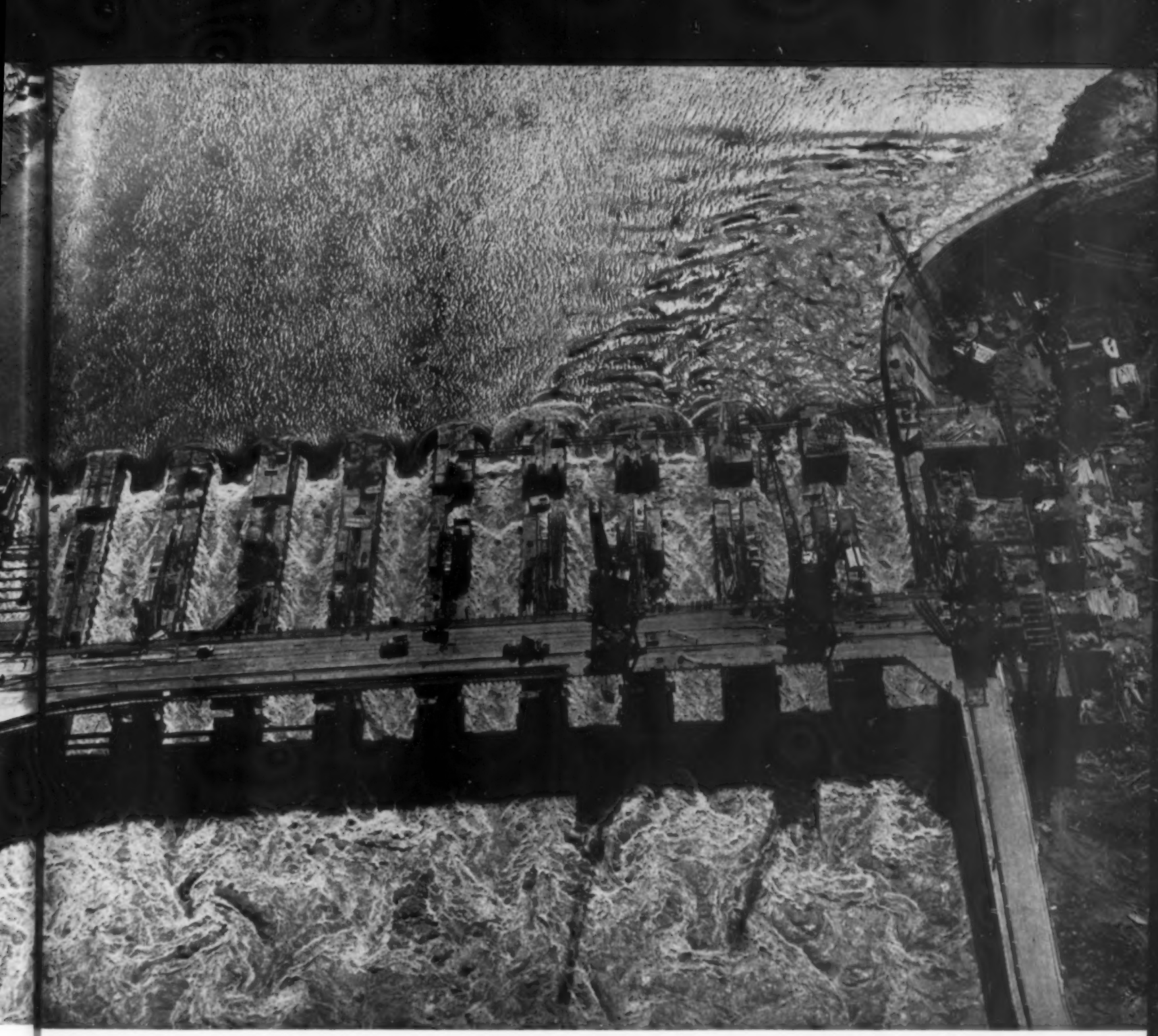
The eight-man delegation, led by Senators Frank Moss of Utah, Ernest Gruening of Alaska and Edmund Muskie of Maine, was sponsored by the Senate Committee on Interior and Insular Affairs and the Public Works Committee. The delegates were asked to report on relative water and power resources development in the two countries.

The senators were accompanied by a team of experts headed by Michael Straus, the former Commissioner of Reclamation and consultant to the Senate Interior and Insular Affairs Committee. When this very authoritative delegation returned home, its leaders submitted an official account to the sponsoring Senate Committees. Analyzing Soviet efforts in construction of large dams and power plants, the American specialists praised the work already done which lays a solid foundation for future progress in power development.

The delegation attributed the Soviet successes, said *The New York Times*, to "many factors, including bold planning for a grid system that will carry power across many time zones, from Vladivostok on the Pacific to Leningrad on the Baltic."

Nikita Khrushchev, speaking recently at the USSR Power Development Conference, commented on the American power experts' appraisal. He said: "There was a period when American specialists were teaching us. We were grateful to them and decorated some of them—Colonel Cooper, for example, who was a consultant on the construction of the Dnieper Hydroelectric Station. They don't have to be ashamed of their pupils. We must give them their due that they are not too proud to take off their hats to worthy pupils of good teaching.

"Without conceit but with pride we can say that we are pleased with the testimonial of the American senators and specialists; for the Americans are the best builders of hydroelectric stations and of industrial establishments generally."



THIS HYDROPOWER PROJECT AT BRATSK, ONE OF THE YOUNGEST CITIES IN THE WORLD, WILL SOON BE GENERATING AN ANNUAL 20 BILLION KILOWATT-HOURS OF ELECTRICITY.

A Siberian Tour

The ten-man delegation of power experts led by Walker Cisler preceded the Senators' delegation by a couple of months. This was the second trip to the Soviet Union for Walker Cisler and some of the others in the group. In 1958 they had inspected power projects in the European part of the country; last summer they came to Siberia.

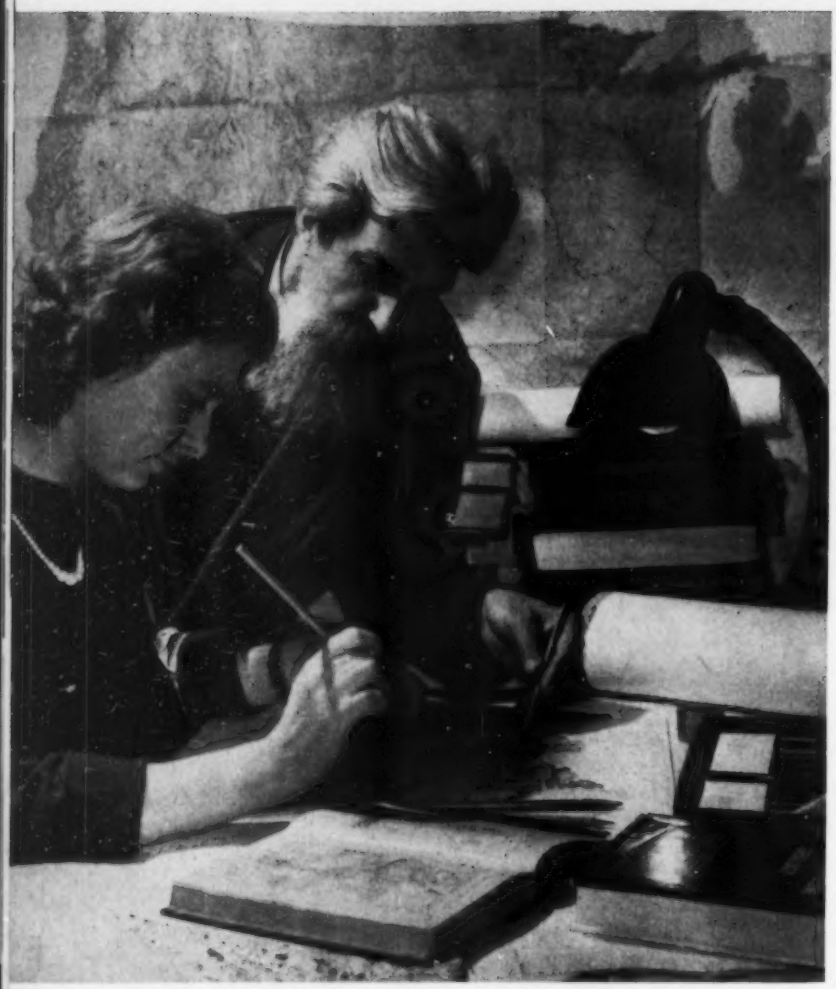
The guests spent some considerable time talking to the builders at the great Bratsk project on the Angara River. They were impressed by the modern techniques used there and commented on the fact that standardization was apparently more advanced than in American hydropower construction and that this made for cheaper and faster building of power stations. They particularly noted the rapid assembly and the very effective adjustment to local conditions.

Speaking to Alexander Milovanov, Chairman of the Bratsk City Soviet, Charles E. Eble, President of Consolidated Edison of New York, said he was pleased to be able to meet the mayor of one of the youngest cities of the world, a city with a power plant that would soon be generating annually more than 20 billion kilowatt-hours of electricity at a tenth of what it would cost his company in New York City.

Edwin Vennard, Vice President and Managing Director of Edison Electric Institute, who inspected Soviet power facilities both in 1958 and last summer, submitted a 35-page report prepared by the power experts for the Joint Congressional Economic Committee. His impressions of what he saw in the Soviet Union, as reported in *The New York Times*, are refreshingly direct:

"They're good engineers, builders, scientists and research men and are building practically as good systems as ours, although ours continue to be larger and cleaner. They're working like hell with a burning desire to build their power systems. Their electric power field as an industry is growing very fast and for the past seven years at a faster rate than our own."

When the American power experts finished their Siberian tour last summer and were about to leave for home, Walker Cisler, speaking for the delegation, said: "I won't say that we Americans are delighted with your aim to outstrip us, but what is important in the long run is the fact that both our countries are advancing in peaceful competition. Progress and peace on earth depend on us; and if we desire progress for all mankind and happiness for our children, we must be friends and know and understand each other better."



Soviet publishing houses print many books that deal with varied aspects of American life. Dmitri Kravchenko, noted geographer, and Rimma Narsikh, cartographer, are working on a geomorphological map of North America.

ARE YOU interested in American life? What do you know about the United States? What have you read about that country? Are you familiar with modern America's literature and art?

These were the kinds of questions we asked a number of Soviet people chosen more or less at random. Except for one person who happens to be a specialist in literature and a student who expects to teach English, none of the others had a particular professional interest. All the people interviewed gave an affirmative answer to the first question—Are you interested in the United States?—and all were quite well informed, considering that they had made no special studies.

This is not at all accidental. The Soviet people have all sorts of opportunities to learn about the United States. At school, children study the history, geography, economy and governmental structure of many countries, the United States among them. In the fifth year they begin foreign language study which continues until graduation. English is the most popular choice. While studying the language children become acquainted with the country's literature.

In the seventh grade they study the physical geography of the United States and in the eighth, American history and the Constitution. In the ninth grade the economic geography of the country is taught, broken down into such topics as natural resources and their distribution, population and varied national composition; regions of industrial and agricultural development; transport facilities and domestic and foreign trade; major cities—New York, Chicago, Pittsburgh, Detroit, San Francisco—and their specific character. A typical assignment might be this one: Make a diagram that compares the per capita production of the most important types of industrial and agricultural commodities of the USA and the USSR.

In this way all Soviet children from the age of 12 receive a background of information about the United States. These are studies they must pass if they are to graduate. If they go on to college, they will very likely do further study of American history, geography, literature, law—depending upon the special field of interest.

This is the background which everybody has, but many people have a great deal more than this minimum. Soviet libraries are very well stocked with American books and they circulate continuously, usually with long waiting lists. Soviet readers are omnivorous and the publishing houses just cannot keep up with demand.

I LIKE TO READ ABOUT AMERICAN WORKERS

Alexander Mysin
Electrician

AM I interested in the United States? Of course I am, like any other intelligent person; especially these days when the world's peace depends on the relationship between our two countries. That's why I pay special attention to news items and articles about America.

What interests me most? Articles about people like myself in America—workers. I read about them in our press which, besides reporting in detail the speeches of American trade union leaders, does a good deal of writing on American industry. I also read the magazine *Amerika*. I was especially interested in a piece the magazine ran on a worker in an aircraft factory.

I also happen to like music a lot—every kind of music. So that I listen in to broadcasts, like those I heard not long ago of *My Fair Lady* and *West Side Story*. I heard Igor Moiseyev, the director of the dance troupe that performed in the United States, give his impressions of the tour at a meeting I attended. He spoke very enthusiastically of these American musicals and I could understand his feeling. I felt the same way when I heard them.

On the classical side, I heard the works of some of the contemporary American performers in symphony broadcasts conducted by Leopold Stokowski and Leonard Bernstein and I managed to get a seat for one of the concerts given by violinist Isaac Stern when he played here—a concert I'll not be forgetting very soon.

GETTING TO

WE HAVE TO LIVE AS NEIGHBORS

Irina Lutcheva
Housewife

This is true both for originals and translations. So far as originals are concerned, there has been, to everyone's gratification, an increasing exchange between the two countries. As example, during the first eight months of 1959 the library of the USSR Academy of Sciences received more than 8,000 copies of various scientific and technical publications from the United States, and sent in return about 10,000 books and journals.

Soviet libraries subscribe to a large number of American periodicals to keep their readers abreast of current affairs. The Lenin Library in Moscow—the large central library—gets about 1,500 American newspapers and journals.

The theater is another—and a very direct—interpreter of American life. In the past three years the Soviet theater has staged 27 American plays and dramatizations of novels. This last season alone there were 1,200 performances of American plays given for an audience of 600,000.

Most American playgoers would agree that the dramas chosen, for the most part, represented the best of American theater—Arthur Miller's *The Crucible, Death of a Salesman* and *View from the Bridge;* Lillian Hellman's *Watch on the Rhine, Another Part of the Forest* and *The Autumn Garden* are representative.

For the younger audiences there were stage versions of Mark Twain's *Tom Sawyer* and *Huckleberry Finn* and Mayne Reid's *The Headless Horseman.*

Other varied sources of information about the United States include radio programs which schedule music by American composers. Large numbers of people see the news shots filmed by Soviet photographers in the United States, and American news reels have become a regular feature on TV. A recent TV series on the "History of the Film" presented a good deal of material on America's contribution.

Certainly the most important and most direct contact the Soviet people have had with things and people American has come from the past two years of exchange activity. The performances by American musicians and orchestras, the exchange magazine *Amerika*, the exhibits of contemporary American art and the American National Exhibition in Moscow this summer, the American delegations and tourists that visited the country, the sports meets that have taken place, the students who came to study at Soviet schools, all have contributed to give the Soviet people a better understanding of America and its way of life.

The USSR Academy of Sciences subscribes to 1,600 American technical and scientific journals in every field of study. It carries on an exchange of books with dozens of U.S. publishing houses, libraries and universities.

TO KNOW THE UNITED STATES

YEARS AGO the housewife was very much fenced in by her kitchen, but that isn't so today—not with radio, television, newspapers and books to help her keep abreast of what's doing in the world outside. With all these news sources I've been filling in my school knowledge of the geography, history and literature of the United States and of the way Americans live.

Our Soviet newspapers, radio and television give us the world's news and a great deal of American news. I also read *Amerika*, the exchange magazine published by the United States and sold on our newsstands. Our television programs frequently show American news strips and the faces I see are not at all different from those I see on my own street—some smiling, some worried-looking—but all neighbors.

Americans feel as we do, I am sure, that with the world as small as it is, and getting smaller by the day—what with jet planes and space ships—we are almost all of us living on the same street, and like neighbors, we have to learn to live with each other.

OUR READERS CHOOSE AMERICAN BOOKS

Nina Levidova
Chief Bibliographer
Foreign Literature Library in Moscow

LAST SUMMER our library arranged a meeting to honor Ernest Hemingway's sixtieth birthday. Those who were able to get tickets for the meeting thought themselves lucky since we had many more people wanting to get in than we had room for. I cite this to give you some idea of Hemingway's popularity, and that of other American writers, with Soviet readers.

Our library has some 30,000 regular readers, and very many of them are interested in American literature. We are a general library, with an emphasis on modern fiction. About a third of our books are in English.

We get a large assortment of American newspapers, magazines and current books. We review American books and publish biographical data on authors. We invite visiting American writers to meet and talk with our readers. One of the most recent guests was Mitchell Wilson, whose novels *Live with Lightning* and *My Brother, My Enemy* are very popular in the USSR.

The most widely read American writers are probably the very same ones most popular with American readers—Ernest Hemingway, John Steinbeck, William Faulkner, Carl Sandburg, Arthur Miller, Erskine Caldwell, James Jones and Jack Kerouac.

LEARNING FROM EACH OTHER

Rostislav Chubarov
Radio Engineer

THERE WAS a time when Soviet radio engineering was way behind that of other countries, but that is not so any longer. These days the opposite is true in a number of branches where Soviet engineers lead the way.

That isn't true as yet for my particular specialty, radio aerials, but we're not bothered by the fact. As a matter of fact, it nudges us on to greater efforts.

Our work is based not on the studies of our own scientists alone, but on those of foreign scientists too, especially Americans. As an engineer, I know what American inventive genius is capable of.

In the photo you see me holding the *ARE National Convention Record* put out by the American Radio Engineering Institute. I read every issue of the journal to keep informed of the work done by Americans in my field and, I suppose, American engineers read our journals. We learn from each other. This is as it should be. Free exchange makes for speedier research progress for scientists everywhere.

WE HAVE AMERICAN PEN PALS

Alexander Vinogradsky
Ninth Grade Student
Moscow High School 112

ONE OF THE FIRST books I remember reading was *The Adventures of Tom Sawyer*. We used to make up games around the book. I also like Jack London's books.

But these are about America of the past. At school we learn about America today in our courses in geography and history. Two years ago we studied the physical geography of the United States. We found the classes interesting especially since we saw slides of the country and the way it was built up. Now in our economic geography classes we are learning about America's industrial and farm regions and its important cities.

We began to study American history at the beginning of the last school year. The course began with the arrival of the *Mayflower* at Plymouth and will go on through this year to take us up to modern times.

Through the Friendship Club in our school we have made friends with Mr. Ray G. Simpson's class at the Central Valley High School in California. They write to us in Russian and we answer in English. This is the third year that we have been exchanging letters and tape recordings and trading stamps with American boys and girls.

When Americans came to visit our school they stopped in at our club and were surprised and pleased when we talked to them in English. We showed them around our classrooms, laboratories, workshops and radio station. The guides at the American Exhibition in Sokolniki also came to visit us. I was at the Exhibition and liked it. I learned some new things about the United States there.

American boys and girls, write to us, and if you should happen to come to Moscow, please come to see our school and club.

GETTING TO KNOW THE UNITED STATES

Bookbuyers queue up for a new 300,000-edition of Ernest Hemingway. Library exhibit of American books translated into 50 Soviet languages. American medical researcher lecturing to a group of Soviet colleagues.

IN THE PAST 3 YEARS 60 SOVIET THEATERS STAGED 27 AMERICAN PLAYS. HERE ACTORS IN A PRODUCTION OF *TOM SAWYER* MEET MEMBERS OF THE AUDIENCE BACKSTAGE.

FROM HEMINGWAY TO THE BEATNIKS

Nonna Avanesova
Student, Moscow Institute for Foreign Language Study

I'M A FUTURE TEACHER of the English language and I'm interested in the United States for what you might call professional reasons, but I'm also interested because I think it's so vital that we get to know more about each other. It is not only I who feel that way; every student I know feels the same.

We learn about the United States through American newspapers, magazines and books freely available to any student at the Institute library. We have an American literature club where we discuss current literature all the way from Hemingway and Saroyan to Truman Capote and the beatniks.

Newspapers, books, films and music are all very fine, but they give us just a "correspondence" acquaintance with the United States. We were glad to get a somewhat closer look at America this summer at the Exhibition in Moscow's Sokolniki Park. But even that was only a substitute for a firsthand visit. I am sure that many Americans who saw the Soviet Exhibition in New York felt the same way. Like many of my fellow students, I look forward to a much expanded student exchange and tourist program and we hope to be some of the Soviet students visiting the United States in the near future.

NINETY MILLION AMERICAN BOOKS

Pavel Chuvikov
Director, Foreign Literature Publishing House

AMERICAN BOOKS make up a very considerable part of our publication list. Our house has put out 680 titles by American writers in chemistry, physics, biology, economics, philosophy, history, foreign relations, the arts and fiction. Multiply this figure by the many other Soviet publishing houses like ours which specialize in foreign translations and you have some idea of the quantity of American writing published in the Soviet Union. The total is a staggering 90 million copies printed in 50 languages, circulated in every one of the Soviet republics.

American fiction is very widely read. Best seller is Jack London; the total printings of his books now come to 20 million copies. O. Henry has been published in 4 million copies and 122 editions; Theodore Dreiser in 9 million copies and Mark Twain in 11 million and 250 editions. Under way is a 12-volume edition of the complete works of Mark Twain. This is besides large printings of many contemporary American fiction writers.

American technical literature is in great demand by our readers. *Textbook of Polymer Chemistry* by Fred W. Billmeyer, Jr. was sold out in a few days. A two-volume *Experimental Nuclear Physics* edited by Professor Emilio Segre of the University of California also had a quick sale.

There is hardly an area of science or engineering in which we have not published one or more books by American writers. We put out the *Handbook of Industrial Electronic Control Circuits* by John Markus and Vin Zeluff in three editions. In farming we have H. O. Henderson and Paul M. Reaves' *Dairy Cattle Feeding and Management*, Heystaud and Fight's *Agricultural Areas of the United States*, and a good many others. In medicine we published a four-volume collection of American studies on cancer.

As to size of editions—we usually print 5,000 to 10,000 copies of scientific books; 30,000 copies of non-fiction books; and 50,000 to 400,000 copies of novels. Very frequently these first printings have to be heavily supplemented. There seems to be an inexhaustible hunger for books of all kinds in our country and in spite of large and frequent printings we never seem to catch up with demand. Books, I might add, are sold at lower prices in the Soviet Union than anywhere else in the world.

Our country now stands first in the world for publication of foreign writers, with the number of translations growing yearly. Our book list for next year is longer than it has ever been and with more Americans represented. We will be putting out 70 books by American writers, 22 of them fiction writers.

SOVIET ARMED FORCES WILL BE CUT BY 1,200,000 MEN IN THE NEXT YEAR OR TWO IN ACCORDANCE WITH THE LAW PASSED IN JANUARY BY THE USSR SUPREME SOVIET.

SERVICEMEN TRAIN FOR PEACE

By Pyotr Dmitriev

FEBRUARY 23 is celebrated as Soviet Army Day, a national holiday dating back to 1918. That was the crucial year when the young Soviet state was attacked by counter-revolutionary forces aided by foreign intervention. The Soviet people were compelled to form an army to defend their country and their new way of life. It was on February 23, 1918, that the Soviet Army scored its first victory and stopped an enemy invasion.

Since that time February 23 has become a traditional holiday with celebration rallies in honor of the armed forces all over the country. Major cities mark the holiday with gun salvos. Greetings and gifts are sent to servicemen. Holiday programs are performed for them at theaters and concert halls.

"We Want Disarmament"

Whenever a war was imposed on the Soviet state the armed forces always had the support of the entire nation. It is this, more than any other single factor, that accounts for victories that defied the calculations of the greatest military minds of our time.

The picked forces of fourteen countries that invaded Soviet Russia during the Civil War were driven out. The "invincible" Nazi army met the same fate in the Second World War. Just as the armed forces have always been able to rely on the support of the people, the people have always found their armed forces ready to defend the freedom and security of the nation.

The commemorative meetings held on February 23 pay tribute to those who sacrificed their lives in the country's defense. The speeches and statements made on this day deal not so much with the glory of battles as with the tragic cost of war and the urgent need for world peace.

Last September the Soviet Union submitted to the General Assembly of the United Nations its plans for total and universal disarmament. Introducing the proposal, Nikita Khrushchev said in his speech:

"We have proved our desire to solve the disarmament problem not only by words, but by deeds also. The Soviet Union has time and again taken the lead in proposing concrete steps for putting an end to the arms race, for

Workers of many factories are patrons of army units, helping to orient the servicemen to civilian life.

Army service isn't all military routine. Budding talents have a chance to develop.

Mail call—one of the big moments of the day. This one may be from home or a reply to a job application.

getting down to practical disarmament measures as soon as possible.

"Immediately after the war we carried through extensive demobilization in our country. The Soviet Union closed down all the military bases it had on the territories of other states after the Second World War.

"In recent years the Soviet armed forces have been cut, unilaterally, by a total of over two million men. The Soviet forces in the German Democratic Republic have been considerably reduced and all Soviet troops have been withdrawn from the Rumanian People's Republic. We have also effected a considerable cut in our military budget."

The USSR Supreme Soviet, the country's legislature, at its session last October, issued an appeal to the parliaments of all other countries urging an early solution of the disarmament problem. The appeal expressed the hope that all parliaments and governments will do their best "to achieve disarmament and open up before mankind the path to eternal peace on earth."

The idea of general and complete disarmament has been welcomed with profound satisfaction by people the world over. The Supreme Soviet's appeal met with support from the parliaments of the socialist countries and from many legislators and statesmen in other countries as well.

1,200,000 Men to Be Demobilized

The Soviet Union has been carrying out, step by step, the concrete measures set forth in its disarmament plan. In January the USSR Council of Ministers and the Communist Party's Central Committee submitted to the Supreme Soviet a proposal for the further reduction of the country's armed forces.

Introducing this proposal, Nikita Khrushchev said that the Soviet Government considered it possible to carry out this reduction of armed forces unilaterally, regardless of the course the discussion of the disarmament problem takes in the United Nations Committee of Ten or other international bodies.

The law passed by USSR Supreme Soviet provides for a one-third reduction of the country's armed forces in the next year or two—from the present 3,623,000 men to 2,423,000. This is below the level proposed by the United States, Britain and France during the discussion of the disarmament problem in 1956.

The USSR Supreme Soviet again appealed to the parliaments of all other countries "to respond to the initiative of the Soviet Union and undertake practical steps to reduce their armed forces."

The law passed by the USSR Supreme Soviet directs the government to make all necessary preparations to provide suitable employment for all those who are going to be demobilized. Each one of the 1,200,000 men to be relieved of army duties will receive every kind of help and consideration in readjusting to civilian life.

Jobs After Military Service

A term of military service is required for all young men in the Soviet Union. This is a civic duty called for by the Constitution.

The routine in the army is by no means confined to military training alone but in large measure is oriented to prepare the temporary soldier for peace-time life when he is demobilized. As a rule the serviceman, if he has no trade or skill when he enters the army, will have one by the time he leaves.

Young people called to the colors are not worried about jobs when their term of service is up. A factory, office or other enterprise is required by law to rehire an ex-serviceman within a month after he is demobilized. Should there be some difficulty about resuming his old job, the demobilized soldier is entitled to similar work at similar pay in the same town.

Young men called to the colors are not worried about jobs when their term of service is up. There are openings for every skill and ability in every part of the Soviet Union.

THE SMILES? THEY'VE FINISHED THEIR TOUR OF DUTY AND ARE GOING BACK TO SCHOOL OR JOB.

THESE TWO EX-SERVICEMEN LEARNED TRACTOR MAINTENANCE WHILE SERVING IN THE ARMY.

SERVICEMEN TRAIN FOR PEACE

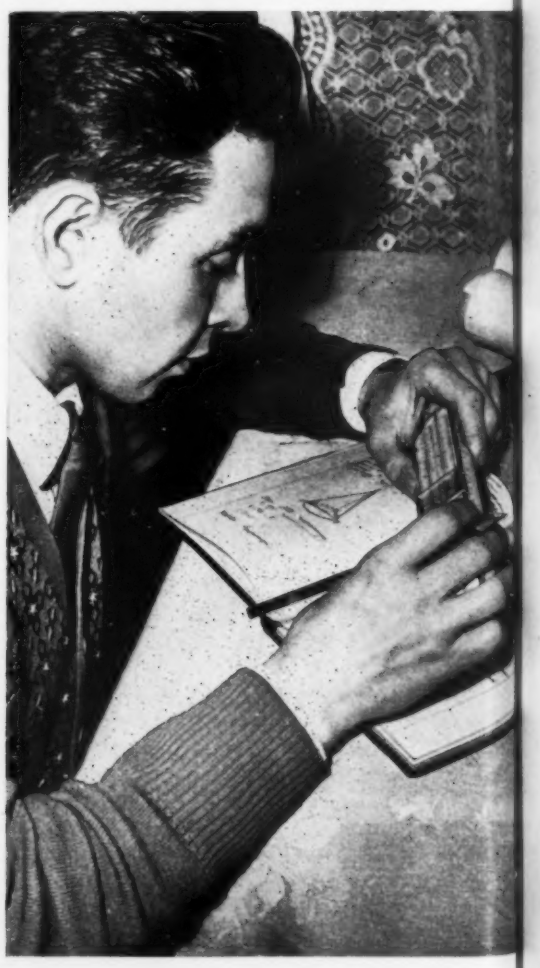
There is no job problem in the Soviet Union. The problem is to find enough men to fill all the jobs which keep opening up as the country's industry and agriculture expand.

Not infrequently, ex-servicemen will decide to try a different line of work or a different part of the country—perhaps to get a job on one of the construction sites in a new Siberian city or to help grow wheat on virgin lands in Kazakhstan. Many young people have been doing that after their army service.

Ivan Chupakhin is one of them. He writes in a letter to *Krasnaya Zvezda*, the army newspaper: "I've just finished my tour of duty. Like many other men in my regiment, I decided to choose one of the most difficult sectors on the seven-year plan front. I'm leaving for West Siberia to help build a new iron and steel plant there. I've learned about machines in the army and I think my knowledge will stand me in good stead in peacetime work."

Vladislav Ponomaryov, just demobilized, is a native Siberian and eager to get back

BACK TO COLLEGE STUDIES AFTER DEMOBILIZATION.



THIS EX-NAVY MAN EAGERLY LEARNS ABOUT TEXTILES.

home. He's a bricklayer by trade. "We have a big building program in Siberia," he says, "and we could use all that money now spent for missiles to build more houses, schools, theaters and hospitals."

Vladimir Stotsky taught the Russian language and literature in his native Kirghizia before he was called up for service. He will be glad to be teaching again. Abdulla Khabidullin also intends to go back home to his old job. He's a driver and lives in the Tatar Autonomous Republic.

Back to School

Some of the men go back to their studies—specialized secondary school or college—to complete their education. Ex-servicemen are given priority for admission to all schools. If a soldier enrolls as a student while still in the army, he is usually demobilized before his full term of service is up. Like every other Soviet student, the ex-soldier gets a monthly stipend and his dormitory accommodation while studying.

Young Albert Atakhanov, who comes from the Central Asian Republic of Turkmenia, expects to enroll at a dramatic school when he is demobilized. He seems to be a natural-born actor and did a fine job of directing his regiment's amateur theater group.

Private Alexei Ratnikov hails from Chapayevsk, a small city on the Volga. Before he was called up to the army, he worked as a mechanic. Alexei studied while in service and has just passed his entrance examinations for the Moscow Aviation Engineering Institute. This ex-soldier speaks for every man in the Soviet Army when he says:

"My term of service gave me excellent training that I expect to be using not for war but for peace. I most certainly hope that the plane I'll be piloting after I get through my course at the institute will never carry a lethal load."

A PLANT IS REQUIRED BY LAW TO REHIRE SERVICEMEN WITHIN A MONTH AFTER DEMOBILIZATION.

OUR THEATER GOES TO

MIKHAIL SHCHEPKIN (1788-1863)

PROV SADOVSKY (1818-1872)

MARIA YERMOLOVA (1853-1928)

ALEXANDRA YABLOCHKINA

Scene from the current production of Alexander Ostrovsky's *Wolves and Sheep*, first staged in 1853. During the author's lifetime the Maly produced 47 of his 48 plays.

Moscow's Maly Theater of Drama, which celebrated its 135th birthday last October, has a wide repertoire including many world classics and contemporary Soviet and foreign plays.

THE PEOPLE

By Alexandra Yablochkina
People's Artist of the USSR

A monument to Alexander Ostrovsky stands in front of the Maly, sometimes called Ostrovsky House, in recognition of the dramatist who did so much to create the theater's fame.

Alexandra Yablochkina was 93 last November and in her 72 years on the stage she has appeared in nearly 400 roles. Her playing reflects the finest artistic traditions of the Russian drama theater.

As far back as 1915 stage people, in tribute to Yablochkina's artistry, elected her President of the All-Russian Theater Society. She has been chosen to head the organization at every election since.

Yablochkina has been honored with three Orders of Lenin, two Orders of the Red Banner of Labor and the Stalin Prize. She also holds the honorary title of People's Artist of the USSR, the highest national award an actor can receive.

THE MALY Theater of Drama ranks with the Bolshoi Theater of Opera and Ballet for the best in Russian stage art. The literal meaning of Maly is minor, but that in no way belittles the theater's illustrious grandeur. It was so named because its building is less imposing than that of the Bolshoi—meaning grand—which stands across the street.

Last October the Maly celebrated its 135th anniversary. The theater was fathered by two great actors, Mikhail Shchepkin (1788-1863) and Pavel Mochalov (1800-1848)—democrats by birth and by conviction. Descended from serf-peasants, they saw in the theater a powerful instrument for enlightening and educating the people.

Legacy of the Past

The first important works of Russian drama to be staged by the Maly were Alexander Griboyedov's *Wit Works Woe* and Nikolai Gogol's *Inspector-General.* These were satirical plays which condemned the morality of a regime based on serfdom.

Shchepkin, unexcelled as comic and satiric actor, had roles in both plays. He did not descend to caricature. The power of his art lay in its profound psychological insight, its honest portrayal of emotion and its outward simplicity. His contemporaries had reason to call him the first actor to be "non-theatrical in the theater."

Shchepkin founded the Russian realistic school of acting. Scores of his talented pupils followed the tradition he set to bring fame to the Maly Theater. The dramatic school opened under the auspices of the Maly nearly a century ago bears his name.

Mochalov was a tragedian described by Vissarion Belinsky, one of Russia's greatest critics, as "the genius who shared with Shakespeare the glory of creating Hamlet."

He also renounced the pompous and stilted acting of the time. In portrayals of characters from Shakespeare, Schiller and Griboyedov he read the parts as though they were contemporary. To his audiences they sounded like calls for the human spirit to emancipate itself, to fight for lofty humanist ideals.

But it was not only the greatness of Maly artists and their fine portrayals of the classics that brought the theater fame. As important as the classic drama may be with its universality of character and breadth of appeal, a truly progressive national theater cannot forge ahead if it produces the world classics alone. It must have a contemporary national repertoire.

In 1853 the Maly produced the first play by Alexander Ostrovsky (1823-1886). That first handshake of the theater with the new playwright developed into a 30-year creative partnership based on an affinity of idea and artistic viewpoint.

Ostrovsky carried on the task which Griboyedov and Gogol had begun—to create a national dramaturgy. Of his 48 dramas and comedies 47 were produced in his lifetime by the Maly Theater. All were tremendous successes.

His plays gave a broad picture of contemporary life. He showed that "somber kingdom" of old Russia, and with rare insight and great sympathy revealed the Russian character.

I have played 18 roles in Ostrovsky's plays. In some of them I played in a cast with actors who had worked out their impersonations under the guidance of the author himself.

During Ostrovsky's lifetime the Maly company included many very talented actors. Shchepkin still graced the stage. Prov Sadovsky, who founded a famous theatrical family with some members acting today, was then in his prime. Then there were Glikeria Fedotova, Maria Yermolova, Prov Sadovsky's son Mikhail, Alexander Yuzhin—each of them made Russian theater history. What a splendid team they were!

In that bright galaxy, Maria Yermolova was the star of the highest magnitude, the pride and glory of the Russian stage. It was in 1876, still in her youth, that she appeared as Laurencia in Lope de Vega's *Fuente Ovejuna.* The action of this play is laid in feudal times. Laurencia is a peasant girl dishonored by a powerful feudal lord. She urges her fellow villagers to take up arms against the tyrant.

The audiences, who listened to Yermolova as a 15th century Spanish girl make these fiery speeches, interpreted them as a call to Russians to battle czarist autocracy. The students marched out into the streets singing revolutionary songs. After a few performances the play was banned.

The impact of Yermolova on her contemporaries was very deep indeed. After the Russian people overthrew czarism, they paid their homage to the courage of this eminent actress.

On the occasion of her 50th jubilee a great celebration was held in 1920. Present among the guests was Lenin, founder of the Soviet state. The Moscow City Soviet sent her a warm greeting which read: "With the Maly Theater the proletariat received as legacy the finest that the old world offered in art, and the very finest of that art—Maria Yermolova's art." She was the first actress to be honored with the title People's Artist, the highest tribute to an artist in our country.

Nikolai Gogol's *Inspector-General,* a comedy about the foibles of provincialism.

Scene from *Lyubov Yarovaya* by Konstantin Trenev. The early years of the Soviet Union was its theme, and the events and people portrayed were an inspiration to the younger generation.

OUR THEATER GOES TO THE PEOPLE

Yevdokia Turchaninova in Ostrovsky's play *Truth Is Good but Happiness Is Better.*

Nikita Podgorny in Dostoyevsky's *Stepanchikovo Village and Its Inhabitants.*

"Art Belongs to the People"

When I think of the role the theater plays in the life of a country and its people, these words of Lenin often come to my mind: "Art belongs to the people. It must be deeply rooted in the midst of the working masses. It must be understood and loved by them. It must unite their feelings, thoughts and aspirations. it must elevate them."

Our theater "went to the people" the very first days after the Revolution. During the Civil War we played to workers' clubs and to Red Army units fighting against the counter-revolutionists and the interventionists. Later we performed at the sites where new factories and plants were being built and at collective farms.

Grateful audiences, made up of plain people who were searching for answers to the many questions posed by the new life, awaited us eagerly wherever we went. We tried to answer their questions in the new plays we presented.

I remember the way our production of Konstantin Trenev's *Lyubov Yarovaya* swayed people. It is a play about the first years of the Revolution. Its main heros are the young schoolteacher Lyubov Yarovaya, the commissar Koshkin and the sailor Shvandya.

The characters portrayed in the play were so lifelike and compelling that our performance had all the force of a hymn to fortitude, steadfastness and revolutionary vigilance. The play's heroes set inspiring examples for the young people of that time.

Later we staged the plays of such other prominent Soviet dramatists as Leonid Leonov, Boris Romashov, Alexander Korneichuk, Boris Lavrenyov and Nikolai Pogodin. They pictured the most significant aspects of new life in the country.

Romashov's *Fiery Bridge* showed how Soviet people were building their young state in spite of hardships caused by intervention and counter-revolution. *Skutarevsky*, a play by Leonov, was dedicated to those of the Russian intellectuals who found their places among the revolutionary people. Korneichuk's witty comedies *In the Ukrainian Steppes* and *Guelder Rose Grove* pictured life in the Soviet countryside.

Many of the plays we present reflect the problems of our time. Some of the current productions, for example, deal with the ethical and moral education of young people today.

In *Ivan Rybakov*, a play by Victor Gusev, the motivating theme is that a young man's standing in a socialist society is not determined by the status of his parents, no matter how important their contributions, but by his own merit and his usefulness to the community.

Another of our current productions, *A House of Cards* by Oleg Stukalov, centers on a young man who is full of optimism and eagerness to find his true calling in life. The idea of the play is to show the difficulties sometimes created by that search and how essential it is to find the right solutions.

Our theater turns time and again for its plays to the classics. Our present repertoire includes Shakespeare's *Macbeth*, Ibsen's *Ghosts*, Shaw's *Pygmalion*, and a dramatization of Thackeray's *Vanity Fair*. From the Russian classics we do four plays by Ostrovsky, Leo Tolstoy's *Power of Darkness* and *The Living Corpse*, and a stage version of Dostoyevsky's *Stepanchikovo Village and Its Inhabitants*. To mark the centenary of Chekhov's birth we are presenting his *Ivanov*.

The years since the Revolution have brought us more than one generation of fine actors. Many of the talented young actors in our company are products of the Maly's dramatic school.

Our best actors—Yevdokia Turchaninova, Varvara Ryzhova, Yelena Gogoleva, Igor Ilyinsky, Mikhail Zharov—and our director Mikhail Tsarev have been honored with the title People's Artist of the USSR and many with the title Peoples' Artist of the Russian

Maly's repertoire is not limited to works written especially for the stage but includes many adaptations of famous novels. Here is scene from Dostoyevsky's *Stepanchikovo Village and Its Inhabitants.*

Mikhail Tsarev in Griboyedov's *Wit Works Woe*, satire on 18th century high society.

Scene from the Maly's stage adaptation of Thackeray's novel *Vanity Fair*, which is being shown this season, with Tatyana Yeremeyeva in the role of Becky Sharp and Nikolai Ryzhov as Joseph Sedley.

Vera Pashennaya in the leading role in Maxim Gorky's play *Vassa Zheleznova*.

Nikolai Anenkov in Gorky's *Barbarians*, about the intellectual's degradation in old Russia.

Mikhail Zharov in *Power of Darkness*. Two Tolstoy plays will be performed this season.

Yelena Gogoleva in *Macbeth*. Shakespeare is in the Maly's permanent repertoire.

Igor Ilyinsky in Leo Tolstoy's *Power of Darkness*, a play of the old peasant life.

Federation—Yelena Shatrova (she is also a deputy to the Russian Federation's Supreme Soviet), Natalia Belevtseva, Darya Zerkalova, Nikolai Annenkov, Nikolai Svetlovidov and Nikolai Ryzhov.

Patron of Amateur Groups

Our theater is closer to the people these days than it ever has been. We are patrons of amateur dramatic groups in Krasnogorsk District near Moscow, and of the amateur theater group at a large steel plant in the capital, the Hammer and Sickle Mills. Our actors and directors, set designers and make-up men teach the elements of stagecraft and help stage productions. We invite these groups to full-dress rehearsals of our own plays and discuss our new productions with them.

The Maly Theater Company makes regular cross-country tours. We use the same people and stage sets for the road as for our Moscow performances. The tours broaden the outlook of our actors and directors by bringing them in closer touch with varied audiences. They also help to broaden the cultural horizon of the playgoer in the smaller cities and towns, and present a challenge to the local theater.

Abundant proof of the esteem in which the people hold their Maly Theater was offered at the 135th anniversary celebration. Among those who came that day to pay tribute to the company were fellow actors from some 30 other Moscow theaters, and from the All-Russian Theater Society and related groups. There were also many other guests who came to the celebration—factory workers, people from farm communities, university students, school children, men from army units.

It was then that I felt how near to my heart were the words of Maria Yermolova: "All its soul the Maly Theater gave to the people; always we longed to be close to the people—the theater and I. And to the end of our days we shall always belong to the people."

A member of an amateur drama group thanks the Maly actors for coaching help.

Nikolai Kamensky, one of the top Soviet ski jumpers, has a record 88-meter leap to his credit. He is on the Soviet Union's Olympic team at the Winter Games in Squaw Valley, California.

Oleg Goncharenko, world title winner in 1953, 1956 and 1959, says that all existing records in speed skating will have to be shattered in order to capture the Olympic crown this year.

Pavel Kolchin was on the Soviet team that took first prize in the 40-kilometer relay in the 1956 Winter Olympics. Last year he won the international 15-kilometer event at Squaw Valley.

Nina and Stanislav Zhuk, one of several husband-wife teams, will make their Olympic debut.

59 match between the American and Soviet teams. The SSR Olympic team is made up of members of the Dynamo, ny Central, Wings of the Soviets and Locomotive clubs.

lya Yeroshina was a winner in the 1956 Winter Olym- . She is on the national team again after tough compe- ions in which Soviet athletes vied for the honored place.

WINTER OLYMPICS AT SQUAW VALLEY

By Yevgeni Valuyev
Vice Chairman
Joint Council, USSR Sports Societies

THE Eighth Winter Olympic Games opening at Squaw Valley, California, this February will see a stronger Soviet team than the last White Olympiad. All in all we will have 125 men and women present—contestants, coaches, physicians, referees and officials. This is the second time that we are taking part in the Winter Olympics. The first, in 1956 at Cortina d'Ampezzo in Italy, was one to be remembered, for the Soviet athletes led in the number of medals won.

In all previous White Olympiads the Scandinavian countries practically walked away with the show. The Norwegians especially seemed to have established a monopoly on gold medals. In five Olympiads they went home with more of them than any other country. Only once, in 1932, when the games were held at Lake Placid in New York State, did the Norwegians relinquish top honors to Americans.

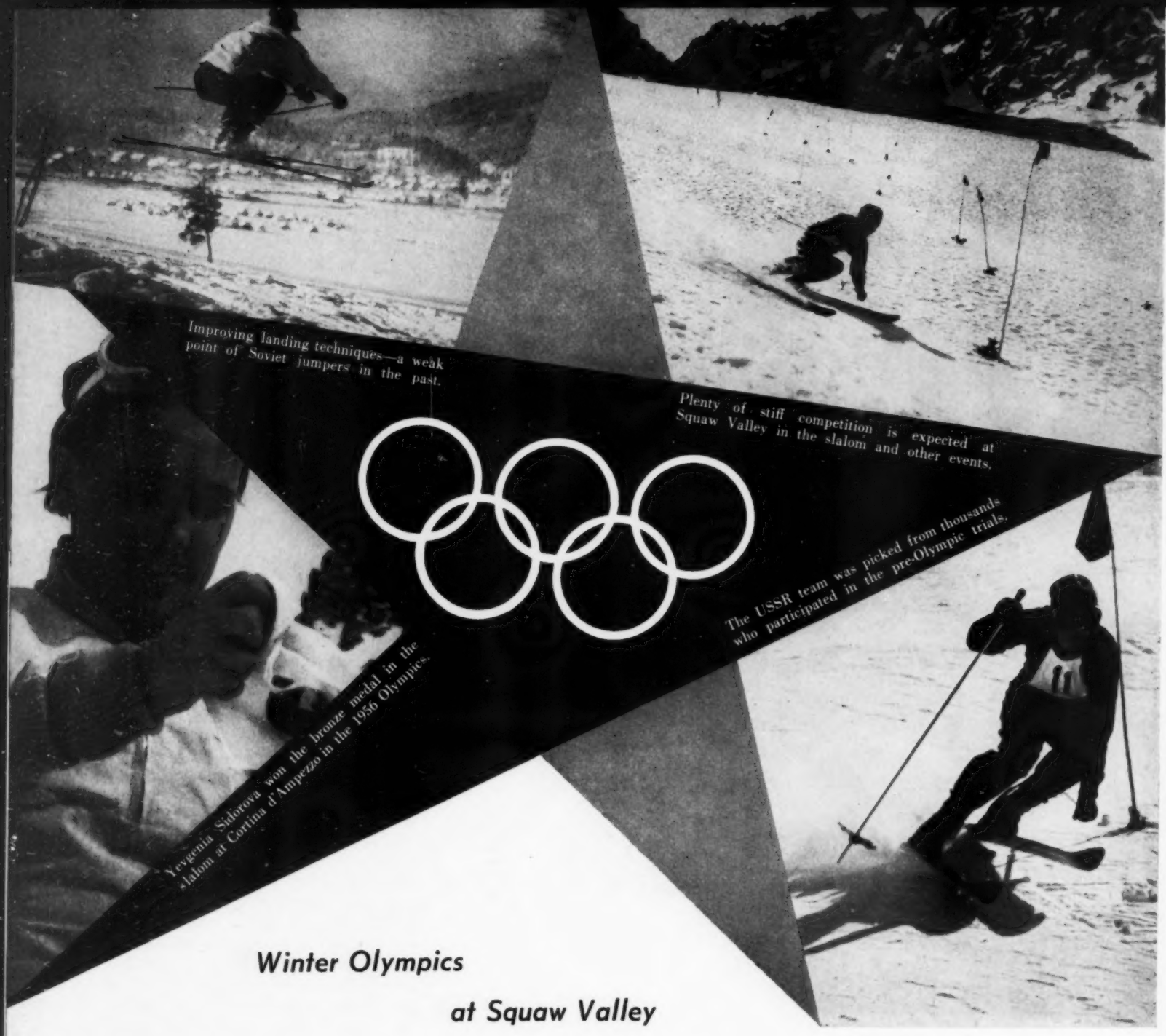
At the Squaw Valley Olympiad Soviet contestants will be taking part in practically all the events. They were chosen after two years of pre-Olympic trial matches in which athletes from every section of the country fought for a place on the national team.

The delegation includes a number of the 1956 Olympic winners—skiers Lyubov Kozyreva, Radya Yeroshina, Nikolai Anikin and Fyodor Terentyev, and speed skater Yevgeni Grishin.

Two of our leading ski jumpers, Nikolai Kamensky of Moscow and Koba Tsakadze of Georgia, are also in the delegation. So are a number of athletic couples—skiers Alevtina and Pavel Kolchin, Maria and Nikolai Gusakov; speed skaters Valentina and Boris Stenin; figure skaters Nina and Stanislav Zhuk.

The Olympic ice hockey team is made up of players chosen from several Moscow clubs. The Dynamo, Army Central, Wings of the Soviets and Locomotive sports societies were asked especially to concentrate on training the trios of forwards and the pairs of defensemen. All indications are that they did a good job. Among the team members are Nikolai Sologubov, Ivan Tregubov, Nikolai Khlystov and Nikolai Puchkov, all of whom participated in the previous Olympiad.

Soviet speed skaters are headed by Oleg Goncharenko, three-time world title winner. He believes that in the fight for the Olympic crowns, existing world records will be shattered on the Squaw Valley rink. That would mean racing 500 meters in 40 seconds or less,



Winter Olympics at Squaw Valley

1,500 meters in 2 minutes 6 seconds, 5,000 meters in 7 minutes 45 seconds, and 10,000 meters in 16 minutes 30 seconds.

Predictions as to the outcome of the ski contests vary. Assessing the debut of Soviet skiers at the Cortina d'Ampezzo games, most experts are inclined to be optimistic even though the men failed to score a single victory in the individual races. The 1956 gold medals were captured by the Scandinavian Big Three: Finland's Veikko Hakulinen, Sweden's Sixten Jernberg and Norway's Hallgeir Brenden.

In the 4× 10-kilometer relay, however, the Soviet skiers took the prize. It wasn't chance that did it. Pavel Kolchin, Fyodor Terentyev, Nikolai Anikin and Vladimir Kuzin turned in a more even performance than any other team. In each of the other skiing events several of the Soviet entrants finished among the top ten and sometimes among the top six.

As for the Soviet women ski racers, they have been acknowledged the world's best since the 1954 championship. Lyubov Kozyreva was the first Russian woman skier to win the Olympic crown. In slalom, however, our women have not achieved notable progress. Only Yevgenia Sidorova captured the bronze medal in this event.

Now seasoned after many international meets, Soviet skiers know what they can count on at Squaw Valley.

The men stand an excellent chance of taking the top prize back to the Soviet Union. The U.S. open championships last year were in the nature of a dress rehearsal for the Olympics. With almost all the Scandinavian stars participating, Pavel Kolchin took the 15-kilometer event and Dmitri Kochkin scored in the Nordic Combined (jumping and 15-kilometer race).

This last is especially promising. It shows that our ski jumpers have made substantial progress. They've managed to get rid of their earlier weakness—lack of confidence in landing after a jump. Our skiers, however, will face stiff opposition at Squaw Valley in the downhill, slalom and giant slalom events.

A new event, the biathlon, included in the Winter Olympics program for the first time, looks like a very strong gold medal possibility for Soviet athletes. The biathlon is made up of a 20-kilometer ski race with rifle shooting at four firing lines on the way.

In the 1959 world biathlon championships in Italy our athletes Vladimir Melanyin and Dmitri Sokolov won the gold and silver medals respectively. Team honors were also taken by the Soviet contestants.

In each of the events rivalry at Squaw Valley is expected to be sharper than at Cortina d'Ampezzo four years ago. But the Soviet delegation is now stronger. It looks like stiff competition all around awaits challengers for the Olympic honors.

The Soviet Union vs. Sweden—a game in Moscow in 1959. Immediately after victory over the Brock team, visiting from the United States, the Soviet hockey players lost to their guests from Sweden. few days later they won a second game, but there w be any second chance at the Squaw Valley Olymp

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