

GENERAL INFORMATION

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**N. S. KHRUSHCHEV:
WE GO TO THE USA
WITH
AN OPEN HEART**

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DURING HIS STAY IN MOSCOW RICHARD M. NIXON HAD USEFUL AND FRANK TALKS WITH NIKITA S. KHRUSHCHEV.

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Outstanding International Event



WE SHALL GO TO AMERICA WITH AN OPEN HEART AND IN ALL SINCERITY, WITH GOOD INTENTIONS, BEING GUIDED BY CONCERN FOR SAFEGUARDING PEACE THROUGHOUT THE WORLD, SAID CHAIRMAN OF THE USSR COUNCIL OF MINISTERS NIKITA S. KHRUSHCHEV AT THE PRESS CONFERENCE AT THE KREMLIN ON AUG. 5.



THESE days people throughout the Soviet Union—in Moscow and the Far East, in far-flung villages and great metropolitan centers, in factories and collective farms—are talking enthusiastically of the exchange visits of Chairman of the USSR Council of Ministers Nikita S. Khrushchev, and of US President Dwight D. Eisenhower.

At the invitation of the President, Nikita S. Khrushchev will arrive in Washington, D.C., on September 15. He will tour the country visiting New York, Los Angeles, San Francisco, Des Moines and Pittsburgh. During his stay in the United States the Chairman of the USSR Council of Ministers will have informal talks with President Dwight D. Eisenhower on problems of mutual interest to both countries.

Mr. Eisenhower will make an official visit to the USSR later this fall and will spend several days touring the country for a first hand view of Soviet life. His visit will provide another opportunity for an exchange of views with Nikita S. Khrushchev.

The crucial importance for world peace of friendlier relations between the United States and the Soviet Union is universally acknowledged. These visits are prompted not alone by the in-

terests of two great powers, but by the interests of the whole world.

“An outstanding international event”—this is how peace-loving people in every country have acclaimed this most significant of exchanges.

As soon as the news about N. S. Khrushchev's visit was announced hundreds of letters, telegrams and long distance telephone calls started to pour in from all parts of the United States inviting the Soviet Premier to be the guest of different American cities and towns. They came from governors and congressmen and mayors, from universities and chambers of commerce, from people in all walks of life.

Whether the cordial invitation came from an Iowa farmer or a New Jersey businessman, a California teacher or a New York sales executive, they expressed one common hope—that the exchange of visits would help to create better understanding between the two nations, that it would promote the cause of peace.

The statement issued simultaneously in Moscow and Washington expresses that same profound hope. It is one shared by men and women of good will everywhere.

NIKITA S. KHRUSHCHEV



NIKITA SERGEYEVICH KHRUSHCHEV, CHAIRMAN OF THE COUNCIL OF MINISTERS OF THE USSR AND FIRST SECRETARY OF THE CENTRAL COMMITTEE OF THE COMMUNIST PARTY.

NIKITA Sergeyevich Khrushchev, outstanding Soviet political leader and statesman, was born on April 17, 1894, in the village of Kalinovka, Kursk Region. It was there, in the center of the European part of Russia, that he spent his childhood. His family belonged to the poorest group of the rural population and Nikita began to work at a very early age, first as shepherd, then as farm hand in Kalinovka and in the neighboring villages. During the winter months, when work slackened, he managed to go to school.

His father, a miner, took young Nikita to the Donbas coal fields in the Ukraine where he got a job as apprentice fitter at the Bosset engineering factory in Yuzovka and, after he

had learned to repair mining machinery, in the pits which were owned by foreign companies.

"When I read Zola's *Germinal*," he recalls, "I was under the impression that he was writing not about France but about the pits in which my father and I worked. The lot of the workers was the same in France and in Russia. Later, when I attended lectures on political economy and the lecturer spoke of the wage system under capitalism, of the exploitation of workers, I had the feeling that Karl Marx had seen the mine where my father and I worked."

During the revolutionary upsurge, which swept the nation in 1917, he was working in

the Donbas. The miners and steelworkers in that region were among the most militant workers in the country, and N. S. Khrushchev's keen, searching mind and working-class background brought him into the very middle of the struggle for freedom.

In 1918 he joined the Communist Party. During the Civil War he served with the Soviet army on the southern front. The war ended, he returned to the Donbas as assistant manager of a mine. He left to enter the Workers' Faculty of the Donetsk Industrial Institute. This was a type of preparatory school then organized to give adult workers and peasants a three- or four-year secondary school education.

After graduation, he was elected secretary of the local District Committee of the Communist Party. In that position he dealt with matters relating to mining and farming. Subsequently he headed the Organization Department of the Yuzovka Region Party Committee and held important Party posts in Kiev.

In 1929 he went back to school again, this time to the Industrial Academy of Moscow, an institution at the university level, which functioned at the time to train top management for the country's economy. He was elected secretary of the Party Committee of the Academy.

For a period during and after 1931 N. S. Khrushchev headed one and then another District Committee of the Party in Moscow. He moved ahead to increasingly important posts, until in 1934 he was elected to membership on the Central Committee of the Communist Party of the Soviet Union. In 1935 he was elected First Secretary of the Moscow Committee of the Party; in 1938, First Secretary of the Central Committee of the Ukrainian Communist Party; and in 1939, a member of the Political Bureau of the Central Committee of the Communist Party of the Soviet Union, which was reorganized in 1952 into the Presidium of the Central Committee.

Active Organizer of Socialist Construction

N. S. Khrushchev's talent for large-scale organizing was demonstrated in the thirties by his direction of the many-faceted plan to reconstruct Moscow. He spent long hours with architects and city planners, visited building sites for new industrial plants and housing projects, and personally checked construction progress on the Moscow subway and the Moscow-Volga Canal.

In the twelve years that N. S. Khrushchev headed the Ukrainian Communist Party he played an important part in advancing the

republic's economy and culture and in improving the well-being of the population.

When the Nazi invasion began in June 1941, N. S. Khrushchev undertook the enormously difficult job of moving the industry of the Ukraine eastward, out of reach of the advancing fascist armies. He served in front line posts during the entire course of the war as member of the Military Councils of the Kiev, Southwest, Stalingrad, Southern and First Ukrainian fronts. He was directly involved in the defense of Stalingrad and the shattering defeat of the Nazi army, a critical turning point of the war. He made a particularly important contribution to the organization of the partisan movement in the Ukraine.

In 1949 he was elected Secretary of the Central Committee of the Communist Party of the Soviet Union and Secretary of the Moscow Regional Committee of the Party; in 1953 he was elected First Secretary of the Party's Central Committee. In March 1958 the USSR Supreme Soviet appointed him Chairman of the USSR Council of Ministers.

In April 1959, in recognition of his outstanding services in behalf of peace, N. S. Khrushchev was awarded an International Lenin Peace Prize for the Promotion of Peace among Nations.

Close Contact with People

The Soviet statesman recently observed his sixty-fifth birthday. His mobile face with its quick, winning smile is familiar to people the world over.

Briefly, Nikita Khrushchev can best be described as a leader of the Lenin type, nearness to the people being his most characteristic trait. Soviet citizens by the thousands know his hearty handshake and direct friendliness. His frequent travels criss-cross the country. In the course of a year he visits innumerable industrial plants and collective



In the thirties N. S. Khrushchev directed the complex many-faceted plan to reconstruct Moscow.

N. S. Khrushchev is presented with an order in recognition of his outstanding war service.



N. S. KHRUSHCHEV IN KIEV AFTER ITS LIBERATION IN 1944. HE MADE AN IMPORTANT CONTRIBUTION TO THE RESTORATION OF THE ECONOMY IN WAR-DAMAGED AREAS.





BETWEEN MEETINGS OF THE 21ST COMMUNIST PARTY CONGRESS N. S. KHRUSHCHEV TALKS WITH COLLECTIVE FARMER YEVGENIA ANDREYEVA AND MINER NIKOLAI MAMAI.

NIKITA S. KHRUSHCHEV

COLLECTIVE FARM SCHOOLGIRL NINA KURTSEVA PRESENTS N. S. KHRUSHCHEV WITH A YOUNG PIONEER TIE.



and state farms and speaks at many meetings.

He has the faculty of translating complex problems into clear everyday language. He talks simply and colloquially whether he is addressing a large audience or carrying on a conversation.

Thanks to his close contact with people at many levels and his firsthand look into many activities, N. S. Khrushchev has been able to acquire a deep knowledge of life, to check on the efficacy of governmental undertakings. He consults with and seeks the advice of large numbers of people on important affairs of state before formulating a proposal. Frequently a recommendation will emerge from a conversation he had with a collective farmer or rank-and-file worker. The appeal to the country's population to overtake the United States in per capita production of meat, milk and butter, which has had so stimulating an effect on Soviet livestock farming, resulted from N. S. Khrushchev's conversations with collective farmers and state-farm workers, after his direct acquaintance with their plans to bring about a sharp increase in livestock production:

His statements are frank and straightforward, even on extremely complex political problems. This frankness stems from his complete and unalterable faith in communism and the people. One may recall his speeches with regard to Stalin's personality cult and

on the serious shortcomings formerly tolerated in the management of the country's agriculture.

Fruitful Economic and Social Leadership

A whole series of most significant economic and social undertakings since 1953 bear the mark of N. S. Khrushchev's initiative and leadership. They made possible the great progress in all spheres of the country's life, in the building of communism.

It was at his initiative that the old system of centralized industrial administration from ministries at the capital was changed. Now regional economic councils direct local industry and construction. The improvements are manifold. The changeover has cut duplication, saved great stores of material, eliminated extensive haulage and, most important, has enormously stimulated local initiative.

Under N. S. Khrushchev's energetic leadership all branches of Soviet agriculture have moved forward with giant strides. Most important of the many measures taken in the past half-dozen years are these: the large-scale reclamation of virgin and long-fallow lands—some 90,000 acres have been reclaimed since 1954; increased farm mechanization and electrification through greater governmental financing; decentralized planning of farm production; reorganization of the system of machine and tractor stations and

the sale of agricultural machinery to collective farms; a new procurement system which pays higher prices to collective farmers for their products.

These measures and others have made for larger harvests thus raising the standard of living not only of collective farmers but of the Soviet people generally.

Due to Nikita Khrushchev's initiative the progress of Soviet public education has been quickened. Legislation recently passed by the USSR Supreme Soviet aims to strengthen the tie between school and every day life. The new curriculum is based upon these principles—integrating theory with productive labor and combining a general education with polytechnical and vocational training, this to carry through from the earliest grades in steps consistent with the child's levels of development. This approach—to secure the closest relation between study and productive practice—also determines the altered college curriculum. This important reform reflects concern for the harmonious development of the country's younger generation, for the versatile education of the builders of a new society.

Continuous progress of the socialist economy of the Soviet Union has resulted in further improvements in the people's life in the past few years. Real wages of industrial and office workers and the real incomes of collective farmers have risen markedly. The workday has been cut. Pensions have

N. S. KHRUSHCHEV SAYS:

On Building Communism

Communism is unthinkable without an abundance of material values, to create which we must rapidly develop production and, above all, heavy industry. The building of communism is no fantastic undertaking that the ordinary man cannot understand. The builders of communism are factory workers, collective farmers, engineers, technicians, doctors and teachers.

Communism cannot be couched in formulas and notions from which one might think that only some kind of gifted and talented people could build communism. No, comrades, communism is an abundance of material and cultural values. It is the full utilization of all opportunities, so that the people enjoy all good things and have everything necessary for developing the creative forces, both of society as a whole and of everybody living in that society.

Here one needs to understand concretely what we should do in order to create an abundance of material values. The effort to create such good things doesn't consist simply in general appeals to work better and increase labor productivity. A creative approach to the building of communism means organizing things so that everybody knows what he should do at a given stage, what concretely he must undertake in order to advance the country to communism.

The task facing us is rapidly to surpass the United States, the richest capitalist country, in per capita livestock production. That is precisely one of the concrete tasks in building communism. (From a speech in Ryazan, February 13, 1959)

Increasing Social Services

Man is a social being and his life outside the collective, in isolation from the society to which he is bound by most diverse ties, is inconceivable. This social aspect of man's life is revealed more fully in the course of communist construction. That is why the satisfaction of his individual requirements must proceed hand in hand with the increasing supply of the good things of life produced by society. It must proceed not only through increased wages, but also through social funds, whose role and significance will increase more and more.

The expenditure of the state on social services enjoyed by the people is growing constantly. It may be pointed out, for example, that over 215 billion rubles were spent in 1958 for social insurance benefits, allowances, pensions, stipends to students, free education, health services, payments for holidays, maintenance of boarding schools, kindergartens, nurseries, sanatoriums.

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N. S. KHRUSHCHEV GREETING WORKERS WHO ARE CONSTRUCTING THE GIANT STALINGRAD HYDROPOWER STATION.





THE SOVIET PREMIER ON A VISIT TO A TULA FACTORY HEARTILY CONGRATULATES SOME OF THE VETERAN WORKERS ON THE HIGH QUALITY OF THEIR CRAFTSMANSHIP.

NIKITA S. KHRUSHCHEV

been increased. Taxes have been reduced. Housing construction is conducted on a vast scale. All this is justifiably associated in the minds of the Soviet people with the name of N. S. Khrushchev, whose initiative is responsible for the implementation of many undertakings aimed at raising the general living standard of the population.

On the basis of the laws operating at the present stage of communist construction and taking into account the enormously accelerated rate of Soviet production, N. S. Khrushchev has proposed that national planning be done for longer periods than the customary five-year terms. He outlined the principles

and major directions of the long-range economic plan for the next 15 years in a report presented at a session of the USSR Supreme Soviet in November 1957 celebrating the fortieth anniversary of the Great October Socialist Revolution.

The target figures for the period between 1959 and 1965 are based on this long-range plan. The seven-year plan now in progress calls for all-round development of the country's productive forces. On the basis of priority expansion of heavy industry, it aims at a level of production in all branches of the national economy that would enable the USSR to take a decisive step toward the estab-



Greeting Praskovya Kovrova, who won national recognition for her advanced methods in farming.

IN THE COURSE OF EACH YEAR NIKITA KHRUSHCHEV VISITS A GREAT MANY COLLECTIVE AND STATE FARMS.





HIS NATIVE VILLAGE, KALINOVKA, WELCOMES N. S. KHRUSHCHEV WITH THE TRADITIONAL BREAD AND SALT.

N. S. Khrushchev Says:

Continued

rest homes and homes for the aged, and other payments and benefits. The seven-year plan provides that expenses under this head should rise to about \$60 billion rubles, or to about 3,800 rubles per worker annually. In addition, the state will spend over 800 rubles annually per worker on the building of houses and cultural, medical and other establishments. (From the Report to the 21st Congress of the CPSU, January 27, 1959)

Production for Man

... Our seven-year plan is not just a bundle of figures. It is first of all the organization of socialist production on a new and higher technical and scientific level, on the basis of the all-round development of the mechanization and automation of production processes.

Why is it that our Party believes mechanization and automation of production to be the prime task under these conditions? Because this allows the work of the people to be made much easier, labor productivity at enterprises to be greatly increased. Increasing productivity means a sharp increase in output. Consequently, we shall be able better and better and to an increasingly greater extent to satisfy the steadily growing requirements of the population, and to reduce the length of the working day. Not man for production, but production for man—this is the leitmotiv of all our economic plans.

Communism means plenty of food-stuffs and consumer commodities. But communism is not only that. Communism is the most progressive and most highly organized society this planet has ever known. It is a society with the highest level of production and no tiresome manual labor. Under communism work processes will be fully mechanized. Human labor will consist of the ability to run machinery. It is this that is implied in the elimination of the differences between mental and manual labor under communism. Machines will be created and run by people having the same high standard of technical knowledge and mental development. Under communism man will be able fully to display his great creative ability. He will indeed be Man with a capital "M," as Gorky said. (From a speech in Katowice, Poland, July 16, 1959)

Parliaments of the People

Life itself, the entire development of the Soviet socialist state, have prepared for the gradual transfer of a number of functions of divisions of the state apparatus to social organizations, including the greatest and most authoritative of them—the Soviets of Working Peo-

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NEARNESS TO THE PEOPLE IS THE MOST TYPICAL TRAIT OF N. S. KHRUSHCHEV'S CHARACTER AND STYLE OF WORK.

LOOKING OVER A NEW MODEL PASSENGER CAR AT THE GORKY AUTO PLANT, LARGEST IN THE SOVIET UNION.





THE SOVIET PREMIER ADDRESSING THE THIRD CONGRESS OF SOVIET WRITERS WHICH CONVENED IN MOSCOW THIS SPRING. REPRESENTED WERE WRITERS FROM EVERY REPUBLIC.

NIKITA S. KHRUSHCHEV



N. S. Khrushchev examines some prize sheep at a stock breeding farm in the Kirghiz Republic.

lishment of a material and technical base for communism and to ensure the Soviet Union's victory in the peaceful economic competition with the capitalist countries in the shortest period of time. By raising the country's economic potential, the seven-year plan will bring about a substantial improvement in the well-being of the people.

Further Development of Soviet Democracy

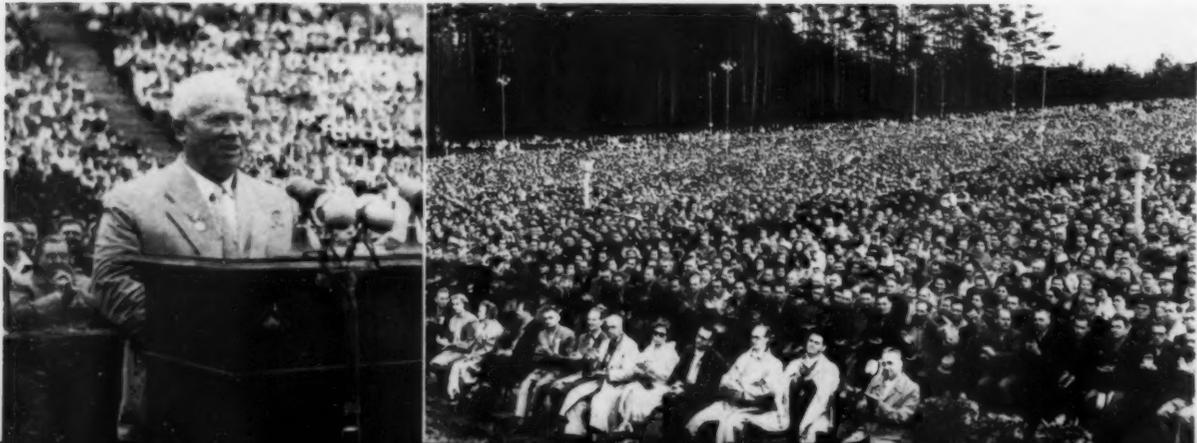
"The chief trend in the development of the socialist state," said N. S. Khrushchev at the Twenty-first Congress of the Communist Party of the Soviet Union held in January of this year, "is the maximum promotion of democracy, drawing the broadest sections of the population into the management of all national affairs, enlisting all citizens to share in the supervision of economic and cultural development."

This trend is being consistently furthered in the political and social life of the USSR.

A number of measures recently adopted enlarge the rights and powers of the union republics, local government bodies, trade unions and collective farms. Here again the intent is to foster local initiative and to transfer important government functions to the large numbers of citizens grouped in public organizations. Strict observance of the law is guaranteed.

Characteristic, too, of this broader spread of democratic participation is the nationwide discussion that develops around important questions of government policy. Draft proposals for new legislation are widely publicized by press, radio and television and are discussed by all the people. Typical was the public discussion for several months before the opening of the Twenty-first Congress. Before the Congress met to consider the target figures for the seven-year plan they had been discussed at 968,000 public meetings attended by more than 70 million people. At these meetings more than 4.6 million speakers pro-

AT A LARGE OPEN-AIR RALLY IN RIGA, CAPITAL OF THE LATVIAN REPUBLIC, N. S. KHRUSHCHEV DISCUSSES DOMESTIC AND FOREIGN POLICY.





N. S. KHRUSHCHEV APPLAUDS BUILDERS OF THE LENIN HYDROELECTRIC STATION DURING ITS OFFICIAL OPENING.

posed amendments and corrections to the draft.

Still more recommendations were contained in 650,000 letters addressed to the press and to organizations of various kinds. The national debate was richly productive in filling in the general outlines of the plan. It also contributed immeasurably to long-range future planning.

Further perfection and development of Soviet democracy, accomplished under N. S. Khrushchev's leadership and with his energetic participation, have produced the most favorable results. A characteristic feature of the period following the Twentieth Congress of the Communist Party of the Soviet Union was the growing unity of the peoples of the Soviet Union around the Communist Party, and greater initiative on the part of the masses in the process of communist construction.

N. S. Khrushchev's personal role in the practical implementation of the principles of

socialist democracy is exceptionally great. In his responsible positions of First Secretary of the Central Committee of the CPSU and as head of the government, N. S. Khrushchev adheres consistently and most strictly to the principles of collective leadership and fights energetically for the observance of the Leninist principles of Party life. That can be most convincingly illustrated by facts.

Two Party Congresses were held since 1953. Plenary meetings of the Central Committee (highest organ in the intervals between Congresses) are convened regularly. The Presidium, which is the executive organ of the Central Committee of the CPSU, meets regularly at least once a week.

Much credit is due to N. S. Khrushchev for the thoroughly consistent and complete implementation of the principle of collective leadership in the Soviet government system, beginning with the USSR Supreme Soviet and the Council of Ministers.

N. S. Khrushchev Says:

Continued

ple's Deputies—as outlined by the 21st Party Congress. This is an expression of the further development of Soviet socialist democracy to that lofty goal when, according to Lenin's definition, all people learn to administer, and will indeed themselves administer, all the affairs of society.

As has already been said, the Supreme Soviets of the Union Republics have found it necessary to increase considerably the number of deputies to local soviets with the object of improving their work, strengthening their ties with the masses, and promoting the further development of socialist democracy and the drawing of working people into the practical activity of the Soviets on a wider scale. In the forthcoming elections to the local Soviets over 1,800,000 deputies are to be elected. Many energetic and enterprising people will join the Soviets. This is a great popular force.

A deputy in our country is called upon to carry out the will of the people, to give expression to their interests. The strength of the deputies to the Soviets lies in their unbreakable ties with the people. And the deputies to the Soviets are themselves factory workers, collective farmers, office workers, scientists, workers in the fields of literature and the arts. They are the flesh and blood of the people.

Our deputies are genuine deputies of the people. Our Soviets, our parliaments—the Supreme Soviets of the Union Republics and the Supreme Soviet of the USSR—are genuine parliaments of the people.

The deputies to the Soviets must always bear in mind that they are under the continual supervision of their electors and that their activity as deputies is judged, not by their words and the speeches they make during the election campaign, but by specific deeds. (From a speech to the Kalinin constituency of Moscow, February 24, 1959)

Devotion to Common Cause

We have many talented people. We must boldly advance them and skilfully use them. Many told me about it and I myself was very glad when I heard Valentina Gaganova, a wonderful girl member of the Young Communist League and team-leader, speak here on behalf of the women workers of the Vyshni Volochok Mills in Kalinin Region. Just think, comrades—and this is something you really have to think about—a man who thinks along capitalist lines will never believe that a worker voluntarily gave up a better-paid job for a lower-paid job and began to earn less.

Moreover, this woman worker, went

Continued on page 11

N. S. KHRUSHCHEV IN KAZAKHSTAN WHERE LARGE AREAS OF VIRGIN LANDS WERE RECLAIMED ON HIS INITIATIVE.





READING PRAVDA BETWEEN SESSIONS OF THE SVERDLOVSK CONFERENCE OF THE URALS AGRICULTURAL WORKERS.

NIKITA S. KHRUSHCHEV

A most valuable contribution has been made by N. S. Khrushchev to the development of Marxist-Leninist theory, to substantiate scientifically the major undertakings implemented by the Communist Party and the Soviet Government in internal developments and in its foreign policy.

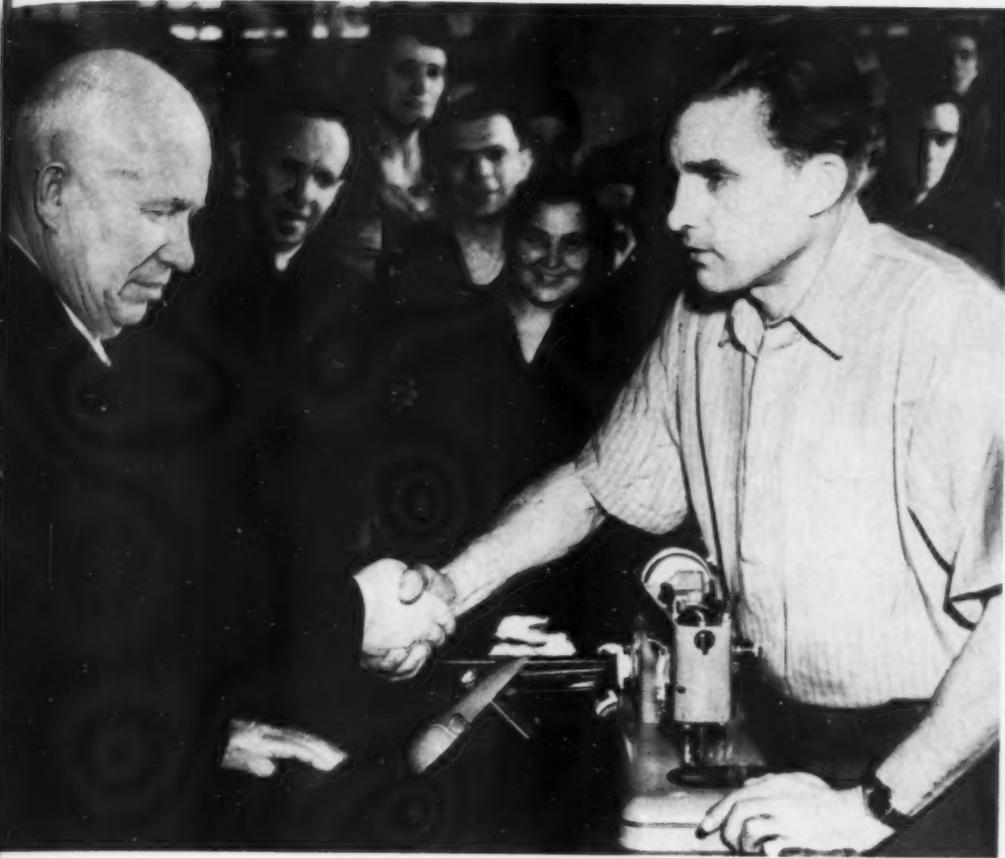
In his report to the Twentieth Congress of the CPSU (1956), N. S. Khrushchev formulated a number of profound theoretical propositions on questions relating to the construction of communism and on fundamental and urgent problems of international life. The theses developed by N. S. Khrushchev concerning the possibility of peaceful coexistence of countries with different social systems, the possibility of preventing wars in our time, about the general laws governing the transition, and multiple forms of the transition, of different countries to socialism have been of extremely great progressive value and have been fully confirmed by life.

An example of a creative approach to the development of Marxist-Leninist theory in inseparable connection with the practice of building communist society in the USSR and with the present stage of international relations is afforded by N. S. Khrushchev's report to the Twenty-first Congress of the CPSU. This fundamental document contains a profound analysis of all major social problems the world faces today. It defines the trends and directions of the coming period.

Important theoretical definitions given in the report cover, among others, such areas as the essence and specific features of the seven-year plan of the Soviet Union; the two phases of communist society; the laws operating in the USSR during the transition from socialism to communism; the laws governing the transition from socialism to communism in all the countries of the socialist system; international unity of the labor movement and the inevitability of the complete collapse of revisionism; peaceful economic competition of the two systems of capitalism and socialism.

Particularly important is the conclusion he made with regard to the seven-year plan and the prevention of war. In his report to the Twenty-first Party Congress he pointed out that the fulfillment of the seven-year plan of the USSR and the economic plans of all the other socialist countries will create a real possibility of excluding world wars from the life of society and this in the immediate future, even before the complete victory of socialism, in a world still divided into socialist and capitalist countries.

A specific feature of N. S. Khrushchev's theoretical propositions is their close contact with life, with the tendencies toward future developments. Based on the unshakable principles of Marxism-Leninism, these propositions take into account the specific character of developments, and objective and subjective factors. N. S. Khrushchev's theoretical formulations are distinguished by the same clar-



FREQUENT TRIPS TO FACTORIES KEEP N. S. KHRUSHCHEV IN CONSTANT CONTACT WITH RANK-AND-FILE WORKERS.



MANY IMPORTANT GOVERNMENT UNDERTAKINGS GREW OUT OF MEETINGS LIKE THIS WITH COLLECTIVE FARMERS.

TO FIND OUT IF A NEW PLAN IS FEASIBLE, N. S. KHRUSHCHEV CONSULTS THE PEOPLE WHO WILL CARRY IT OUT.



N. S. Khrushchev Says:

Continued

over to a lagging team not because she had no needs to meet.

The value and nobility of this act is that there was no material aspect for doing it, only the idea, her devotion to the communist system. And it is for the sake of this system that a personal sacrifice is made! True, this personal sacrifice was of a temporary nature. Valentina Gagnova herself proved that. Our working class understands the goal the Party serves—the goal of building communist society. And when it is necessary they make material sacrifices for the sake of achieving this goal. (From a speech at the Plenary Session of the Central Committee of the CPSU, June 29, 1959)

More Housing

... more and more housing is being built each year. There is the absolute conviction that the sweeping program of housing construction, which the Party and Government have mapped out, will be fulfilled ahead of time.

Of late, housing construction has assumed truly unprecedented proportions in our country. We are now building sturdy brick or reinforced concrete houses with well-appointed apartments. There will not only be enough housing for our children, but for our grandchildren and great grand-children as well. Let them live in ease. We are building much but housing requirements are so great that it is impossible to satisfy them all at once. Great effort and time are needed. (From a speech in Dnepropetrovsk, July 28, 1959)

Advancing Animal Husbandry

All Soviet people everywhere have joined in the socialist emulation movement. Having summed up their resources, the collectives of many enterprises and construction jobs, and farm workers are pledging to achieve the seven-year targets within five to six years or even less. The Soviet people are advancing at seven-league strides and there is no doubt that the program for a new rise in the economic, cultural and material standards of the people, which the Congress mapped out, will be carried through ahead of time.

We have especially much to do further to advance animal husbandry. In the seven years we must more than double the output of meat and almost double the output of milk. This, comrades, is a difficult task, but it is quite feasible. The key to it lies in the creation of a good fodder base and here the main crop is corn. This year more than 20 million hectares have been planted to corn. (From a speech at the opening of the USSR Exhibition of Economic Achievements, June 16, 1959)

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N. S. KHRUSHCHEV CONVERSING WITH MAO TSE-TUNG AT THE PEKING AIRPORT IN THE PEOPLE'S REPUBLIC OF CHINA.

NIKITA S. KHRUSHCHEV

DURING HIS VISIT TO INDIA THE SOVIET PREMIER HAD A CORDIAL MEETING WITH PRIME MINISTER NEHRU.



ity which is characteristic of all his other statements.

In Behalf of World Peace

It would be impossible to overestimate the contribution N. S. Khrushchev has made in the past few years in behalf of world peace, relaxation of international tensions and the thawing of the "cold war."

He has neglected no possible opportunity that would advance the cause of world peace and make for better understanding between nations. He has visited many foreign countries, including the People's Republic of China, Britain, India, Burma, Afghanistan, Yugoslavia, Finland, Bulgaria, Poland, Czechoslovakia, Hungary, the German Democratic Republic and Albania. Through these visits and personal contacts with leading statesmen and, notably, with President Eisenhower in Geneva in 1955 and with Prime Minister Macmillan, and through his participation in a number of major international conferences, he has contributed a great deal toward easing tensions and settling controversial issues.

Although preoccupied with important Party and state affairs, Khrushchev finds time for interviews with many foreign visitors, including those from non-socialist countries. In his interviews N. S. Khrushchev has never avoided any important issue; all his statements are clear-cut. He is always the impassioned propagandist for peace. When asked by foreign visitors about the prospects for peace, Khrushchev invariably answers: "I am an optimist."

A Happy Life for All People

"What has the Communist Party meant to you personally?" was the question asked of N. S. Khrushchev by a foreign correspondent in 1957. He replied, "The Communist Party is dear to me because it expresses the interests of the working class, the interests of the people, and my own aspirations and dreams of building a new society. I am happy that, after having lived for many years and having worked in this Party for a long time, I can state that our Communist Party, advancing along the path indicated by Lenin, has ensured such colossal progress in our country that our people have blazed the trail which is now followed by many peoples of other countries.

"Like all Communists, I dream only of ensuring a happy life for all people, of enabling all people—irrespective of nationality, irrespective of religious beliefs, irrespective of the color of their skin—to enjoy fully the fruits of their labor. We are working for the accumulation of as much material wealth as will be necessary to provide an abundance of everything for all the people. And we believe that mankind will achieve this. It is hard to foretell exactly when it will happen, but one thing is clear: mankind is advancing toward it. I rejoice at this and, on my part, I am doing everything within my power to assist in this advance."

Those words contain the program of the whole life of this outstanding man who has come from the very heart of the people and is devoting all his strength and energy to the struggle for man's happiness.



GREETING PRIME MINISTER HAROLD MACMILLAN OF GREAT BRITAIN AT THE MOSCOW VNUKOV AIRPORT (1959).

N. S. KHRUSHCHEV ON A VISIT TO THE GERMAN DEMOCRATIC REPUBLIC IS GREETED WITH A FLORAL TRIBUTE.



AN ENTHUSIASTIC RECEPTION IS GIVEN THE SOVIET PREMIER DURING HIS VISIT IN THE BULGARIAN REPUBLIC.



N. S. Khrushchev Says:

Continued

Economic and Cultural Progress

During the years of Soviet rule our country has made tremendous progress in its economy and culture. It is well known that pre-Revolutionary Russia's total industrial output was one-eighth, and in per capita terms from one-thirteenth to one-fourteenth of the U.S. amount. In 1958 we were producing roughly half the amount of industrial products turned out by the USA, or slightly less than one-half in terms of per capita output. In other words, our country has reduced its lag in comparison with the United States four-fold for volume of output and more than six-fold for per capita production. After the fulfillment of the seven-year plan it will take us some five years, or possibly even less, to surpass the USA not only for total volume of production, but also for per capita output. (From a speech delivered at the opening of the American National Exhibition in Moscow, July 24, 1959)

Link School with Life

. . . Education must, above all, be linked with life, with production, with the practical activities of the people. The Party makes the labor-education of all the people and the promotion of a conscious Communist attitude to labor the pivot of all its educational activity. We want labor—the source of all material and cultural benefits—to become the prime vital necessity of the people.

. . . When we raised the question of reorganizing the school system, some "prophets" abroad shouted: "They are short of labor, that is why they want to make youngsters work." Let such oracles crow. They will never understand us in any case. We are reorganizing the school system not because we are short of labor, but because we want to improve the educational system, because we want to link school still closer to life.

. . . The linking of the school with productive work does not detract from, but rather enhances the knowledge acquired. I have spoken on many occasions with young collective farmers and workers who study at evening institutes or technical schools, or by correspondence, and with students who have come to technical schools or institutes from industry.

What remarkable people they are! Persistent, strong willed, eager to learn, they absorb knowledge so as to work better for the good of society and not as a sort of dowry, not for the peace of mind of some parents who consider it a "tragedy" if their son or daughter has no diploma. (From the Report to the 21st Congress of the CPSU, January 27, 1959)



ACADEMICIAN DMITRI SKOBELTSYN PRESENTS NIKITA KHRUSHCHEV WITH THE INTERNATIONAL LENIN PRIZE FOR HIS OUTSTANDING EFFORTS ON BEHALF OF WORLD PEACE.

... Dear friends, I realize that when you decided to award an International Lenin Prize to me, it was not only my own personal activities that you had in mind. I am fulfilling the will of the Soviet people, of our Party and government. That is why the award of a Lenin Prize to me should be regarded as recognition of the tremendous efforts made by the Soviet people and of their great contribution to the struggle for peace and universal security.

There is scarcely any need to say that in our day one man, whatever efforts he might make, cannot prevent war and ensure peace. It is necessary that all peoples should take an energetic part in defending peace and that every man, wherever he may work and live, should know and feel that peace on earth can be preserved only through active participation in the struggle against the war danger.

My participation in the defense of peace merges with the energetic actions of millions of men and women, with their thoughts and feelings. I assure you, dear friends, that I will dedicate all my energies to the triumph of the cause of peace and make use of all the opportunities available to me to that end. *(From the speech at the presentation of the International Lenin Prize for Strengthening Peace among the Nations to N. S. Khrushchev, May 16, 1959).*

... Following the teaching of the founder of the Soviet state, Lenin, we are in favor of the peaceful coexistence of countries with differing social systems. In doing so the Soviet Union strives for the development of business and cultural relations with all countries, including the United States, in their mutual

interest, for, in our opinion, the development of these relations would promote the establishment of normal relations and the consolidation of confidence among states. *(From replies to the questions of the Grand Rapids Herald, March 1957)*

... In my opinion, the most important thing is to normalize relations among countries, between the United States and the Soviet Union in the first place ...

... We would like to live without wars, in peace. We believe we could have friendly relations, could be friends, so far as it is possible taking into account our ideological differences. And this is possible. We have many questions uniting us and we would readily cooperate with the people of the United States of America.

... We want peace and friendship with the American people very much. We want friendship, not for our two strong powers to unite against the weak, we want friendship because the peoples of all the other countries will gain by our good, friendly relations with the United States ... *(From the interview given to the Columbia Broadcasting System, May 28, 1957)*

... We have been and we are in favor of the peaceful coexistence of states belonging to different social systems, for the peaceful coexistence of the socialist and the capitalist countries. The struggle for peace is the basis of our foreign policy. Why? Because we have no groups interested in the seizure of foreign lands and in enslaving other peoples, interested in deriving profits from an armaments drive. Because we need peace



IN ALBANIA THE SOVIET LEADER PLANTS A SEEDLING DEDICATED TO PEACE.

Nikita S. Khrushchev

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for successful communist construction, for the creation of an abundance of material values for all members of the Soviet society . . .

. . . As to the exchange of ideas and information, this exchange . . . must serve the consolidation of mutual understanding and friendship among the peoples, and not have as its purpose the sowing of the venomous seeds of mistrust and enmity among them. The exchange of ideas and information must strengthen peaceful coexistence of states with differing systems instead of undermining it. We are in favor of such an exchange . . .

. . . If all states, with the United States and the USSR possessing the greatest military and economic potential in first place, would work in a businesslike manner and in the spirit of cooperation and mutual understanding for the discussion and settlement of important international problems which complicate the situation and hamper the attainment of firm confidence, the chances of world peace, and, I emphasize, for all countries and people, would increase considerably. Mankind strives for peace and it is the duty of the governments of all countries to respond to this striving for the attainment of genuine peaceful cooperation of the peoples throughout the world. (*From answers to the questions of James Reston of The New York Times, October 7, 1957*)

. . . Let us put an end to the cold war and bring about a relaxation of international tension. Instead of the cold war, it is better step by step to traverse the road of establishing friendly relations between our countries . . .

. . . There are many possibilities which, together with a show of good will, could be utilized for the achievement of mutual understanding and for living in peace and friendship without creating a military psychosis.

We have already said that the Soviet Union would like to have friendly relations with the United States of America. It is better to have peaceful competition than competition in the manufacture of means of destruction.

The establishment of friendly relations between our countries would be a great step toward the consolidation of peace between all countries, toward the maintenance of world peace. We are fighting for peace and are bending all our efforts to the achievement of this goal . . .

But in peaceful competition we will work to win. Here, if I may say so, the Soviet people will be on the offensive. However, this will be an offensive in which people will not perish, but quite the contrary, they will be improving their life and raising the level of their economy and culture.

Challenging the United States to a competition to produce more meat, butter, clothes, footwear, to build more good housing, to manufacture more TV and radio sets, vacuum cleaners and other goods and articles necessary to man, the Soviet people are confident of their victory. You are not being threatened with intercontinental ballistic missiles. You are threatened with a peaceful offensive, a peaceful competition in the manufacture of consumer goods and articles that serve to improve the culture and life of people. In this we will be relentless. This competition will show which system is better. (*From the interview given to William Randolph Hearst, Jr., November 22, 1957*)



NIKITA S. KHRUSHCHEV IS HEARTILY WELCOMED TO THE POLISH PEOPLE'S REPUBLIC BY WLADYSLAW GOMULKA UPON HIS ARRIVAL AT THE WARSAW AIRPORT LAST JULY.

Nikita S. Khrushchev

on peaceful coexistence and international cooperation

... We have always said and continue to say now: let us improve our relations, let us trade, let us develop scientific, cultural and sports contacts. Let us meet and discuss pressing international problems in a businesslike manner.

... The Soviet Government is ready to discuss any questions designed to strengthen peace and establish greater confidence among the states, to discuss these questions with its partners. Mr. Eisenhower, for instance, recently put forward in one of his speeches the idea of pooling the efforts of the Soviet Union and the United States to combat such scourges of mankind as cancer, tuberculosis and malaria. We believe that one can agree with this. One could list many other questions, such as the struggle against poliomyelitis, locusts, glanders and foot-and-mouth disease. We are successfully cooperating with Iran and Afghanistan in combating locusts. There are many other matters regarding which, far from hindering, we are doing our

utmost to extend cooperation. Although not all these problems are acute or dangerous to our country, we are nevertheless ready to cooperate with countries where such problems are particularly pressing. We shall be pleased to pool our efforts with those of other countries in solving such problems. (*From the speech at the conference of the advanced agriculturists of the Byelorussian SSR, January 22, 1958*)

... We in all sincerity say to the capitalist countries, let us compete, not to see who can make the largest number of H-bombs and missiles, for that is a competition which bodes no good to the peoples, but to see who can build more houses, schools and hospitals, produce more bread, milk, meat, clothes and other consumer goods. That is the kind of competition the people want. Instead of the slogan "Let us arm!", we proclaim "Let us trade!"

Although the Soviet Union has made significant progress in all spheres, and not least in raising the standard of living of the people, it has set itself the goal of producing more consumer goods than any capitalist country. And we are confident that we shall achieve a still higher standard of living. How can this endanger peaceful coexistence of nations?

... The Soviet Union deeply sympathizes with all the nations striving to win and maintain their independence. And these nations can rest assured that the Soviet Union, without any meddling in their internal affairs, without stipulating any conditions, will help them to strengthen the independence for

which they fought so hard. (From replies to Manuel Mejido, correspondent of the Mexican newspaper, Excelsior, February 21, 1958)

... Now the whole world recognizes the Soviet Union's great achievements. It is a pleasure to the Soviet people to listen to these acknowledgements. But we cannot put on airs, and, even less so, be complacent and rest content with what we have achieved. We must do great and persistent work to achieve the main economic task confronting our country, to make our country march in the van of mankind in all fields of life, to keep it at the level of modern achievements of science and engineering. We are confident that our successes will increase and multiply in this sphere, too ...

... The Soviet Union is in favor of friendly, good-neighbor relations with all countries without exception. We are ready to establish such relations on a reciprocity basis with all states who wish them ...

... We were allies of Britain, France and the United States during the Second World War and we fought together against Hitler Germany. We respect the peoples of those countries and have a high opinion of the great contribution they have made to the development of world science, technology and culture. Soviet men and women are very well aware that the people of those countries, too, are striving for peace. The Soviet Union has exerted, and will continue to exert, every effort to achieve understanding and establish friendly relations with the peoples of those countries and their governments.

In international affairs, in settling existing disputes, they should be guided, not by what divides the world today, but by what brings countries closer together in their joint effort to preserve peace.

The only possible foundation for relations between states with different social systems is the well-known Five Principles: mutual respect for territorial integrity and sovereignty; non-aggression; non-interference in one another's internal affairs for economic, political or ideological reasons; equality and mutual benefit; peaceful coexistence.

The principles of peaceful coexistence, recently approved by the United Nations, should actually be made the cornerstone of



SOVIET PREMIER RECEIVES UN SECRETARY GENERAL DAG HAMMARSKJÖLD IN MOSCOW.



NIKITA S. KHRUSHCHEV VISITS THE STATE OF MADRAS DURING HIS TOUR OF INDIA.

INDIAN AND AFRICAN DELEGATES TO THE CONFERENCE OF ASIAN AND AFRICAN WRITERS HELD IN TASHKENT MEET WITH N. S. KHRUSHCHEV AT THE KREMLIN RECEPTION.





AMERICAN INDUSTRIALIST CYRUS EATON VISITS N. S. KHRUSHCHEV AT THE KREMLIN.

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relations between all states. (*From the speech at a meeting of Electors of Kalinin Constituency, Moscow, March 14, 1958*)

... If the principles of peaceful coexistence are adhered to, then no ideological differences, though they do of course exist, would prevent the development and broadening of mutually profitable economic ties. Peaceful coexistence is a hard reality whose significance in international relations is growing. Trade constitutes that sound and stable basis upon which coexistence between countries with different social and economic systems can successfully develop and be consolidated. I think you will agree with me that trade has a more than economic significance. Trade is the most normal way of establishing good relations between countries. Trade and economic ties create a good basis for the consolidation of international political relations.

The Soviet Union today has trade treaty relations with 45 countries: with all the socialist countries, almost all the countries of Western Europe, including Britain, France, Italy, Austria, Switzerland, Greece, Sweden, etc., with the majority of Asian and African countries, including India, Indonesia, Japan, Iran, Afghanistan, Burma, the United Arab Republic, and many others. We also have trade agreements with two countries on the American continent—Canada and Argentina.

With a number of countries we have agreements for the development of exchange on the basis of agreed lists of commodities for reciprocal deliveries.

Many western countries are showing an interest in the development of trade with the Soviet Union on the basis of long-term agreements. That is why the Soviet Union has in recent years concluded long-term agreements on reciprocal deliveries with a number of capitalist countries, for instance, a five-year agreement with Finland and long-term agreements with Norway, Iceland and Denmark. In 1957 alone we concluded such long-term agreements with France, Italy, Austria, Afghanistan and Iran. Negotiations are in progress on a long-term agreement between the USSR and the Federal Republic of Germany. All these agreements provide for a substantial increase in trade.

The United States of America is now the only great power

and one of the few countries of the world with which the Soviet Union does not have trade treaty relations. If the Government of the United States expresses a desire to conclude a trade treaty or agreement with the USSR, I can assure you of a favorable response from the Soviet side.

We advocate the lifting of all restrictions and bans on trade between the capitalist and the socialist countries not only because we hope it would promote the establishment of confidence in the relations between all nations and bring about a relaxation of international tension, but also because discriminatory restrictions lead to uncertainty in commerce and mistrust between the partners in trade. Connected as you are with business circles, you should know full well how much confidence means in commerce and how adversely its absence affects the development of trade.

We are in favor of selling what we can sell and of buying what we want to buy, and we want our partners to be able to sell and buy what they want. And the things which either you or we cannot sell should not be a subject for reciprocal claims. (*From the interview given to Eric Ridder, publisher of Journal of Commerce, and its editor, Heinz Luedicke, March 22, 1958*)

... The Soviet Union undeviatingly comes out for general disarmament, for unconditional prohibition of nuclear weapons, for an immediate discontinuance of the tests of atomic and hydrogen bombs, for the end of the "cold war." In pursuing the policy of peace and striving for the relaxation of international tension, for bringing about an atmosphere of confidence, the Soviet Government has reduced the country's armed forces by 2,140,000 men in the last three years. (*From the speech at the celebration in Budapest of the thirteenth anniversary of Hungary's liberation, April 3, 1958*)

... The Soviet-American agreement on exchanges in the field of culture, technology and education, signed recently, was, in our opinion, a good practical step toward bringing our countries closer together. It is gratifying to see that the conclusion of this agreement was approved by broad sections of the public both in the USSR and the United States, and in other countries as well. It seems to me that it was received in this way first of all because the peoples saw in this agreement a concrete proof of the fact that Soviet-American relations can be really improved. . . . (*From the message of the Chairman of the USSR Council of Ministers, N. S. Khrushchev, to the President of the United States, Dwight D. Eisenhower, June 2, 1958*).

Our point of view regarding the nature of interstate relations between the socialist and capitalist countries has been set forth a number of times. The gist of it, in brief, is first, that the form of state organization and the form of social organization of any particular country must be decided by the people of that country themselves; secondly, that no state or any external force can or should impose on other nations its way of life or its political or social system; thirdly, since man's social development takes place along an ascending line, it inevitably gives rise to new forms of society. Consequently, the appearance of states with a socialist system, as a result of the operation of the objective laws of social development, is just as natural as was, in its day, the appearance of bourgeois states; and lastly, in order to rid mankind of devastating wars and, in particular, of the threat of the most destructive war ever known by humanity—nuclear war—we feel that the principle of peaceful coexistence and cooperation must prevail in relations between the socialist and capitalist states.

What does this principle mean in practice? It does not demand that the capitalist states renounce their existing system or ideology. Naturally, acceptance of this principle will not lead to the immediate elimination of disputes and contradictions that are inevitable under conditions when different kinds of states exist. But this principle demands that the states, in settling outstanding issues between them, should renounce



DURING A CBS TV INTERVIEW N. S. KHRUSHCHEV OUTLINES THE PLANS OF THE SOVIET UNION FOR PEACEFUL CONSTRUCTION AND CALLS FOR FRIENDLY RELATIONS WITH THE U. S.

the use of force in any form, including military force, and seek the peaceful settlement of possible conflicts respecting the mutual interests of the parties concerned. Peaceful coexistence also presupposes the complete and unqualified non-interference of states in the internal affairs of one another with a view to changing their system or way of life, or for any other reason.

I think that the meaning given to the term peaceful coexistence will now be clearer to you. As you see, we stand for a healthy and realistic basis for relations between states with different social systems. The principle of peaceful coexistence does not place any individual state or any group of states at an advantage over other states and does not infringe on anyone's interests; it is of benefit to all who desire peace, not in words, but in deeds. (*From answers to the questions of John Waters, Editor of the Melbourne Herald, June 11, 1958.*)

. . . Under socialism there are no oppressors or oppressed; all men and women live by their own labor, and all have equal rights and duties to society. At the highest stage, under communism, the full satisfaction of man's needs will be ensured. And these are not idle words. Under socialism man is a friend to man, regardless of the language he speaks and the God to whom he prays. Religion is a matter for each person to decide for himself.

Socialism is the most just and noble social system, under which the efforts of the whole of society are aimed at promoting the welfare of the people and the constant development of the economy, science, culture and art, at ensuring that the people live better and better. It is well worth working for these lofty aims, sparing neither effort nor knowledge. In the language of Western businessmen, one can figuratively describe the firm of communist construction as sound and upright.

Under socialism the products of labor are distributed in accordance with the quantity and quality of work contributed by each member of society, i.e., according to the principle: from each according to his ability, to each according to his work. Under communism distribution will take place according to the principle: from each according to his ability, to each according to his needs. In order to speed the advance of all the socialist countries to communism, we must do everything possible for each socialist country to develop its economy and

increase its labor productivity more rapidly. Each of our countries must render genuinely fraternal aid to the other socialist countries. By uniting our efforts, by promoting cooperation and collaboration, our countries are achieving greater success in economic development. At the same time each socialist country must make the best possible use of its internal potentialities for developing its national economy.

In the process of building communism, all socialist countries will equalize their economies, eliminate differences in level of development, without taking the relatively underdeveloped countries as their criterion. This equalization will not take

A TALK WITH AUSTRIAN BUSINESSMEN AT THE LEIPZIG INTERNATIONAL FAIR.





GREETING DELEGATES TO THE FIFTH INTERNATIONAL CONGRESS OF ARCHITECTS.

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place by lowering the level of the countries that are economically highly developed. By no means. The equalization should and will proceed through the more rapid advance of the countries that are relatively less developed economically by bringing them up to the level of the most developed countries. Thus, all the socialist countries will march in a common united front along the road of socialism, along the road of building a communist society. (From the speech at the meeting of the Bitterfeld Electro-Chemical Works in the Palace of Culture during the visit of the delegation of the Communist Party of the Soviet Union to the 5th Congress of the Socialist Unity Party of Germany in the German Democratic Republic, July 9, 1958).

... The Soviet Union's interest in negotiating with the Western Powers is not to be explained by internal reasons or our international position, but by human, universal considerations, by the fact that we stand firmly for the peaceful coexistence of states with different social and political systems. We want to remove the danger of a destructive war, to deliver the people from constant fear of a new military conflict, and to win for them a peaceful and tranquil life. (From the speech at the Soviet-Czechoslovak friendship meeting of Moscow working people, July 12, 1958).

... The Soviet Union is a state powerful enough to defend the cause of peace in a worthy manner: in this lies the happiness of all people who wish to preserve world peace. (From the talk with the Indian journalists, July 29, 1958).

... The Soviet Union can carry out its grand plans of

economic development successfully and in the scheduled time only on condition that peace is maintained on earth . . .

... The doors of our house are flung open to foreign journalists who conscientiously wish to acquaint themselves with the Soviet Union's economic and cultural achievements and who objectively inform the public in their countries about the Soviet Union. (From answers to the questions of A. E. Johann, West German writer and journalist, September 20, 1958).

... Non-interference in the internal affairs of other countries is one of the basic principles to which our country adheres in its foreign policy. Every people is master in its own house, and it alone has the right to decide what shall be its internal system.

We resolutely condemn the use of the *diktat* in international relations. The principle of noninterference in the affairs of other countries must be observed by all countries, not only in words but in deeds. (From answers to the questions of Murilo Marroquim de Souza, Brazilian journalist, October 3, 1958).

... We have repeatedly had to point out the great responsibility borne by the two Great Powers—the Soviet Union and the United States—in preserving the peace. As regards the Soviet Union, it has on many occasions expressed its sincere desire to normalize relations with the United States, and has backed its words with deeds. The Soviet Union proposed a 50-year pact of nonaggression. It proposed that the two countries should extend reciprocal trade, promote cultural relations, and so on . . . (From the report to the 21st Congress of the CPSU, January 27, 1959).

... Our seven-year plan is the most convincing proof of the Soviet Union's peace-loving strivings. We need peace and we are persistently and consistently struggling for it. All the peoples of our planet strive for peace. This is why the Soviet Union's peace-loving policy enjoys such profound respect and support in the whole world. (From the concluding speech at the 21st Congress of the CPSU, February 5, 1959).

... The implementation of our seven-year plan depends on our own efforts, on our internal resources. And if we are interested in the development of trade with the capitalist countries, the capitalist countries are interested in this to the same degree, if not more. It is clear to everybody that the development of trade between the Soviet Union and, let us say, the United States of America, could lead to greater employment in the USA . . . (From the speech at a reception in Leipzig, March 6, 1959).

... The Soviet Union does not have, nor can it have, any expansionist intentions with regard to other countries . . . The aim of our home policy, the only and the principal aim, is to build up a life worthy of mankind's finest ideals. The aim of our foreign policy, the only and unchangeable aim, is to avert war, to ensure peace and to safeguard the security of our country and of all countries . . . (From answers to the questions of the Pravda editorial board, April 10, 1959).

... The Leninist ideas of peace and friendship among the peoples are the basis, the foundation of the foreign policy of the Soviet state. We are loyal to the Leninist ideas, we are consistently implementing them and we shall do everything possible to avert war and to establish good relations among the peoples, among the states, irrespective of their social systems. We are in favor of peaceful coexistence!

Peace is the most important condition for the peoples' existence and progress. People combine their most cherished aspirations and strivings for a better life with the hope to live in

peace. The peoples of the Soviet Union who, within a brief span of time, experienced the gravest trials of the two world wars and had made colossal sacrifices, especially value the blessings of a peaceful life. (*From the speech made at the presentation of the International Lenin Peace Prize, May 16, 1959.*)

... Our position with regard to meetings of the leaders of different states is well known. We want the heads of government or the heads of state, people vested with great powers and enjoying great trust, to meet more often to exchange their views. We think that each such meeting would result in a better appreciation of the questions that need to be settled and in a better understanding of the position of one's partners. This, in turn, would help the achievement of such decisions as would be of advantage to both sides.

Such talks, however, will only produce good results when all sides proceed from a striving to ensure the durable peace that all the peoples on earth desire so much. If we overlook this principal aim and try to adapt ourselves to something else, a position may arise when it will be said that one side loses something as a result of the talks, while the other gains. We should proceed from the assumption that no one loses anything by agreements aimed at ensuring peace. On the contrary, all peoples stand to gain from this, as the cause of peace is furthered. To my mind, this position is progressive, and it has universal support. The statesmen who really are guided by this principal goal should make their contribution to the noble cause of ensuring durable peace. Then those who will avoid this, those who will not be serious in their approach to the solution of this problem, will not be successful in their policy. This much is certain. This is how we see the tasks which the statesmen should bear in mind in meeting among themselves.

In this connection I should like to refer to our meetings and conversations with the British Prime Minister, Mr. Macmillan, during his visit to the Soviet Union last February. Our meetings unquestionably played a large part in improving the relations between our countries.

They led, for instance, to the conclusion of a new trade agreement of benefit both to Britain and to the Soviet Union. And if there are still some unsettled issues in dispute between our two countries, these are no longer questions of mutual relations between our two countries—Britain and the Soviet Union—but, in the main, those between the NATO countries, Britain included, on the one hand, and the Soviet Union and the other

socialist countries, on the other. We have, therefore, ample reason to say that our meetings and talks with Mr. Macmillan have been useful and fruitful. One can cite many other examples of the contacts between top national leaders having led to improved relations between the countries.

Everyone realizes the immense importance which the state of relations between the Soviet Union and the United States of America, the largest nations of the world, has for the cause of peace and international cooperation. Is it, indeed, a matter of doubt that if our powers were to establish good friendly relations and if we were to succeed in establishing cooperation in the cause of peace, peace on earth would be more stable and durable?

Are there any realistic opportunities for relations between the USSR and the United States to be based on the principles of peace and friendship? We are positive that such opportunities are there. There are no territorial disputes between our two countries, nor any insoluble contradictions, nor any issues that could prevent the creation of a climate of confidence and mutual understanding.

It is common knowledge that the Soviet and American peoples fought together against a common enemy during the years of World War II.

We are always prepared to do everything within our power to ensure that relations between our countries are based on the sound foundations of peace and friendly cooperation. A betterment of Soviet-American relations will not fail to help improve relations with other countries and scatter the grim clouds in other areas of the world. Naturally, we want to be friends not only with the United States, but with the friends of the United States as well. At the same time, we want the United States to have good relations not only with us, but with our friends as well.

Therefore, we hope that the exchange of visits between the President of the United States and myself will be useful. On our part, we shall do our best to make the talks and discussions between us contribute toward establishing better understanding between the Soviet Union and the United States of America and toward fostering peace.

... We shall go to America with an open heart and in all sincerity, with good intentions, with the earnest desire to help do away with the state of cold war and ensure the possibility of reaching agreement with the President on questions connected with the improvement of relations between our countries, being guided by concern for safeguarding peace throughout the world. (*From the statements at the press conference at the Kremlin, August 5, 1959.*)

GUESTS FROM FLORIDA ARE WARMLY RECEIVED BY THE SOVIET PREMIER IN MOSCOW.



AMERICAN TOURISTS POSE FOR A PICTURE WITH N. S. KHRUSHCHEV AT THE KREMLIN.





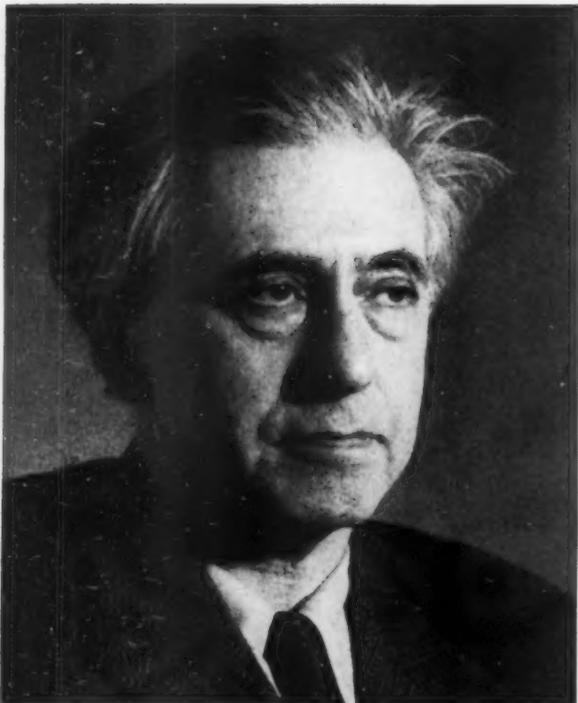
"WE MUST LIVE TOGETHER AS FRIENDS"

Mikhail Guskov,
Mechanic, Likhachov Auto Plant

YOU can't walk through a shop in our plant without hearing groups of men discussing Comrade Khrushchev's visit to the United States. We auto workers hail the exchange of visits. We are certain that the meetings will serve to strengthen world peace.

Comrade Khrushchev has time and again said that international security, in the final analysis, depends to a large degree on the relations between the United States and the Soviet Union. That is why we must live together as friends.

Soviet People Welcome KHRUSHCHEV



"NEW HOPE FOR PEOPLE EVERYWHERE"

Ilya Ehrenburg,
Writer

TWO names—Khrushchev and Eisenhower—can be heard on all radio wave lengths—long, medium and short. The news of the forthcoming exchange visits of the Chairman of the USSR Council of Ministers and the President of the United States is welcomed everywhere with relief and joy. What are modestly termed "unofficial talks" in the communique give hope to the people throughout the world. The meetings of these two statesmen, heading two of the world's greatest powers, can mark the beginning of a new era in international relations and thereby influence the life of every man in every country.

"TO BUILD A STILL BETTER LIFE WE NEED PEACE"

Alexei Bezelyansky,
Moscow Bus Driver

I AM an ordinary bus driver but you don't have to be a political wizard to understand how important these mutual visits are.

As I drive my bus along the streets of my native city, I keep noticing how Moscow is growing all the time. Construction is going on everywhere—new housing projects, schools, theaters, all kinds of stores. All this is to build a still better and richer life for everyone in our country. For that we need peace.



"VISITS FURTHER CULTURAL EXCHANGES"

Sergei Gerasimov,
Film Producer

I MET many Soviet and foreign artists at the International Film Festival in Moscow and they all spoke about the exchange visits. The news has stirred everyone concerned with the preservation of peace. The friendly meeting of these two leading statesmen of two great countries will play an important role in determining the future course of international relations. It will also promote further cultural exchanges between our two countries.



le **WELCOME**
EV **EISENHOWER visits**

"GOOD NEWS!"

Dmitry Malyavko,
Plasterer

OUR building team is now finishing the interior of a new apartment house in the southwest section of Moscow. This is our small contribution to the big housing program scheduled by the seven-year plan. It is a plan for peaceful construction that we are building. That is why we workers were so happy to hear that the President of the United States has invited our Nikita Sergeyeovich Khrushchev to make an official visit and that the invitation was accepted. This is good news!



"ON EVERYBODY'S LIPS"

Nina Krylova,
Autobus Conductor

OUR express bus operates between Vnukovo Airport and Sverdlov Square. We carry many excursionists and tourists from foreign countries. They are all amazed by Moscow's giant-scale construction—the new residential blocks, parks and gardens.

The word "peace" is on everybody's lips these days, both Muscovites and foreign tourists, and it is coupled with talk about the exchange of visits between Nikita Khrushchev and President Eisenhower. Everybody approves.

"AN HISTORIC EVENT"

Anatoly Sofronov,
Writer

THIS is indeed an historic meeting. People in all five continents are hoping for everlasting peace. Peace and happiness—this is every man's dream, no matter where he lives or what language he speaks.

Those of us who have visited the United States know that there, too, as in our country, the people want peace and friendship between nations. This feeling I heard expressed in New York, San Francisco, Arizona, Ohio, everywhere I went.



"HELP SECURE PEACE"

Boris Chesalov,
Engineer

WE ARE glad for anything that will put an end to international tension and create an atmosphere of friendship among nations. My friends and I heard the radio announce the exchange of visits and we read the report of Nikita Khrushchev's press conference. He put it very simply. He was going to America, he said, with a hope for better and friendlier relations that would help secure peace throughout the world.

"ICE MUST BE MELTED"

Nikolai Matsel,
Crane Operator

WE HOPE that when the President of the United States comes to Moscow he will have time to visit Moscow factories. We will gladly show him our machine tools, textiles, furniture and everything else we make in our shops. He'll be welcome in our homes.

I read Eisenhower's statement in the papers in which he says that the exchange of visits will help melt the ice in relations between the Soviet Union and the United States. This ice must be melted as fast as possible.



Soviet People Welcome

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"EXCHANGES DEVELOP PEACEFUL COOPERATION"

Vladimir V. Matskevich,
Minister of Agriculture of the USSR

THE exchange of visits between Comrade Nikita S. Khrushchev and President Dwight D. Eisenhower is the greatest event in the history of Soviet-American relations. It could be of great importance in reducing international tension, in developing peaceful cooperation and business, scientific and cultural ties between our countries. Experience has shown that exchanges of various agricultural delegations between the USSR and the USA are mutually beneficial. Such visits help each country to know and to understand the other better.



"WE WANT OUR CHILDREN NEVER TO KNOW WAR"

Maria Panyushkina,
Principal, School No. 240, Moscow

NONE of us want war, we need peace the way we need air and sunshine. I especially feel this when I come to school and see the happy and eager faces of our boys and girls. We teachers are trying to equip the young generation with the knowledge and experience for a good and useful life. We teach them to love their country, to take pride in productive labor, to work for the happiness of people everywhere.

Even the oldest of our pupils, our seniors, know about the horrors of war only from books and from what adults have told them. We want them never to experience it. Our children, and children everywhere, must be spared those horrors.

That is why I add my voice to the voices of the millions of other Soviet people who hail the forthcoming exchange of visits. We place great faith in this meeting. We know it will strengthen the friendship between our two countries.

"OUR COUNTRIES FOUGHT TOGETHER"

Alexander Voronin,
Barber

LIKE every Soviet citizen I was glad to hear of Comrade Khrushchev's scheduled visit to the USA and the return visit of President Eisenhower to our country. I took part in the Great Patriotic War when our countries fought together against a common enemy. We all hope that the tensions which developed between the USSR and the USA after the war will be cleared away by this exchange of visits.

KHRUSHCHEV-EISENHOWER visits





VICE-PRESIDENT RICHARD M. NIXON CUTS THE RIBBON TO MARK THE OFFICIAL OPENING OF THE AMERICAN NATIONAL EXHIBITION HELD IN MOSCOW'S SOKOLNIKI PARK.

RICHARD M. NIXON IN THE USSR

By Georgi Bolshakov

VICE-PRESIDENT Richard M. Nixon's visit to the Soviet Union, as well as the trips made by Frol R. Kozlov and Anastas I. Mikoyan, First Vice Chairmen of the USSR Council of Ministers, to the United States are important milestones on the road to better understanding and friendlier relations between our two countries. They have served as prelude to the exchange visits of Nikita S. Khrushchev to the USA and Dwight D. Eisenhower to the USSR.

Mr. Nixon came to open the American National Exhibition in Moscow. His visit was especially welcome because it gave a high American official the opportunity to see the Soviet country, its people, and their way of life at first hand.

During his ten-day stay in the Soviet Union, Mr. Nixon had useful and frank conversations with Nikita S. Khrushchev, Chairman of the USSR Council of Ministers, and with other Soviet leaders. This exchange of opinions on problems facing the two countries, said the Vice-President, he had found highly constructive. There is one proposition on which we agree, stressed Mr. Nixon—that differences must be settled at the conference table and not on the battlefield.

The Vice-President saw Moscow, admired the beauty of Leningrad, crossed the plains of Russia on the high-speed Soviet liner TU-104, visited blossoming Siberia and the industrial Urals. He talked with ship-builders in Leningrad, miners in Degtyarsk in the Urals, workers in the Uralmash Plant, the builders of an atomic power station in Beloyarsk,

a town in the taiga. Everywhere Mr. Nixon met with a warm welcome.

From Moscow the American guest went to Leningrad. There he visited the Metal Works, the country's leading center of turbine construction. Mr. Nixon and the people in his party spoke with the workers at the plant, all of whom stressed the Soviet people's desire to live in peace and friendship with the people of the USA. Pavel Tikhonov, a worker, asked Vice-President Nixon to convey friendly greetings to the American people from the Soviet workers.

Mr. Nixon also visited Leningrad's Admiralty shipyards where he viewed the "Lenin", the world's first atomic icebreaker. Accompanied by Pyotr Ponomaryov, the captain of the icebreaker and a well-known polar explorer, Mr. Nixon went aboard to see the machinery and equipment of the vessel.

The party then took a boat trip along the Neva and the Gulf of Finland on the Albatross, a steam launch. The trip was followed by a tour of the parks, gardens and cascades of fountains of the beautiful Petrodvorets palace.

Early the following morning Mr. Nixon and his party set out by the TU-104 from Leningrad to Novosibirsk. From their plane the American guests got a view of the new Soviet Siberia with its industrial centers, its large, well-planned cities and its far-flung collective and state-farm fields.

The heavy machine-building plant at Novosibirsk interested the



Mr. Nixon visits the Urals Machine-Building Plant in Sverdlovsk. Equipment with the "UMBP" trademark is used by factories in many foreign countries.

American guests. Konstantin Gonenko, the chief engineer, took Mr. Nixon around the plant and demonstrated some of the unique machines with which the plant supplies both home and foreign enterprises.

The American guests were greeted with applause by the audience at the Novosibirsk Opera and Ballet Theater which recently celebrated its 14th anniversary. "Ballet in Siberia! And what an excellent ballet!" they exclaimed admiringly.

With great interest Mr. Nixon and his party watched a performance of "Swan Lake" and when the curtain fell were the first to applaud. They went back stage to congratulate the cast.

Mr. Nixon said he had never seen so stirring and magnificent a performance. He asked if he could have a record of the Novosibirsk theater orchestra's rendition of the music as a souvenir, and expressed the hope of seeing the Novosibirsk company perform in California, his native state.

On the following day the party made a trip to the Novosibirsk Hydro-power Station built on the Ob River. Then boarding a motor ship, the Americans sailed to the opposite shore of the man-made Ob Sea where a scientific center is being built in the taiga woods.

In Sverdlovsk Vice-President Nixon visited the Uralmash, short for Urals Machine-Building Plant. Machines and equipment with the "UMBP" trademark may be seen in the factories of many foreign countries. The workers of this plant gave a warm reception to the Americans. Here and there lively conversations were struck up. Mr. Nixon conveyed greetings and best wishes from the American people and from President Eisenhower to the workers.

"For peace and friendship throughout the world, friends!" Mr. Nixon said in Russian.

"We, the workers of Uralmash ask you to convey our best wishes to the workers of the USA," was the reply.

On the last day of their stay in the Urals Mr. Nixon and his party paid a visit to the construction site of an atomic power station. The Vice-President commented that, like his Soviet hosts, he considered the construction of such stations the most beneficial way of utilizing atomic energy. We are looking forward, he said, to the day when atomic energy is used only for peaceful purposes, and not for war. Statesmen must settle all the differences which have arisen between us so that the scientists and engineers of our countries may work jointly on the further solution of problems of the peaceful use of atomic energy.

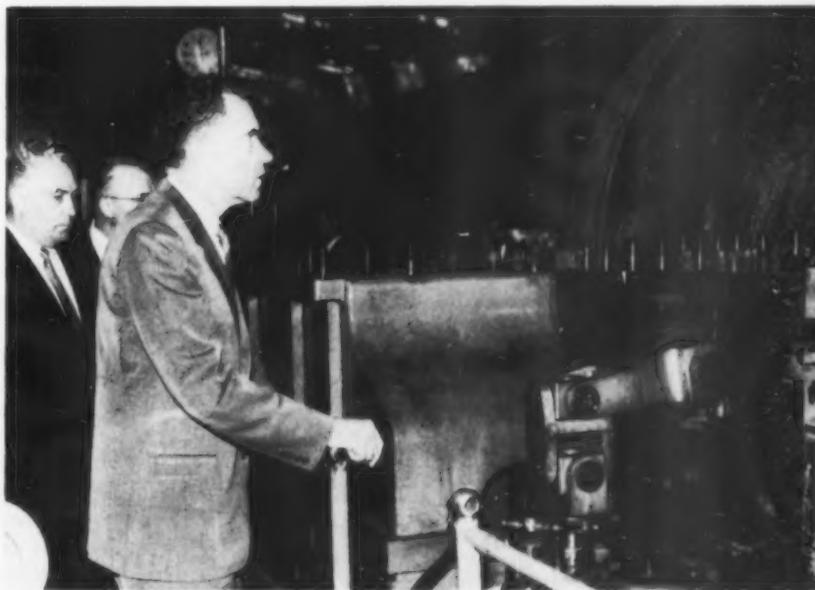
On returning to Moscow Mr. Nixon delivered a speech over Moscow TV and over the national radio network and he held a press conference for Soviet and foreign journalists.

Seeing the guests off at the airport, Frol R. Kozlov, First Vice-Chairman of the USSR Council of Ministers, expressed the hope that Richard M. Nixon's visit to the Soviet Union had given him a "better understanding of our plans and aims which would contribute to greater understanding between the Soviet Union and the USA."



The Vice-President talked to Leningrad ship builders, Urals miners, Siberian metal workers. Everywhere he met with an interested and cordial welcome.

Frol Kozlov, first Vice-Chairman of the USSR Council of Ministers, accompanies Mr. Nixon on a tour of the Leningrad plant where turbines are built.



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Leningrad pediatricians show the American Governors through the city's child research institute.

AMERICAN GOVERNORS MEET THE SOVIET PEOPLE

By Pyotr Dmitriev



Visiting governors look over one of the new housing projects in Moscow. They were highly appreciative of the mass construction methods.

THE NINE state governors who recently visited the Soviet Union covered a great deal of territory in their 23-day tour. Their original itinerary was supplemented by a number of side trips they asked to make. They were particularly interested, naturally enough, in seeing how Soviet governmental bodies functioned, particularly those on the republic level, and in getting an insight into public health, legal procedure, housing and municipal services.

Extended every courtesy by Intourist, the Soviet travel agency, and by government officials, the American visitors, in spite of their short stay, managed to see a considerable section of the country—Moscow, Leningrad, Kiev, Alma-Ata, Kazakhstan, Rustavi and Tbilisi in Georgia, and other cities.

The sight-seeing trip through the canal linking Moscow with the Volga River was reminiscent, said Governor William G. Stratton of Illinois, of travel on the Mississippi. He spoke highly of the Soviet motor ship and its comfort.

In Moscow the state governors went through the First Psychoneurological Hospital and left favorable comments in the Visitor's Book. They visited one of the corrective labor colonies where serious lawbreakers are rehabili-

tated through work and education. The governors were impressed by this advanced penal procedure and thought the colony much less like a prison than a reform institution.

The beauty of Leningrad impressed the Americans as it does all foreign tourists. They visited the city's historic landmarks and its museums, talked with workers in a metal plant and with farmers on a suburban state farm. They visited a Russian Orthodox and a Baptist Church.

Beautiful Kiev

Kiev, the ancient-modern capital of the Ukraine, made the visiting officials heartily welcome. Nikifor Kalchenko, Chairman of the Council of Ministers of the Ukrainian Republic, gave them a word-picture of the city a half-dozen years from now when the seven-year plan is completed. Its present they were able to see for themselves in Kiev's bustling streets and the many projects in construction.

Both Governors Luther H. Hodges of North Carolina and John E. Davis of North Dakota were moved to comment on Kiev's striking beauty. Governor Davis thought that the city planning was admirable and a model for cities of the future.

Governor LeRoy Collins of Florida spoke in the same vein of the luxuriant green beauty of Alma-Ata during a visit to Kazakhstan's thriving industrial cities. The Americans spent some time in Rustavi and Tbilisi in the Georgian Republic. They visited citrus groves, schools, concert halls and stadiums.

Governor Davis said he was much impressed with the scale on which new housing was being built, particularly in the Georgian Republic. He complimented the Georgians on their sunny land and happy-tempered people. They knew how to rest and play and their cities and farms made it evident that they also knew how to work, he thought.

The governors met with people from all walks of life, high government officials, collective farmers, scientists, factory workers.

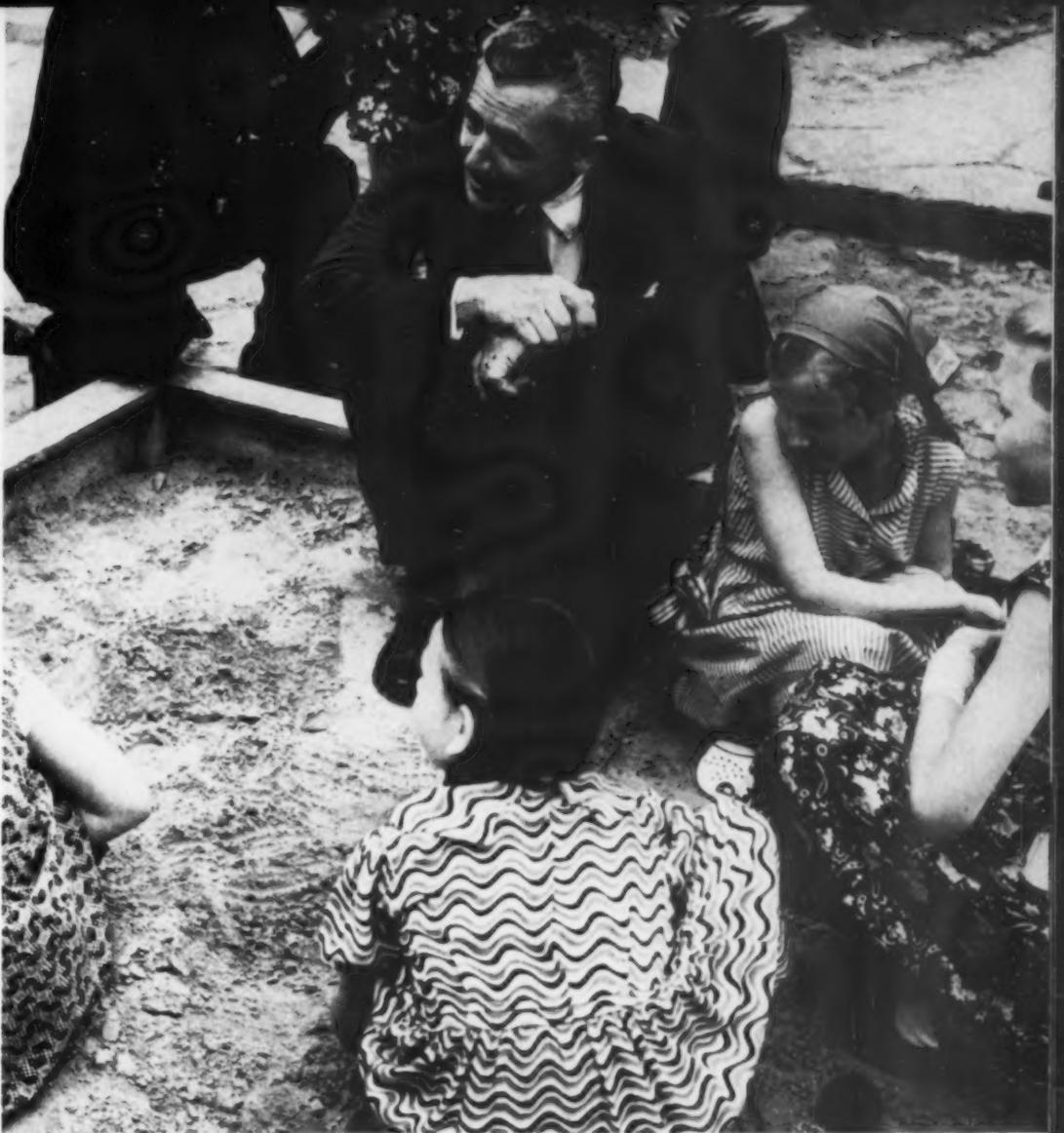
Their tour was widely covered in newspapers and by radio and newsreel.

One ten-year-old in a small village just outside of Kiev told them, "I know all about you. The papers write about you every day." To show that he liked what he had read, he presented Governor Collins with a porcelain cup.

At Home with Soviet Citizens

The party visited with several Soviet families in their homes. Alexander Velin, a Kiev building worker, told them during one of these at-home chats that when he was a PW in a German concentration camp he made friends with an American from Ohio. "We shared our hardship like brothers," he said. "We ought to live in friendship now as we did during the war."

That sentiment was repeated by Governor Robert B. Meyner of New Jersey who said



GOVERNOR COLLINS OF FLORIDA TELLS THE SOVIET CHILDREN THAT HIS DAUGHTER LIKES TO PLAY IN SANDBOXES.

A RESTFUL LUNCH IN THE GARDEN OF AN AGRICULTURAL INSTITUTE IN DIGOMI, A GEORGIAN VILLAGE.



Alexander Melnikov, construction worker, offers a welcoming handshake to Governor Stratton of Illinois when the American visitors tour Kiev.

Governors Meet the Soviet People

that everything he had seen in the Soviet Union proved to him that the people wanted peace and were sincerely interested in getting to know people from other lands. Ways and means of securing peace must be found, he emphasized.

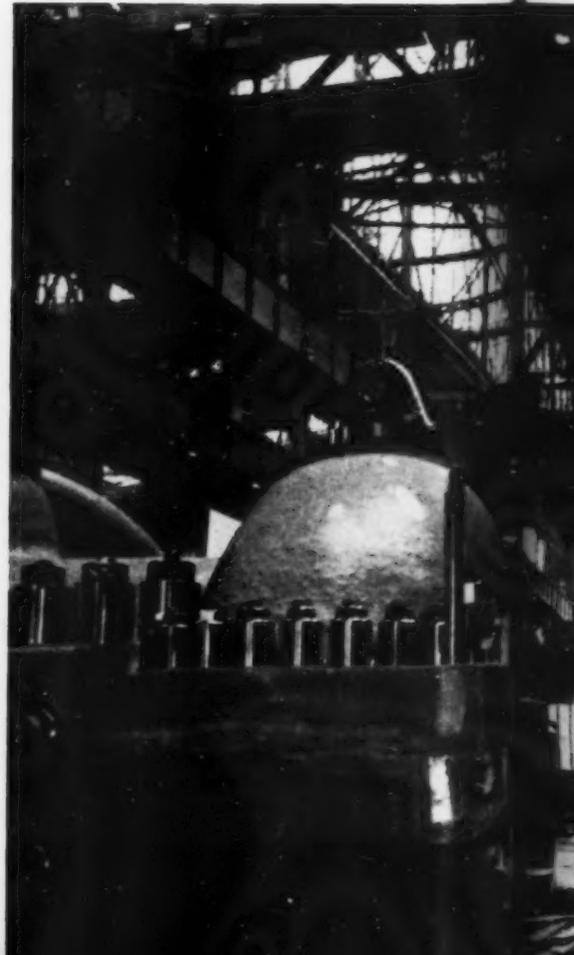
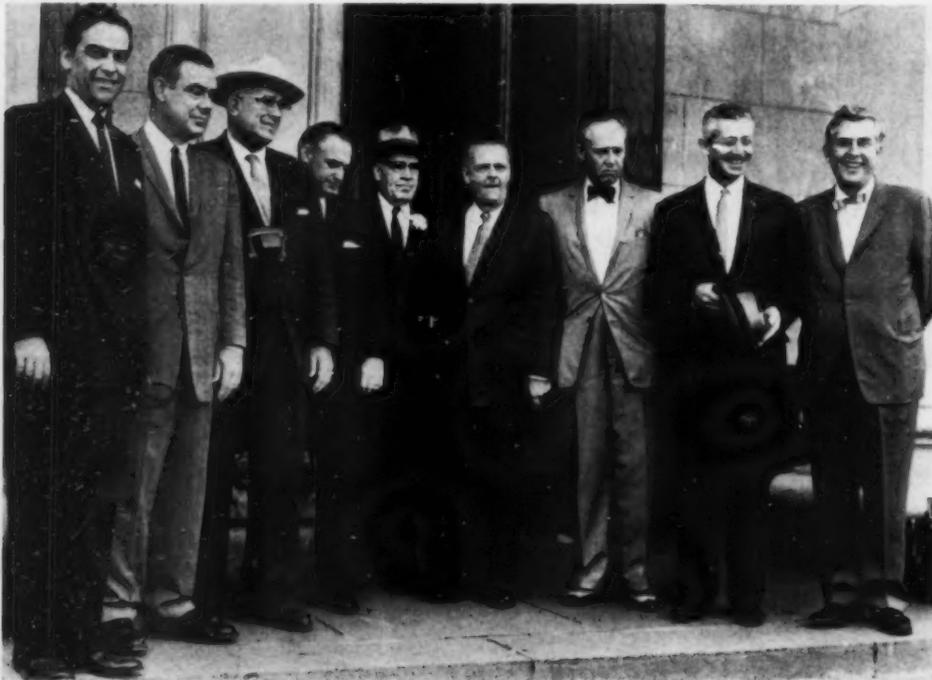
During their stay in Moscow, the governors were received by Nikita S. Khrushchev, Chairman of the USSR Council of Ministers; by Anastas I. Mikoyan, First Vice-Chairman; and by Mikhail P. Georgadze, Secretary of the Presidium of the USSR Supreme Soviet.

Governor George D. Clyde of Utah summed up the party's feeling. He noted the very cordial reception the visitors had met everywhere they traveled. The strongest impressions he and the other members of the party carried away were wonderment at the speed with which the country had been rebuilt after the war's enormous destruction and admiration for the Soviet methods of mass housing which he described as "absolutely unique."



AMERICAN GOVERNORS ACQUAINT THEMSELVES WITH SOVIET JUDICIAL PRACTICE AT A COURT TRIAL IN LENINGRAD.

Governors Underwood of W. Virginia; Smylie of Idaho; Clyde of Utah; Davis of N. Dakota; Hodges of N. Carolina; Stratton of Illinois; McNichols of Colorado; Collins of Florida; Meyner of New Jersey.

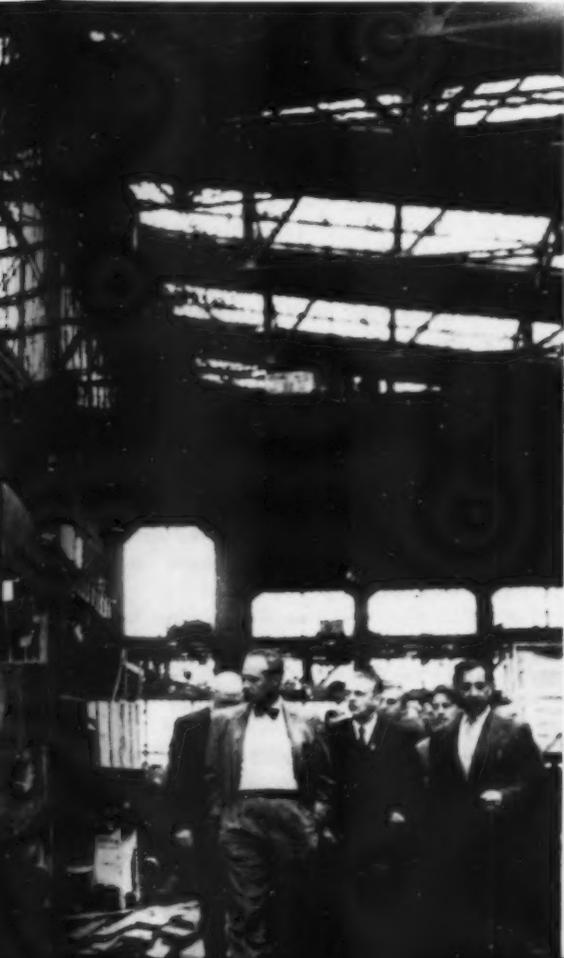




AN INFORMAL TALK WITH N. S. KHRUSHCHEV AT THE KREMLIN. THE VISITING GOVERNORS WERE ESPECIALLY INTERESTED IN LEARNING HOW THE SOVIET GOVERNMENT OPERATES.

THE U.S. GOVERNORS VISITED A NUMBER OF PLANTS.

GOVERNOR SMYLIE OF IDAHO (CENTER) STOPS FOR A FRIENDLY CHAT WITH LENINGRAD METAL PLANT WORKERS.





HEARTY MEALS BROUGHT AND SERVED ON THE SPOT BY A LOVELY COLLECTIVE FARM GIRL.

Fruits of Collective Labor

A SHORT BREAK FOR A REST WITH GAY ACCORDION MUSIC AND AN IMPROMPTU DANCE.



SOVIET COLLECTIVE AND STATE FARMS REPORT GOOD CROPSITE OF A

DESPITE the drought in some farm areas of the country, the collective and state farms of the Ukraine, the lower Volga, the Urals and other regions report better than average grain and vegetable harvests in this first summer of the seven-year plan. In many sections of Kazakhstan, one of the great Soviet breadbaskets, the bumper wheat crop was larger than the record harvest of 1958.

Bigger crops were sown this spring than last on an expanded acreage totaling 470 million acres. More corn, sugar beets, sunflowers and potatoes were planted in an effort to meet the pledge taken by the farms in the Ukraine, the Kuban and elsewhere, to meet their target figures in less time than the seven-year plan required.

But the weather was unaccommodating, to say the least. On the virgin lands of Siberia and Kazakhstan the temperature soared to the very high 90's and elsewhere there was no relief from parching sun and wind.

Soviet collective farmers did not sit back however. They countered nature's unreasonableness with scientific knowledge, hard work, and massed fleets of farm machines.



EVIDENCE OF A BAD DROUGHT IN SOME REGIONS OF THE COUNTRY.

The widespread and general use of mechanized equipment turned the trick. In the first half of this year the collective farms acquired nearly 100,000 new tractors, more than 25,000 harvester combines and a large number of other farm machines. That saved time in sowing and harvesting and made for better cultivating and fertilizing.

In this first half year there has been notable progress in stockbreeding. The number of cattle, hogs and sheep has grown by 21 million. The country's production of meat rose by 38 percent and milk by 19 percent. The average milk yield per cow increased by 9 percent.

Kazakhstan collective and state farms report remarkable output. Early in August they completed their annual delivery quotas of meat, eggs and karakul hides sold to state and cooperative trading bodies. They delivered three and a half times more meat than during the same period last year.

Bad weather or not, Soviet growers and stockmen haven't the slightest doubt that the job they've undertaken of exceeding U.S. meat and milk production will be done.



AROUND-THE-CLOCK WORK IN THE FIELDS HELPS TO BRING IN A BUMPER HARVEST.

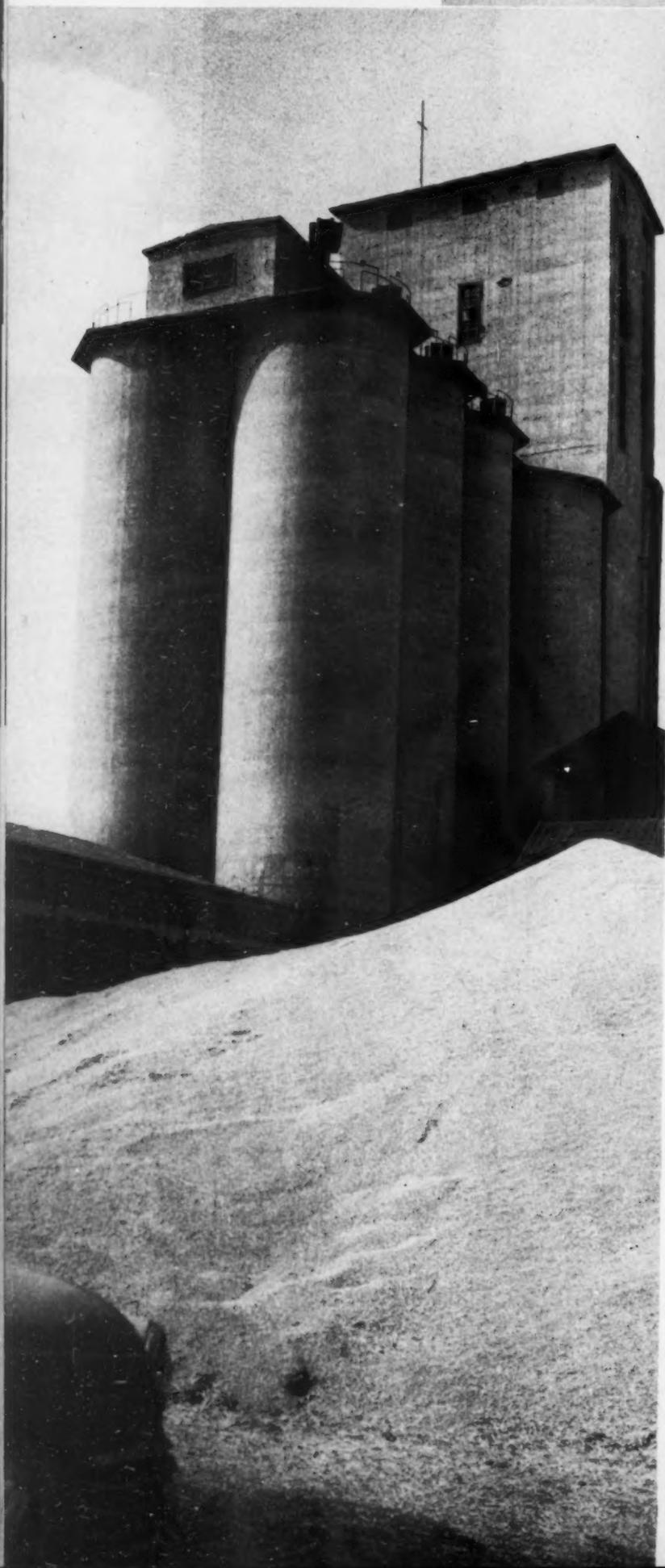
MASSED FLEETS OF MODERN AGRICULTURAL MACHINES COUNTER UNFAVORABLE WEATHER.



Seyatel, a prosperous collective farm village, set in the dry Salsk steppes.

The farm's fields, shaded by tree belts have a rich yield even during droughts.

THE VILLAGE



By Yuri Grafski

THE KULESHES are a big but fairly representative collective farm family. There is Grigori, the 55-year-old head of the family who is one of the farm carpenters, his wife, Fevronya, chief poultry woman, Grigori's two brothers and their wives.

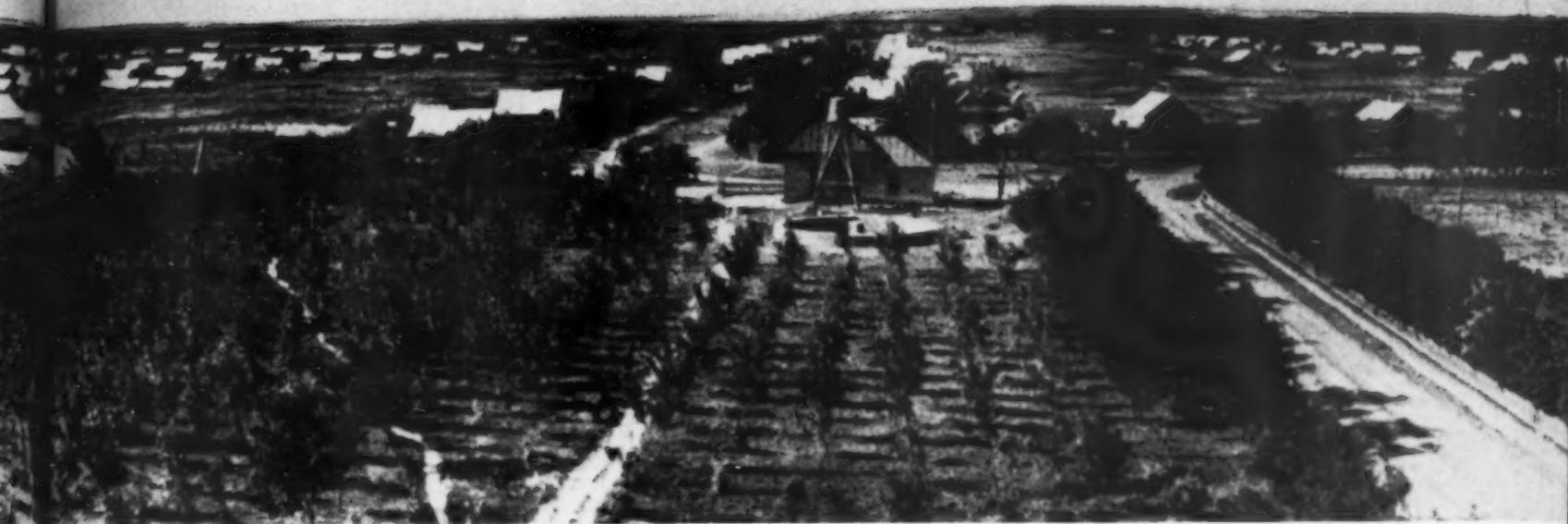
Brothers Albert and Victor are bricklayers, now busy building a new garage for the farm. Their wives Taisia and Nina work on one of the wheat combine crews and in the poultry division, respectively.

Their collective farm is in a remote village, Seyatel, in the Salsk steppes, a region of beautiful but monotonous blue summer skies and practically no rain. It is a rare summer when drought does not threaten. This summer was not at all unusual. Rain came only on the eve of harvest time.

Fighting Droughts

But drought is no longer the imminent disaster it once was. The Kuleshes and everyone at the Stalin Collective Farm have the threat well in hand. A glance at the farm fields tells why. They are evenly divided into 225-acre squares, each one boxed in by trees. Protected by these shelter belts of 18- to 24-foot trees, the fertile black earth is impervious to the worst of droughts and the hottest of summer winds.

IN THE STEPPES



Within each green box the wheat grows higher with each succeeding harvest. The farm's 12,500 acres of plowland is sown mostly to wheat and corn with large sections growing sunflowers, vegetables, watermelons, fruit and grapes.

The farm has 45 big machines—harvester combines, tractors and trucks. The barns and outbuildings of brick house 1,000 head of cattle, 1,500 pigs and about 2,500 sheep. In the poultry yard and ponds are some 70,000 chickens, ducks and geese.

400 Owners

All of this is owned collectively by the 400 collective farm families. The farm's income three years ago was six million rubles; this year it will top eleven million. The distribution of this year's larger income has already been decided upon at a general meeting of all collective members.

The individual farmers will be getting four and a half million rubles for their work, fifty per cent more than they got three years ago. Larger sums, totaling 360,000 rubles, have been earmarked for the village kindergarten, club, library and children's summer camp.

Another three million rubles have been allocated for capital construction—new barns, a garage, a machine shop, a community center, a new school.

A million or more rubles will be going into mineral fertilizer, seeds, spare machine parts, fuel, new irrigation projects, and the purchase of more machinery.

The earnings of the six members of the

MECHANICAL MILKERS LEAVE THESE SEYATEL DAIRYMAIDS TIME FOR AN ANIMATED CONVERSATION.



FORBES
U



THE FARM'S PLOWLAND IS DIVIDED INTO 225-ACRE SQUARES, EACH BOXED IN BY 18 TO 24 FOOT TREES.



NO CHANCE OF A MEAT SHORTAGE IN SEYATEL.

THE VILLAGE IN THE STEPPE

Kulesh family this year total 56,500 rubles. Their budget figure for food runs to 15-20 percent of this figure. The family grows a great many of its own vegetables, fruit and berries in the kitchen garden attached to the cottage and keeps its own pig and dozens of chickens. At one time the Kuleshes kept a cow but that is no longer necessary with plenty of milk products available at the farm's dairy and meat at the farm's slaughterhouse. The village also has a bakery and public dining room to cut down on the time housewives have to spend in baking and cooking.

For the Farm Children

Grigori Kulesh's grandson Sasha is one of a hundred or more farm children ranging in age from two months to six and a half years who are taken care of from sunup until dark at the nursery and kindergarten. The cost of this pre-school training is carried entirely by the farm out of its common funds. The village school has 300 children in attendance.

During the summer the children are sent

off to a summer camp set up in a picturesque spot near the village. The camp is also maintained out of farm funds.

Two years ago the farm started a music school to teach violin, piano, accordion and wind instruments. It has grown so popular that 150,000 rubles a year are now budgeted for its maintenance.

The farm is now embarked on an ambitious school project that will include a boarding school, workshops of various kinds, a music school and three dormitories for students and teachers. Seven million rubles have been budgeted for construction.

Health Service

The farm has its own clinic with a trained nurse in attendance. A hospital is still in the planning stage. Complete medical services, including visiting physicians, are supplied by the district medical center without charge.

The village earmarks about 100,000 rubles a year for farm members who need treatment at spas and sanatoriums. Fevronya Kulesh suffered from a stomach ailment and was sent to a sanatorium with all expenses paid by the collective. The farm has a pension system and has built an old folks home for retired elderly people without families.

No Housing Shortage

Seyatel is a pleasant green village. Its brick-paved streets are lined with single-story cottages owned by the collective farm members. One belongs to Grigori Kulesh; it cost him 20,000 rubles to build it.

There is no housing shortage in Seyatel. Every farm family has its own cottage. Twenty-three new cottages are being built this year but they are mostly for newlyweds.

New homes can be built at relatively low cost since the farm has its own brick yard. The construction work is done by a building team of farm members supervised by farm draftsman-builder Vasily Koptev. These homes, although privately owned, are built with the help of the collective.

Cultural Center

The club is the social and cultural center of the village. It has an orchestra, chorus, brass band and dramatic group. Each year 100,000 rubles are earmarked for the club's expenses—instruments, salaries for the activ-

The village music school teaches piano, violin and the woodwinds.





NOR OF A MILK AND CREAM SHORTAGE, EITHER.

ity leaders and movies three times each week.

Visiting professional theater companies from Novochoerkassk and Rostov stage shows at Seyatel from time to time.

This distant village is by no means isolated from the world of events. The Kuleshes, for example, read three national and two local newspapers. All told the village subscribes to 400 magazines and a thousand newspapers, and the farm people keep most of the 8,000 books in the village library in continuous circulation.

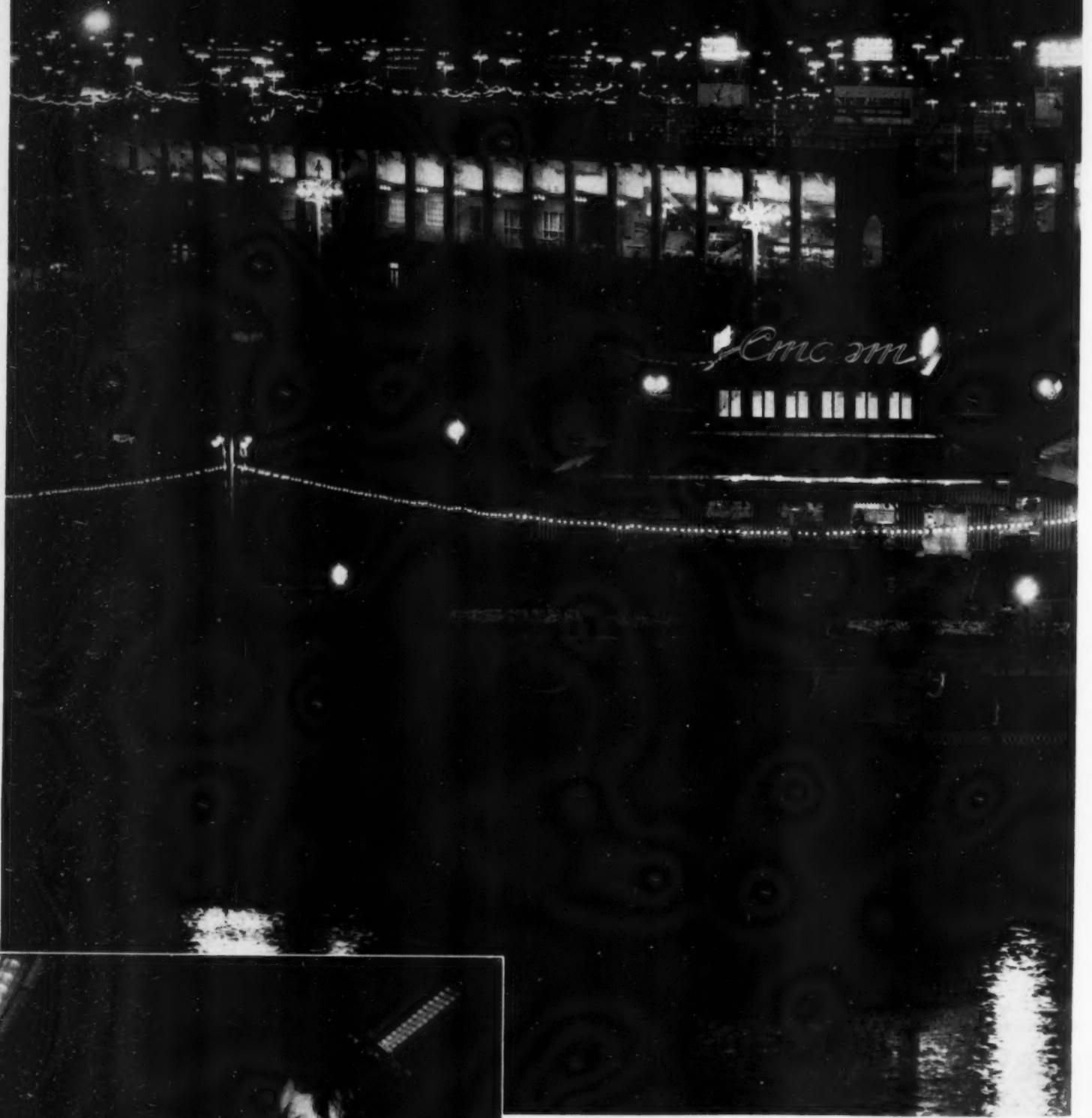
The people of this remote village in the steppes lead a life that is both interesting and fruitful.



SUNUP TO SUNDOWN CARE IS GIVEN TO THESE SEYATEL YOUNGSTERS AT THE FARM KINDERGARTEN.

SEYATEL HOUSEWIVES SPEND A GOOD DEAL LESS TIME IN THEIR KITCHENS WITH THIS DINING ROOM HANDY. A FEW OF THE FARM'S 70,000 DUCKS AND CHICKENS.





ALL LIT UP FOR CUSTOMERS—POPULAR TRADE FAIR IN MOSCOW'S CENTRAL STADIUM.

MORE CONSUMER GOODS A





OCCUPANTS OF NEWLY-BUILT APARTMENTS ARE BUYING NEW FURNISHINGS.

AN EXCHANGE that took place between Nikita Khrushchev and an audience of workers points up the salient fact of Soviet production—that every commodity turned out, whether by heavy or light industries, is designed to meet the growing consumer needs of the Soviet people. This is the basic function of the present seven-year plan, as it has been of the several preceding economic plans.

Nikita Khrushchev was speaking at a meeting of workers of the Dnepropetrovsk Machine-Building Plant. The Soviet Premier said: "Now everyone can see that the material welfare of the Soviet people is augmented from day to day. Indeed, our great industrious people have fine achievements to their credit. They have actually shaken the world with their accomplishments.

"In the past few years remarkable results have been obtained in farming as well. Grain production has risen sharply, and now we have bread in abundance—both black and white. Am I right?"

A host of voices supplied the answer, "You certainly are."

Khrushchev asked again, "Do we have vegetables?"

Voices: "We do. Plenty of vegetables."

Khrushchev: "Do we have milk?"

Voices: "Certainly."

Khrushchev: "And meat?"

Voices: "Yes, but not enough."

Khrushchev: "We have milk, but opinions differ as to meat. Meat production in the last few years has shot up in our country. And this year meat production and procurements are rapidly increasing. As of July 20, the government bought 50 percent more meat than it had by the same date last year. That's not so little, is it, comrades?"

Voices: "Right."

"But we still don't have enough meat," Khrushchev continued. "We must produce more. In response to the call of the foremost collective and state farms, a campaign has begun in the country to overtake and surpass the United States in the production of meat, milk and butter per head of the population.

"In 1958 the U.S. produced 207 pounds of meat per capita. The actual per capita consumption is lower on account of exports. We must also produce more milk, meat and other foodstuffs to satisfy the requirements of the Soviet people in full. We are certain that the task of over-

By Yakov Usherenko

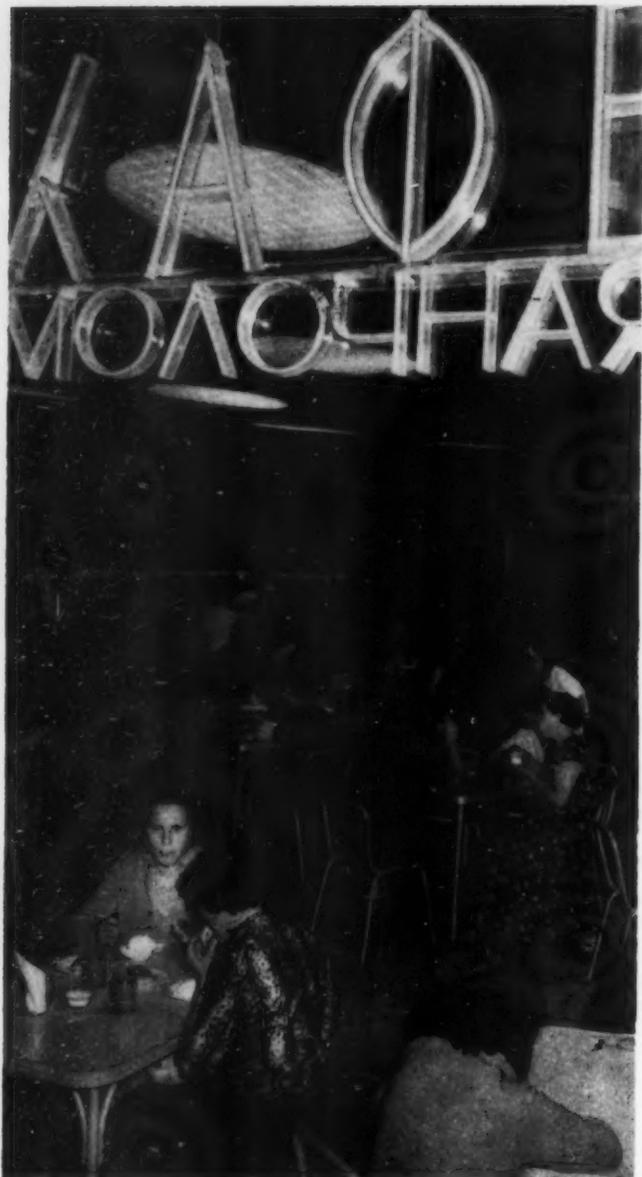
R S AND MORE BUYERS



LIGHTING FIXTURES OF ALL SHAPES AND SIZES ON SALE IN THIS STORE.

MEAT BY THE TRUCKLOAD READY FOR DELIVERY TO RETAIL FOOD SHOPS.





ONE OF THE SCORES OF NEW COFFEE HOUSES THAT OPENED THIS YEAR.

ON SALE—EVERYTHING FROM BALALAIKAS AND VIOLINS TO FINE PIANOS.



MORE CONSUMER GOODS AND MORE BUYERS

taking the U.S. in production of meat, milk and butter in the next few years will be successfully carried out. We have all the potentials for it.

"The Party and Government are directing their efforts towards boosting the development of industry and agriculture in order to improve the living standards of the people. Our people now are living better than ever before. We are sure that they will be living even better in the very near future. Consumer goods of better quality are now being turned out in large quantities. And this is only the beginning."

And the audience responded: "You're right."

More and Better Goods

In the past six months gross industrial output of the Soviet Union was 12 percent higher than for the same period last year. It is 5 percent higher than the target figure of the seven-year plan. In some of the country's light industries, the increase is even greater, ranging from 14 to 28 percent for such commodities as butter, sugar, meat, furniture, refrigerators and washing machines. The seven-year plan control figures provide for a more rapid development of every kind of consumer goods production.

The 200,000 government and the 135,000 cooperative consumer enterprises turn out everything needed to satisfy the demands of the Soviet people. The textiles of the Moscow "Tryokhgornaya Manufactura", the shoes of the Leningrad Skorokhod Factory, the silk fabrics of Margelan (Uzbekistan), the fish products of Tallinn, the canned goods of Riga, the jerseys of Lvov and the furs of Kazan are high quality products. Many have won prizes at the Brussels and other world fairs.

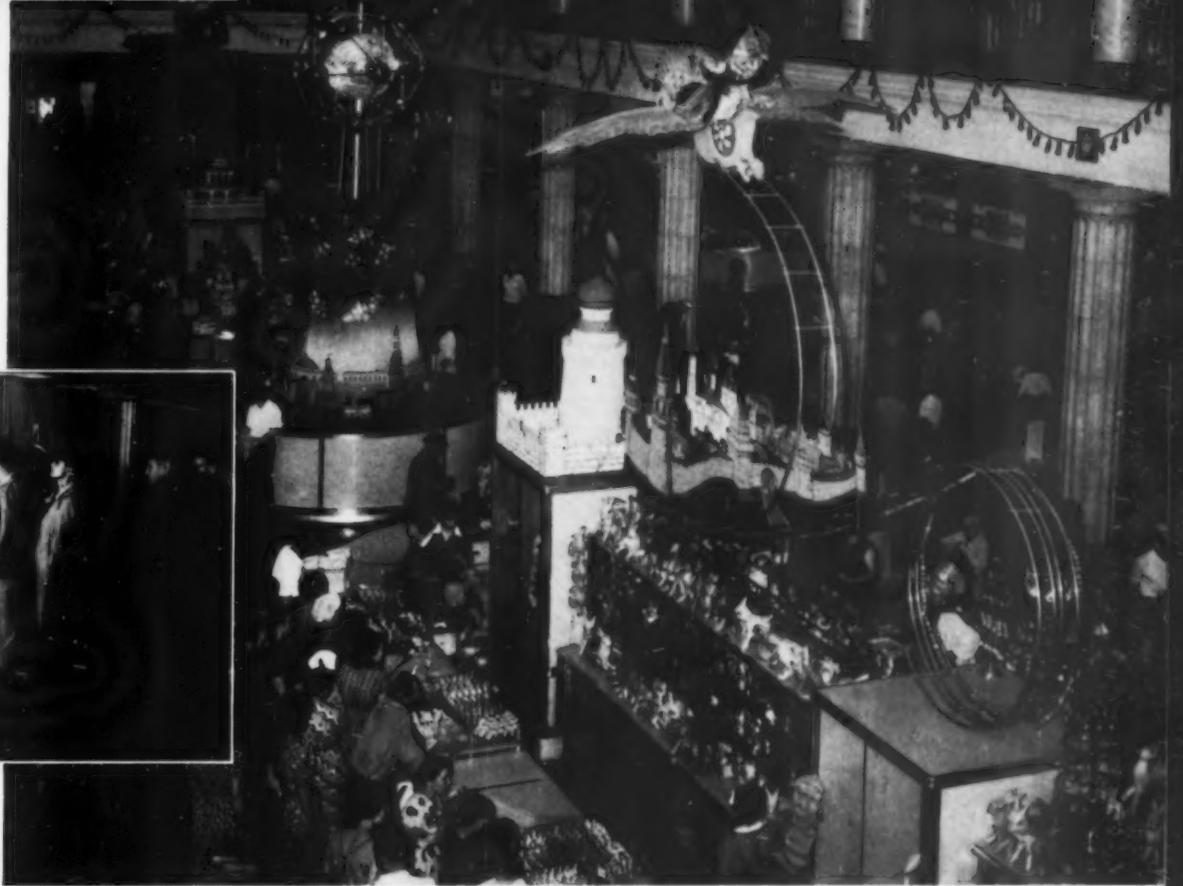




THIS SHOP HAS EVERYTHING FOR CHILDREN.



A SHOP FOR MEN'S APPAREL IN MOSCOW.



Consumer goods are also manufactured at many of the heavy industry plants. Shops in the Krasnoye Sormovo Shipbuilding Yards in Gorky turn out items like washing machines and furniture. The Sverdlov region in the Urals, one of the big heavy industry centers, manufactures bicycles, motorcycles, washing machines, radios, refrigerators, and leather footwear.

New Light Industry Plants

The products of factories built in this first year of the new plan are already on sale in retail stores. The sugar of new refineries built in Krasnodar and Oryol are now sweetening the tea of Soviet consumers.

By 1965 ten million tons of sugar will be produced in the USSR, almost twice as much as in 1958. The per capita sugar output will rise from 57 pounds to 90-96 pounds. Of the 83 new sugar refineries projected by the seven-year plan, 52 are already in construction, 17 will be completed this year.

Before 1965 about 250 new meat packing plants, 100 dairies, more than 200 canneries, hundreds of baking and confectionery factories, wine and beer distilleries and soft drink enterprises will be operating.

Almost twice as much capital will be invested between 1959 and 1965 in constructing light industry plants as was true for the seven years preceding. Finishing touches are now being put on the largest Soviet textile mill in the city of Kamyshin on the Volga. This giant—one of the 170 to be built—will weave more cloth than all the textile mills in Canada put together.

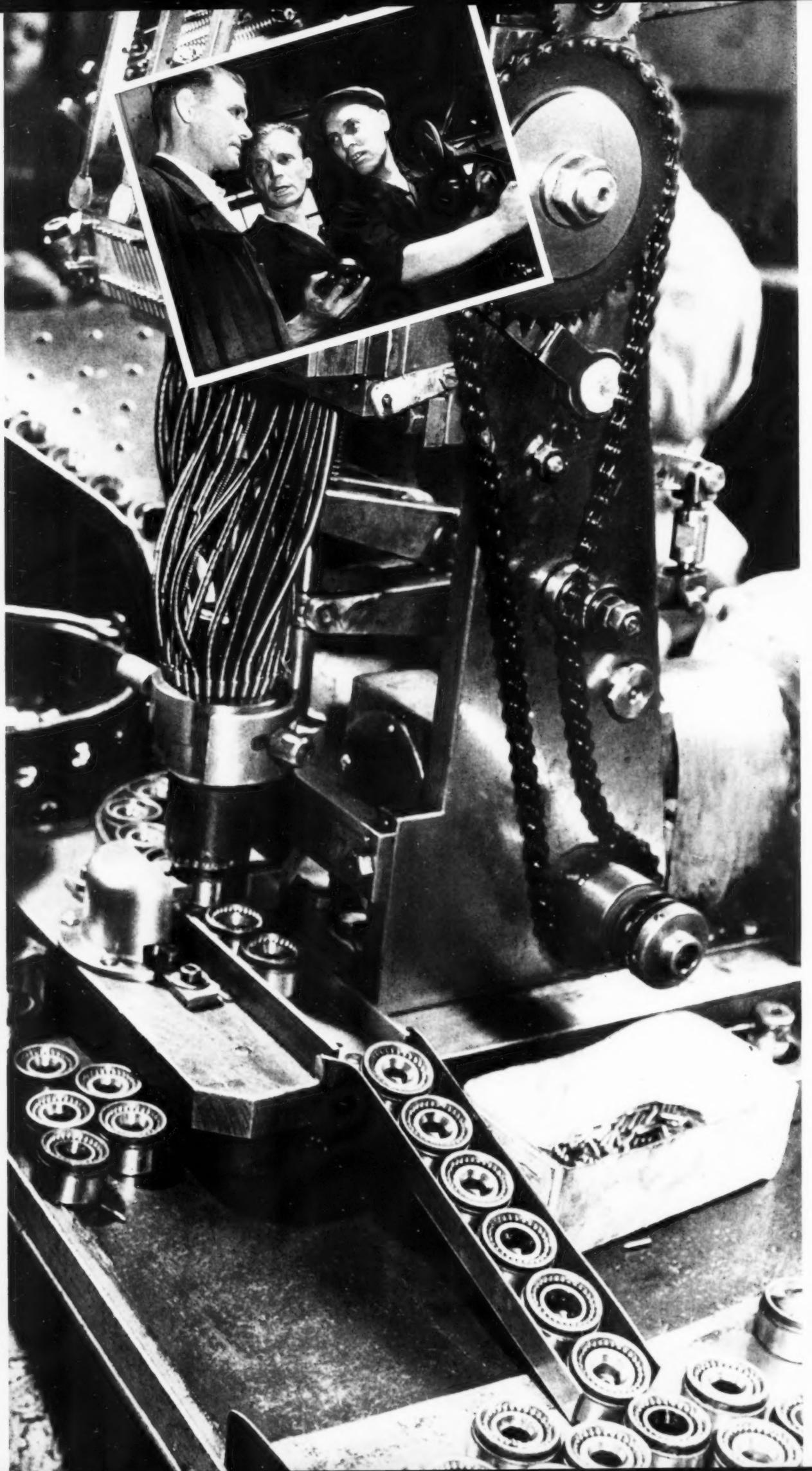
There are more than half a million retail stores of various types. These are predominantly government-owned stores although some are owned by consumer cooperatives and collective farms.

On sale in the state stores is everything from a prefabricated house to a can of caviar. All goods sold by state and cooperative stores have fixed retail prices which have been cut periodically and consistently. This year prices on such commodities as radios, cameras, bicycles, grape wines and some foods were reduced by government order. Many more price cuts are forecast in the seven-year plan.

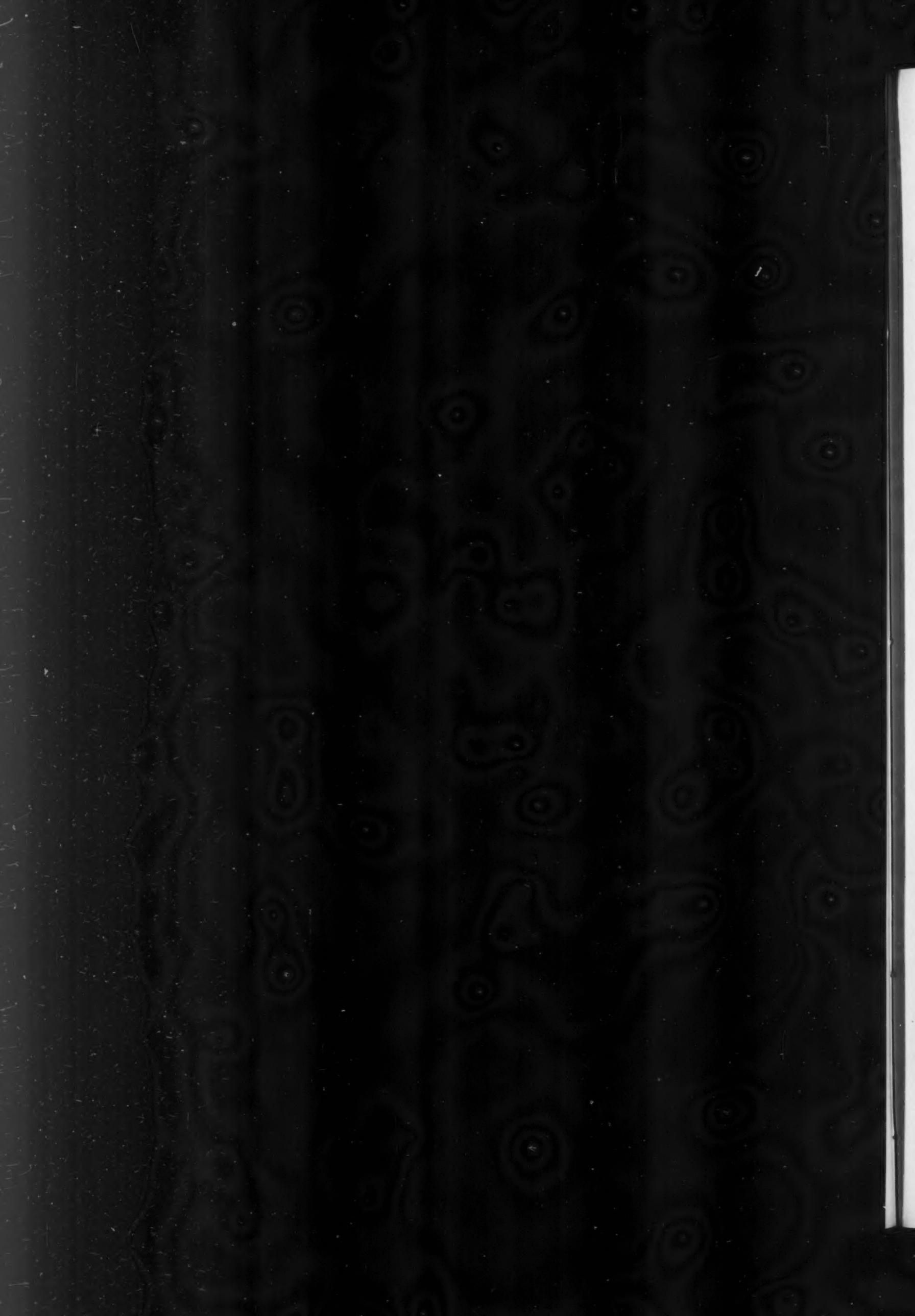
These stores have been selling larger quantities of goods. By comparison, in the first six months of 1959 they sold 21 percent more meat and meat products; 23 percent more milk and dairy products; 38 percent more fruit; 28 percent more refrigerators; 42 percent more washing machines and 28 percent more television sets than they did during the first 6 months of last year.

This demonstrates a steady rise in purchasing power. During the first 6 months of 1959 the Soviet consumer spent 14-odd billion more rubles on food and goods than he did during the same period last year.

Purchases are usually for cash. There are comparatively few credit or installment buyers. If a family wants a car, piano or TV set it will save the amount needed and then make the purchase. The country's savings banks announce 7 billion rubles more in deposits the first half of this year as compared with last year's deposits—another and very significant index of increased purchasing power and a higher standard of living of the Soviet people.







WHAT AUTOMATION MEANS TO US

By Ivan Kalganov,
Alexander Manushin and Pavel Fedyanin

*Machine-adjustors, Automatic Shop of the Moscow
First State Bearing Plant*

THE THREE of us work in one of the automated shops of the Moscow Bearing Plant. Ours is a very big plant and is visited by a good many foreigners—engineers, scientists, newspapermen and just plain ordinary tourists—interested in seeing the inside of an up-to-date Soviet factory.

With our shop so highly automated, the question we are asked most often is what effect automation has had on the workers' living standards. What happens to all the men whose jobs are replaced by machines? With automation, these foreign visitors reason, comes over-production and along with that comes unemployment.

We find the question a little strange since our big problem is getting enough workers. We haven't had any unemployment for thirty years, even when the rest of the world was in the middle of the economic depression of the thirties. Our younger people have never experienced joblessness and what it does to people.

We Benefit from Automation

Automation, for us, does mean more production, but not less employment. There is plenty of work for everyone who wants it. When, for example, the first automatic line of forty machine tools was installed in our plant's automatic lathe department, we had sixty workers whose jobs were taken over by machines. Most of them were transferred to other jobs in the shop at no loss in pay. Some, like Yefim Orlov and Georgy Gorshkov who learned new skills, went to work in other shops.

Instead of being hurt by automation, we benefit from it. With automa-



Alexei Viktorov and Pavel Gorokhov and two other mechanics designed an automatic machine that greases and packs shaft bearings.

ONE OF THE AUTOMATED PRODUCTION LINES IN THE FIRST BALL-BEARING PLANT IN MOSCOW. IT POLISHES THE BEARING RACE OF THE OUTER RING, ONCE A HAND JOB.





Their old jobs replaced by machines, former adjusters Pyotr Simakov (left) Raya Bakhmutskaya and Ivan Kharybin were taught a new skill—drafting.



A new housing project built by the bearing plant for its workers. Savings brought by automation go to build houses, schools and theaters.

WHAT AUTOMATION MEANS TO US

tion, we are able to increase output and with it the profits of the plant. But the profits do not go to stockholders. A good slice comes back to us directly in larger bonuses and incentive payments and indirectly in more and better housing and other benefits. This year the plant is spending about two million rubles for housing in addition to the 7.5 million allocated by the government for this purpose. Last year about a million rubles of the plant's profit went to build a kindergarten. An additional 1,100,000 is budgeted this year for a new nursery.

We Automated Our Plant

In a very short period the workers and engineers in our plant did a thorough modernization job on our equipment. We set up eleven trans-

fer machines, 23 conveyor lines, renovated 1,224 and automated 588 machine tools, built 636 new equipment units and more than 1,000 transfer and hoisting mechanisms. We've more than doubled our output since. Our staff, of course, increased at a much slower rate, but it did rise by 13 per cent.

Ring stamping, up to now, was one of our hardest operations. Now we flatten our rings in the forge shop by special expansion machines fitted with apparatus that pre-heat by electric induction outfits developed by plant technicians and engineers. An automatic operator, also designed by plant engineers, is now being put through its paces in the shop. When fitted with these devices, the expansion machines will round off the complete automation of ring stamping.

In the multi-spindle division of the automatic lathe department, Lev Bulgakov, Lev Kvartin and other engineers have designed a very dependable automatic operator for ring replacement that does most of the hard work that was done by hand before.

To operate this machine, the workers had to improve their skills. Once they got their training finished, their rating and with it their wages went up. Mikhail Mayorov and Anatoly Seliverstov were two of the workers involved. They used to cart the rings to their benches, now they are brought by conveyor. All they have to do is to watch the operation of the machine and keep an eye out for some minor trouble that may need an adjustment.

In our roller shop productivity has doubled since charging devices were installed and wages have gone up very noticeably, also. Some of the machine tool operators know their machines so well they are able to get along without adjusters. In the assembly division of the universal joint bearing shop, fitters Alexei Viktorov, Vasily Frolov, Anatoly Karasev and foreman Pavel Gorokhov have designed and built automatic machines which reduce operating time in bearing assembly and packing by as much as three-quarters.

More Skill—High Wages

Many workers with relatively low skill ratings are transferred to our automatic shop. We train them. Igor Mashkov was a fifth grade worker. He was taught to handle grinding equipment and now works in the No. 3 Small Series Shop. He rates as adjuster, seventh grade, at higher wages than he earned before. He makes up to 1,500 rubles a month.

The same was true of Viktor Maslennikov, who had no specialized training at all and was taught service grinding and equipment assembly.

Yevgeny Khlebushkin was a seventh grade fitter when he came to our automatic shop, but he had little background for this new world of complex precision mechanisms. With instruction, he caught on quickly, qualified for the eighth grade and was placed in charge of a fitter's team with a wage increase of more than fifty per cent.

Once started, he moved right along and now he is working for an engineering degree. He completed his courses in the evening. Nor is he the only one. Juli Palkin, adjuster, and Lyubov Panfilova, inspector, are classmates of his. The training is, of course, given without charge. Schooling, at whatever level, is free in our country.

Some of the workers in our shop have already earned their engineering degrees. Pyotr Simakov worked as an adjuster, graduated from a technical school and qualified as a designer in the plant's automation division. He is one of a number of people from the shop now doing tool designing—an example in life of the way in which industrial automation in a socialist country tends to erase the old line of demarcation between mental and physical labor.

Working Conditions

Higher paid skills, as important as they are, are not the be-all and end-all. There are some things which don't come in a pay envelope. We are talking of working conditions which are pleasant and work which is satisfying.

We do not have any exhausting night work in our shop. The only work done at night is machine and instrument checking and repairing. The shop is clean and well ventilated. The machines are foolproof—equipped with safety devices where necessary, and operate so efficiently that they need very little looking after.

Not only are our designers constantly figuring out new automation techniques but our shop workers as well. All of us are on the lookout for additional ways of increasing output and cutting production costs. Our shop people have made some 400 improvement proposals of one kind or another in the recent past as part of our pledge to increase our output of bearings by another twenty per cent.

By converting an ordinary grinding machine into an automatic one and tying it into a centerless grinding transfer machine, we have already been able to bring our ring output up to the level it was to have reached only in 1961, according to the seven-year plan target figure. By 1965 ours will be the last word in automated plants.



More automation means a shorter workday without any cut in wages for adjuster Gorshkov, electrician Novikov and all other Soviet workers.

NIKOLAI IVANOV (LEFT) WAS ONE OF THOSE WHO HAD TO LEARN A NEW SKILL. ONCE HE BEGAN STUDYING, HE KEPT RIGHT ON. HE'S WORKING FOR AN ENGINEER'S DEGREE.





STUDENTS OF THE EIGHT-YEAR SCHOOLS ARE GIVEN A BASIC KNOWLEDGE OF MACHINE OPERATION AND INDUSTRIAL PROCESSES. HERE THEY STUDY AN ENGINE.

THE SOVIET SCHOOL SYSTEM REORGANIZED

*By Yevgeni Afanasenko
Minister of Public Education, Russian Federative Republic*



CHEMISTRY, PHYSICS AND MATHEMATICS ARE GIVEN MORE EMPHASIS IN THE REVISED COURSE OF STUDY.

THERE is no exaggeration in the phrase "a veritable cultural revolution" to describe what the Soviet educational system has accomplished in these past four decades. It has reared a nation of educated men and women, among whom may be numbered many of the most distinguished of contemporary scholars, scientists and men of letters.

Now the Soviet Union has entered on a new phase in its development—it is constructing communism, a society of abundance. This is the goal toward which the seven-year plan is directed. More is therefore required of the school system than heretofore. It must train men and women of larger skills and talents.

In process it must break down the barrier which all previous societies have maintained between mental and manual labor. It must bring the school closer to real life. It must inculcate a profound sense of the social and personal values of productive labor.

This orientation was outlined by the Twenty-first Congress of the Communist Party which met in January. Subsequently the USSR Supreme Soviet drafted a law which



THE WORK-TRAINING PROGRAM IN FARM REGION SCHOOLS REQUIRES THAT NINTH-YEAR STUDENTS PUT IN 2 DAYS A WEEK OF ACTUAL WORK AT NEARBY COLLECTIVE FARMS.

provides for a thoroughgoing reorganization of the school system.

The new law provides for eight years of basic schooling instead of the previous seven. The eight-year school will be compulsory and universal for both town and country. Children will enter at age seven and graduate at fifteen or sixteen.

The eight-year school will provide an additional 1,015 school hours for general academic and polytechnical instruction. The course of study will cover the fundamentals of science, the Russian language, mathematics, geography, history, physics, a foreign language, and singing, drawing and physical culture. Typical of most others is the curriculum draft prepared for schools in the Russian Republic by the Ministry of Education and the Academy of Pedagogical Science.

The Russian language will be studied for the full eight years with much of the time devoted to practice work. Mathematics study will cover a wider area and stress computing techniques and practical problem-solving. Major emphasis in foreign language study will be on development of speech fluency. The geography program will be broadened to include economic geography. The Russian Republic curriculum recommends that in the fourth grade, instead of elementary geography and nature study, a single program of natural science based on local material be substituted.

Drawing will be taught from the first to the seventh grades inclusive, and music and singing from the first to the eighth grades, two years more than the old course of study provided.

Work-Study Tie-Up

The major point in which the new curriculum differs from the old is in its strong and repeated emphasis upon work-study tie-up. Work training will have a prominent place in

the course of study beginning with the very first grade. Considerably more time is allotted for this kind of instruction than was provided for by the old curriculum. In grades 1-4 there are 432 hours provided for manual training as compared with the previous 206—or 11.7 per cent of the academic hours instead of 6 per cent. Beginning with the third grade, all children will be required to do two hours of self-service work—tidying classrooms and schoolyards, repairing furniture and teacher aids, helping out in school lunchrooms and school libraries, and other such activities consistent with the children's health and age development.

A housekeeping program is included in the new curriculum. Girls will study homemaking, sewing and cooking in the fifth to eighth grades. Fifth-grade boys will also be taught certain appropriate fundamentals of homemaking and care of clothing.

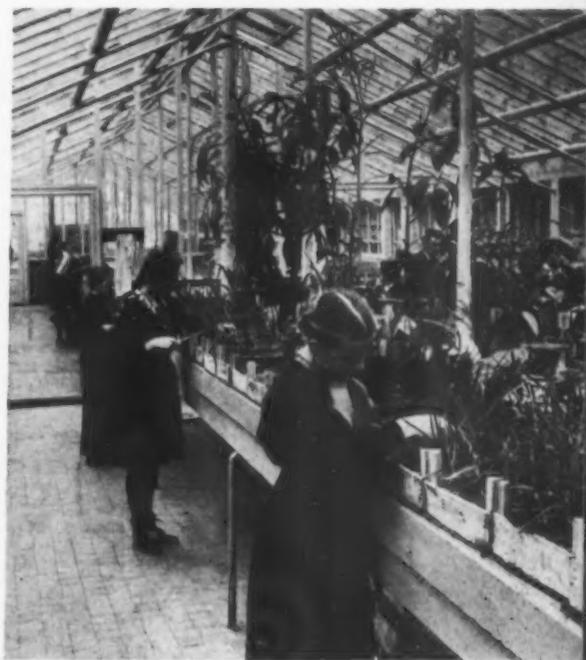
The time allotted for work-training in grades 5-8 has been increased from the present 538 to 895 hours, or from 11.2 per cent of the academic time to 21.8 per cent. Children in these grades will help tend parks and public gardens, help raise poultry and rabbits at collective farms or do the simpler shop operations. Two weeks are allotted to such work-training in every grade.

The program is, of course, graded. As the children grow older they will progress from work in school shops and on farm plots to actual productive work consistent with their age level at nearby factories and collective and state farms which will be coordinated with their classroom study. In this way they will be applying and testing the theory they learn in class in actual work situations.

The academic subjects all provide for this kind of coordination. To illustrate—the natural science program in grades 5 through 8 is a relatively comprehensive study of plants, animals, the human body and the develop-



Eminent scientists like Trofim Lysenko take time from their research to meet with schoolchildren.



The botany and zoology courses in the new curriculum link up with current farm practice.



Girls in grades 5 to 8 learn cooking. Boys are also taught the basic elements of homemaking.

THE SOVIET SCHOOL SYSTEM REORGANIZED

ment of the organic world and provides for practical work, laboratory study and excursions. The physics program includes a large amount of applied physics and serves as both practical and theoretical foundation for the engineering specialties.

Students of the eight-year schools will graduate with a basic knowledge of the major industrial processes, learn how to read blueprints, know the simpler measuring and calculating techniques and be able to process the more common materials.

They will be prepared for the advanced level of secondary school covering grades 9-11 which are a prerequisite for college entrance. Or, if they so choose, they may go on to a vocational-technical school which will provide them with a skill in one of a large group of trades.

Advanced Secondary Study

The course of study for the ninth through eleventh grades has also been changed and the present standards raised. The new programs in mathematics, physics, chemistry and biology include current developments in science and technology.

The physics courses, for example, cover the atom, ultrasonics, semiconductors, the properties of plastics and their applications in industry. In chemistry, students will learn the prop-

erties of high molecular compounds, their classification and active methods of synthesis.

The biology courses are linked closely with the latest developments in agronomy and zootechnics. A new course in the "Fundamentals of General Biology" is being introduced. More comprehensive than the old "Fundamentals of Darwinism" course, it provides a theoretical foundation for training students for farm work. The sciences are given more time in the new curriculum—116 more hours in mathematics, 104 in physics and 67 in chemistry.

The level of teaching in the humanities—literature, history and the others—and the standards in these courses are also to be raised.

The function of advanced secondary schooling is dual—to provide a rounded education that will serve as a basis for higher schooling and to teach a trade.

The curricula for these schools call for regular work in factories, mills or collective farms on the average of two days a week for ninth-year students. Depending on local factors, this work time may be concentrated in one or several periods during the course of the school year, with the cautionary note that students are to be put to work at basic rather than auxiliary jobs, the work to be directed by engineers and skilled workers in the various fields. The course of study for the tenth and eleventh grades is directed to further improve vocational skills.

Vocational Training

In the ninth to eleventh grades of secondary school, the fundamentals of production, vocational training and practical work in production are allotted 1,356 hours instead of the 504 hours in the present curriculum.

The new curriculum for the vocational

technical school is illustrated by the course of study for future farmers at an agricultural school on the secondary level. In the ninth to eleventh grades the school gives the following required courses for all the farm specialties: fundamentals of plant growing, fundamentals of animal husbandry, farm machinery building and electrical engineering, electrification of agriculture, the economics and organization of production on collective farms.

In addition, the school offers special courses for the training of tractor mechanics, crop production men, hotbed and truck garden vegetable growers, livestock breeders, dairy hands, pig tenders, poultry breeders, dairy laboratory workers and so on.

The evening general education secondary schools are designed to give a secondary education to young people who have completed the compulsory eight-year school and have gone to work. These schools will pay special attention to the students' independent work. At large industrial enterprises they will offer both day and evening courses for students who work on various shifts.

Rural schools attended by farmers, as well as schools for people in the merchant marine, will be seasonal and will combine classroom and correspondence study.

The new education law provides for a large increase in the number of boarding schools. For the next school year the Russian Federative Republic alone will have accommodations for 250,000 boarding school students as against the present 83,000. These boarding schools are a relatively new feature of Soviet education but have been doing such effective work in all-round general education everywhere in the country that the new law appropriates a large sum for building new ones. The course of study they offer includes extensive academic, polytechnical, arts and physical training courses.

PART OF THE COURSE OF STUDY IN HOMEMAKING INCLUDES INSTRUCTION IN SEWING AND EMBROIDERY.



Teaching Methods and Textbooks

As part of the school reorganization program, the entire system of teacher training is in process of revision. Teachers in training will now be required to do practical work in factories and on collective farms in order to gather firsthand experience. They will also be required to develop some skill in one of the arts—singing or drawing, for example—so that they will be equipped to lead extracurricular activities of one kind or another.

Educational publishing houses are now at work preparing new textbooks which they expect to have ready for distribution by the beginning of the 1960-61 school year.

Although the reorganization formally takes effect with the opening of the school year this September, the changeover is being made gradually in order not to break away abruptly from the present course of study. In the Russian Federative Republic, for example, the new curriculum will be introduced in the lower grades—1 to 4—this school year. The Republic's educators estimate that it will take a minimum of three to five years to complete the changeover.

The new course of study has these added values: it eases the student's load somewhat by eliminating secondary material and it makes for easier learning by alternating mental and manual activities. Those courses requiring very intensive mental application have been somewhat curtailed. In the early primary grades the class hour is to be reduced to 35 minutes and the midday recess to be increased to 40-50 minutes. The school year for all grades is stretched by an added two weeks to permit fuller use of the spring season for practical work, excursions, and physical education and sports. It is proposed to have four vacation periods during the school year: five days in the fall (November 5-9), twelve days in winter



MUSIC AND SINGING COURSES ARE GIVEN FROM THE FIRST TO THE ELEVENTH GRADES IN THE NEW CURRICULUM.

(December 30-January 10), eight days in spring (March 24-31) and the regular summer vacation—85 days for grades 1-4, 72 days for grades 5-7 and 66 days for grades 8-11.

Local industrial enterprises are in process of providing school workshops with machines, tools and necessary materials, and special experimental plots of land are being allocated to urban and rural schools. Since 1956 there have been many pilot projects collecting experience on linking class study with productive work. In Ryazan and other farm regions special experimental and training stations were opened adjacent to rural schools. Collective

farm work by teams of school pupils who run through the complete cycle of farm work—sowing, cultivating and harvesting—a type of pilot activity begun in the Stavropol Region, has been picked up by many other school districts.

Pilot projects in factories have been carried on by schools in many industrial cities. Moscow, Gorky, Leningrad, Kuibyshev, Chelybinsk, since 1956 when this work-study orientation was first projected at the Twentieth Congress of the Communist Party of the Soviet Union. The experience accumulated is still being carefully studied.

FOLK DANCING IS ONE OF THE MANY EXTRACURRICULAR ACTIVITIES DESIGNED TO MEET EVERY POSSIBLE STUDENT INTEREST AND TO DEVELOP ANY POTENTIAL TALENT.





The School I Teach In

By Nina Kapitonova
Principal, School No. 38

OUR secondary school No. 38 is one of 150 in Sverdlovsk, the largest city in the Urals. Our address is 31 Pavel Bazhov Street, named after a famous Urals writer. We have an enrollment of 1,200 boys and girls, the children of people who work in factories and offices nearby or who live in the vicinity. All parents are required by law to enroll their children in school when they reach the age of seven.

There are sixty teachers on our faculty, the majority of them college trained. Many, like myself, have been members of the No. 38 faculty for a long time. I have been teaching chemistry here for 25 years.

Like all schools in the Soviet Union, we have begun to introduce the new revised course of study which stresses work training. Its aim—and our job as teachers—is to help our children develop into educated, cultured, well-bred men and women, to see that they acquire good work habits and to guide them toward the career for which they are best suited.

The school year opens on September 1 and ends the following June.

September 1, the opening day, by tradition belongs to the first-graders. They are greeted by the older children and taken on a tour of the school where they will be spending at least the eight years required by law and perhaps an additional three years to get a complete secondary education. In our school last fall, 150 small boys and girls were escorted by upperclassmen through our big building. They were shown classrooms, science laboratories, the workshops with their lathes and other machines, the homemaking room, the school garage where classes in driving and car servicing are held.

In the physics laboratory the first-graders saw detailed working models of a blast furnace and a rolling mill our pupils made. Elsewhere they saw a herbarium, a collection of Ural minerals, a short-wave set, a drilling machine. "We made all these things ourselves," the upperclassmen told the newcomers, "and we'll leave them for you to use when we graduate."

Outside, on the school grounds, the children were shown the orchard, berry patch, greenhouse and experimental garden where we have our botany classes.

The School Year

Like many of the city's schools we now work on an eleven-year curriculum. The first eight years are compulsory, the additional three complete the full secondary school program.

The school year is divided into quarters. Children attend six days a week and will usually have four to six lessons a day in different subjects. A lesson lasts 45 minutes with a ten-minute recess. There is a long recess of twenty minutes in the middle of the day. It is proposed in the draft program to reduce the class hour to 35 minutes and to increase the mid-day recess to 40-45 minutes in the early primary grades.

In grades 1-4 the school year is 38 weeks. In grades 5-7 it is also 38 weeks and includes two weeks of vocational training. In the eighth grade the school year is a week longer and includes two weeks of vocational training and two weeks for graduation examinations.

Here is the schedule of hours for each subject in the first to eighth grades:

Number of Lessons Per Week in Grades								
Subject	I	II	III	IV	V	VI	VII	VIII
Russian Language	12	12	12	10	6	} 8	6	5
Russian Literature	-	-	-	-	2			
Mathematics	6	6	6	6	6	6	6	6
History, Constitution of the USSR	-	-	-	2	2	2	2	3
Natural History	-	-	-	3	-	-	-	-
Geography	-	-	-	-	2	2	2	2
Biology	-	-	-	-	2	2	3	2
Physics	-	-	-	-	-	2	3	3
Chemistry	-	-	-	-	-	-	2	2
Mechanical Drawing	-	-	-	-	-	-	-	1



Work in school garden plots gives the younger children a chance to observe processes they have begun to read about in class. At a state farm in the area the older children are taught how to operate and maintain farm machinery.



Each year on September 1, the seniors play host to the first-graders. They take the newcomers on a tour of the school, show them the classrooms, laboratories and workshops and make them feel at home in their big new world.

At the end of the term, the children always crowd around the bulletin board to see which of them has made the Honor Roll. The names of those awarded medals for high scholarship are inscribed in gold and silver letters, evoking the esteem of both teachers and fellow students.



THERE ARE 60 TEACHERS ON THE FACULTY OF SCHOOL NO. 38. THE MAJORITY OF THEM ARE COLLEGE TRAINED. THIS IS ELI SHNERBERG, PRIMARY SCHOOL TEACHER.

The student editorial board of the school's wall newspaper preparing an issue devoted to the works of Sir Walter Scott and H. C. Wells.



Future scientists and engineers learn how to handle and adjust equipment in the electronics laboratory.



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FOR SCIENCE
UNIVERSITY



Upper classmen getting their work training from engineer Semyon Yagnotinsky at a ballbearing plant.



In the primary grades the girls are taught homemaking. They learn how to keep a house in order, to prepare the more common dishes, and to cut and sew simple articles of clothing.

Chemistry, taught in the upper grades, stresses laboratory work. The course takes in such current developments as the properties of high molecular compounds and their classification.



The School

I Teach In

Foreign Language	-	-	-	-	4	4	3	3
Drawing	1	1	1	1	1	1	-	-
Music and Singing	1	1	1	1	1	1	-	-
Physical Education	2	2	2	2	2	2	2	3
Manual Training	2	2	2	2	3	2	2	-
Work Training	-	-	2	2	2	-	-	3
Optional Subjects	-	-	-	-	2	-	-	1

Notice that we give Russian language for the full eight years. Our children also get rather comprehensive training in mathematics; we emphasize computation and problem solving. Included in our geography syllabus is economic geography. We have replaced our old fourth grade elementary geography and natural science courses with a unified course that stresses the natural resources, industry and agriculture of the Urals, our section of the country.

Those of our students who wish to get a full secondary school education stay on after the required eight years for another three. In the ninth to eleventh grades two-thirds of the school time is devoted to classroom and laboratory studies and the remaining third to work training in one or another trade at a local factory.

This is the distribution of subject hours per week for the final three years, grades 9-11:

<i>Number of Hours Per Week in Grades</i>			
<i>Subject</i>	<i>IX</i>	<i>X</i>	<i>XI</i>
Literature	3	3	3
Mathematics	4	4	4
History	3	4	3
Constitution of the USSR	-	-	1
Economic Geography	3	-	-
Physics	4	3	2



English is Galina Mazhura's favorite subject and of many of her classmates as well. Study of a foreign language begins in the 5th grade. Emphasis is on developing speech fluency.

Astronomy	-	1	-
Chemistry	2	3	2
Biology	2	-	-
Mechanical Drawing	2	-	-
Foreign Language	3	3	2
Physical Education	2	2	1
Fundamentals of Industrial Production	2	1	-
Theoretical and Practical Vocational Training and Productive Work	6	12	18
Optional hours for sports, art studies, etc.	3	3	3

A large part of our curriculum is devoted to the humanities, the sciences and polytechnical study. In mathematics and the sciences we cover the latest developments in the field.

Homework, we feel, helps the child to retain what he learns in the classroom and we insist upon thorough preparation of assignments. They are carefully gone over and checked in class. Home assignments are not heavy in the primary grades but grow more

difficult as the child advances. In the lower grades they will usually require one to two hours a day, in the upper grades two and a half to three hours. Care is taken that they are not so burdensome as to affect the child's health or allow him insufficient leisure time for rest and relaxation.

Work Training

A primary objective of the school is to train young people to do socially useful work so they can develop their own talents and make their contribution to the social community.

Elements of work training are woven into every one of the subjects studied. Natural history is taught largely through laboratory experiments and excursions. The physics course includes a large amount of applied material that serves as a theoretical basis for learning to run machinery, to use and repair electrical equipment. In the eight years the children are provided with an elementary knowledge of the basic industrial processes. They learn how to measure, calculate, read drawings and work with various materials.



A corner of the sunny lunchroom. Both boys and girls wear the traditional Soviet school uniform.

Manual training is given in all grades and gradually increases in complexity. In the primary grades the children learn to cut and paste paper, use needle and scissors, make pen wipers and bookmarks, and model in clay and plasticine. They look after plants in the school garden and take care of animals, fish and birds in the nature room. By the time they reach the second and third grades our girls can cut out and make aprons and protective sleeves, embroider on a printed design and hem handkerchiefs.

In the fourth grade the girls are taught homemaking and the boys carpentry. Fifth-grade boys go on to more difficult woodwork projects. They make bookshelves, small tables, bird houses, boxes for seedlings, bird feeders and cages. Guided by the instructor they may build a fence around the school garden.

Fifth and sixth grade girls are taught to prepare the more common foods and to cut out and make simple articles of clothing. By the time they reach the seventh grade the boys have learned to use tools and machine metal parts. Seventh graders are taught the basic elements of turning and eighth graders the elements of the technology of metals.

Our Teachers

Manual training we consider one of the important subjects of our curriculum, taught by people who combine industrial and teaching experience. Nikolai Novikov, one of our manual training teachers, who was once a factory foreman, is very good with children in the lower grades. Under his guidance they quickly learn how to handle the basic wood-working tools. The older children are taught metal working and lathe work by Ivan Paltchenko and Pyotr Isakov, men with long experience in their crafts.

In the fifth to eighth grades the children work at some socially useful project. They

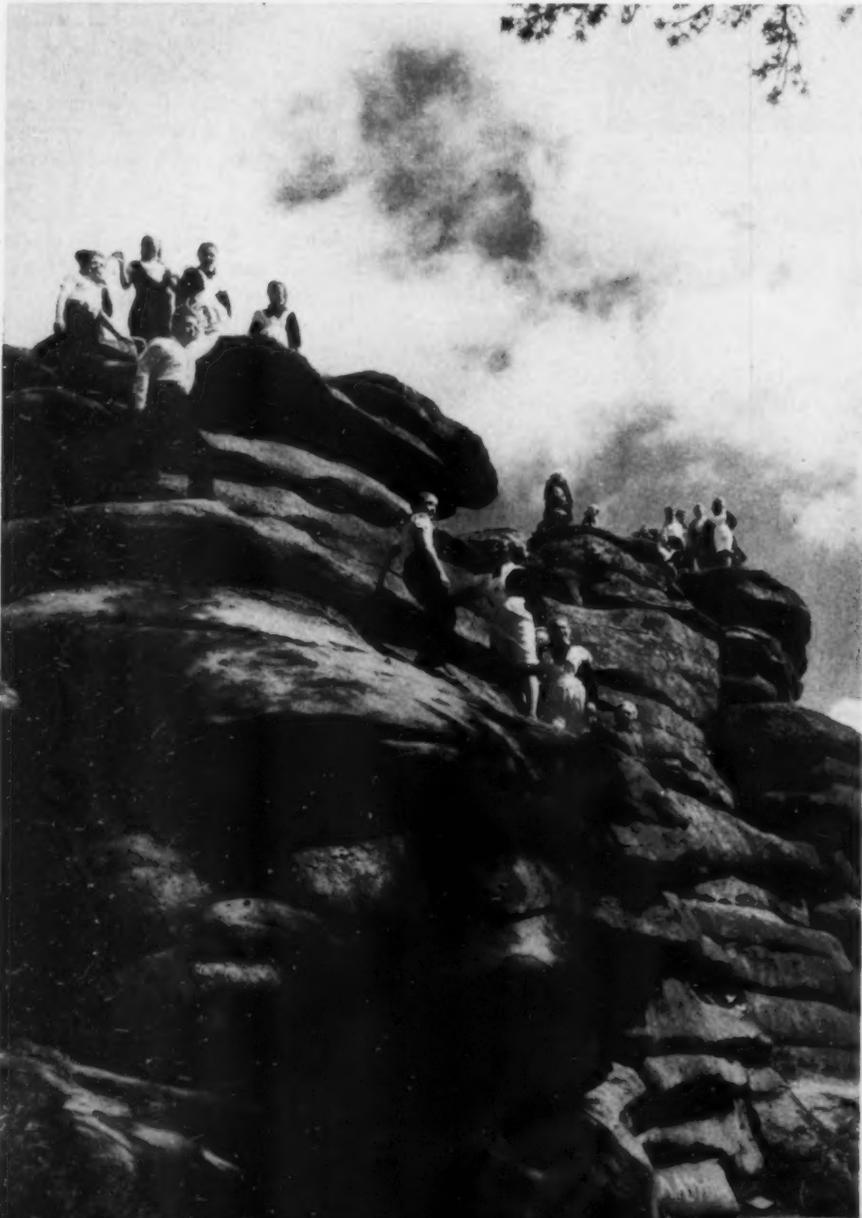


A faculty meeting. Their job, say School No. 38 teachers, is to turn out educated, cultured and well-bred men and women who will contribute their skills and talents to building communism.



Soviet school children, much like those anywhere in the world, have their less-angelic moments.

Through excursions into the country and in town children are given a picture of the natural resources, the industry and agriculture of the Urals Region in which the school is located.



The School I Teach In

may help plant flower beds, work in the school garden or greenhouses, or help repair a school structure.

Ninth to eleventh-grade students spend six hours a week in two- or three-hour stretches at the bearing plant near the school. There they learn to be turners, grinders, assemblers, inspectors. Last year every one of our students received his trade-qualifying certificate after work training at the plant. They were paid while learning. This type of instruction has much educational value. The students get their preliminary trade training, learn to be responsible for work they are assigned and make practical and concrete use of the knowledge they acquire in class.

Workers and engineers help our students in every possible way and our young people respond by trying to do their very best. Here is a letter we received from the plant administration last term: "The management of the bearing plant wishes to thank the teachers at Sverdlovsk School No. 38 for preparing their students so well for practice training at our plant. We are awarding bonuses to forty of your students for excellent work and should like to have our appreciation of their efforts entered on their school records."

Several of these students who graduated last term were offered jobs at the plant. Maria Kremlyova now works as an assembler, Georgi Shtilianin as lathe operator and Olga Vasilieva as inspector.

The new course of study also gives our students some of the farm skills. Younger children work on the school garden plot. For those in the upper grades we arrange a two-week period of work training on a state farm

near Sverdlovsk. They spend four hours a day at all the regular farm jobs and learn how to run a tractor, a harvester combine and how to repair farm machinery.

Citizens of a Socialist Society

We are training future citizens of a socialist society, boys and girls who will be expected to do constructive and useful work and to manage the affairs of their country when they grow to adulthood. That is why, from the very first year at school, we train the child to live in a cooperative community.

We try to instill the group spirit in our children by working to make each class a friendly close-knit body united by common interests. Children are encouraged to help one another in their studies and to spend their leisure time together. The class teacher is their guide throughout the school year.

Our children, like those at all Soviet schools, each year elect a Student Council. The chairman and five members are chosen at a meeting of all the children in the school and each class picks a representative to the Council.

We have a Council of twenty boys and girls responsible for maintaining order and discipline in the school and for keeping the classrooms clean. Council members supervise the lunchroom. All cases of misbehavior or lack of discipline—and that includes being late for classes or failure to do homework—are acted upon by the Student Council at its regular meetings held three times each month.

Third-grade children are eligible to join the Young Pioneer Organization. Seniors are eligible for membership in the Young Communist League if they have the necessary requirements of public service and good scholarship. Both these organizations help teachers and parents in the work of character building. They have a far-reaching influence on all the children.

Also of great help to the school are the parents, many of whom serve on the Parents' Committee. Our teachers maintain close contact with these parents and call on them almost constantly for help of one kind or another.

Our Alumni

We keep in fairly close touch with our graduates. Once a year our school holds a reunion attended by former students now working at the most diverse occupations. We have 1,500 alumni who live and work in Moscow, Riga, Vladivostok, Chita and a hundred other places.

Ludmila Yushina I remember as a fidgety girl with pigtailed. She is now a well-known chemist doing research at the Urals Branch of the USSR Academy of Sciences in Sverdlovsk. Another alumna, Nelly Cantor, is a newspaper woman in Chita, Siberia. Maya Lisina teaches at Moscow University. Roman Raksha is a geologist in the Soviet Far East. Nina Kostenko, an honor student at our school, is a children's doctor in Chelyabinsk in the southern Urals.

When I meet these and others of my old students from time to time I feel a sense of great pride in my profession and an awareness, equally as great, of its responsibilities.



A principle of Soviet education is to train good minds and healthy bodies. Physical culture is given in every school grade and children are encouraged to participate actively in sports.

A few of the 1200 students at the school strike a happy pose for our cameraman. All Soviet parents are required by law to enroll their children at school when they reach the age of 7.



RESEARCH IN OUTER SPACE

By Alexander Nesmeyanov,
President of the USSR Academy of Sciences

THE SPACE ERA began on October 4, 1957 when the Soviet Union launched the first sputnik to circle the earth. It weighed 184 pounds. A month later, on November 3, 1957, the second Soviet sputnik, weighing 1,118 pounds took off. It carried the dog Laika, as test passenger, and more intricate scientific apparatus than the first.

On May 15, 1958 the third sputnik was shot into orbit. It weighed 2,919 pounds and was truly a flying laboratory. Circling the earth well over a year now, its radio transmitter, powered by solar and chemical batteries functioning uninterruptedly, has been telemetering scientific data to every part of the earth.

On January 2, 1959, Soviet science launched the cosmic rocket. It skirted the moon at a distance of about 3,100 miles, overcame the earth's gravitational pull and orbited to become the first man-made planet of our solar system. The instruments and batteries it carried weighed 795 pounds. The final stage of the rocket, after the fuel was consumed, weighed 3,238 pounds.

Responsible for the success of these cosmic flights by high-efficiency rockets operating on high calory fuel is the degree of constructional perfection achieved by large-scale Soviet scientific research and exacting industrial standards. To ensure the rocket's stable position in space and its precise adherence to the pre-determined trajectory during the boost, a system of automatic rocket flight control was devised.

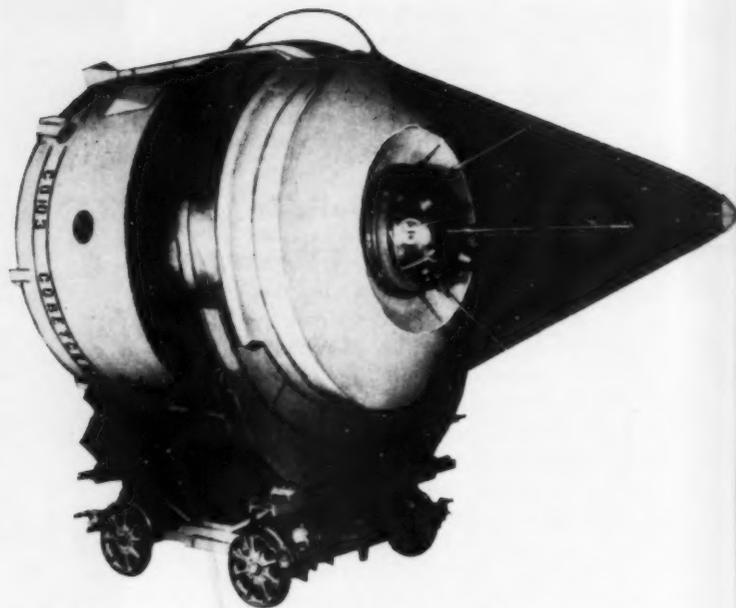
Exceptionally high precision is required to maintain the computed coordinates and speed component at the end of the boosting stage in order to set the artificial satellite in an orbit with pre-determined parameters or to carry on a cosmic flight with definite objectives. The solution of this most complicated problem made it possible to orbit the Soviet sputniks. It was an outstanding accomplishment of modern automation.

With the sputniks and the cosmic rocket, basic scientific studies of the upper layers of the atmosphere and cosmic space have been undertaken. They have yielded findings of paramount scientific interest.

Radiation Research

Research has been going on for some years on the origin of cosmic rays and the interaction of elementary particles of super-high energies with quite unexpected results. It was found that at great altitudes, along with the primary cosmic rays, there was very intensive radiation consisting of particles of relatively low energy.

As distance from the earth increases, the intensity of radiation increases hundreds of times. It reaches a maximum at a distance of 4 radii from the center of the earth, and then drops sharply. At a distance exceeding 10 radii of the earth a constant level is attained which corresponds to the cosmic radiation in interplanetary space. This



A model of the last stage of the space rocket mounted on a cart. Half of the nose cone has been removed to show the spherical instrument container.

phenomenon was described in detail in the June issue—No. 6(33)—of this magazine.

Physicists, geophysicists and astrophysicists have been studying the origin and composition of the halo of particles near the earth. It is too soon after the discovery of this phenomenon, however, to choose definitely from among the different hypotheses that have been advanced to explain it.

Halo of Particles

Last summer, at the assembly of the International Geophysical Year Special Committee in Moscow, this hypothesis was put forward: bombarded by cosmic rays, the earth, like any other celestial body, becomes a source of neutrons. These neutrons appear as a result of the breakdown of the nuclei in the earth's atmosphere by cosmic rays. Since neutrons do not have electric charges they pass through the earth's magnetic field and move away without hindrance. Near the earth some of the neutrons disintegrate to form electrically-charged particles—electrons and protons. These particles, which have comparatively low energy, are trapped by the earth's magnetic field. They can neither enter the earth's atmosphere nor fly off into interplanetary space. Consequently they will move for a very long time in the magnetic field at distances thousands and tens of thousands of miles from the earth. The number of atoms present at such distances from the earth is very small. Collisions with atoms, therefore, are extremely rare and, as a result, the energy of the particles decreases very slowly. In a long span of time they will accumulate in large numbers and the intensity of radiation will be high. At present we may consider it established that it is this process which creates the high energy protons in the inner zone of radiation surrounding the earth.

To explain the origin of the outer zone the hypotheses which seem most valid are those which attribute the phenomenon to the action of the flows of charged particles coming from the sun during heightened periods of solar activity.

Finally, it should be noted that if the products of atomic explosions reach great altitudes they will create intensive flows of charged particles. Since the energy of these particles is small they may be caught in a magnetic trap. As a result atomic explosions may "contaminate" areas of space adjoining the earth.

The sputnik and space rocket flights have yielded signal discoveries. The space around the earth, once thought empty, is now recognized as an area where phenomena of very great scientific and practical importance are occurring.

On the basis of present findings we may make this prediction of fundamental significance for astrophysics—that a similar halo of particles

will surround any celestial body with a magnetic field. The properties of space change noticeably near planets. This, moreover, occurs at distances many times greater than the extent of the atmospheres of these heavenly bodies.

According to the data obtained from the space rocket we may safely conclude that the cosmic rays in interplanetary space will have no harmful effects on the organisms of future space travelers. However, we must qualify that statement. It holds only for a relatively calm state of outer space—the condition which obtained when the space rocket was in flight.

Sputnik III carried a device which checked on the quantity of super-heavy nuclei in the cosmic rays. An analysis of the data indicates that an average of roughly one particle with a charge higher than 15 passed through the device every minute. A heavier nucleus was recorded only once in nine days. Hence it may be presumed that the flow of heavy nuclei is negligible. This is of great importance for further development of the theory of cosmic-ray origin.

Research in the Upper Atmosphere

The sputnik and rocket launchings helped immeasurably to advance the study of the upper atmosphere, a region which extends for approximately 125 miles from the outer edges of the atmosphere. The heat balance of this region is a central research problem. At an altitude of 125 miles the temperature of the surrounding medium is 800-1000° Centigrade and increases with altitude to 2000-3000° Centigrade. This high temperature results in a comparatively slow drop in atmosphere density with altitude. What maintains the high temperature in the upper atmosphere? The latest data provided by the sputniks and rockets offer a partial explanation.

Another critical research problem is the balance of ionization in the upper atmosphere, that is, the process by which equilibrium is established between the time the free electrons and ions appear and the time they are neutralized. Experimental results differ from theoretical computations by as much as 1,000 to 10,000 times. It was found that the phenomena which occur here are more intricate because of other particles present resembling catalyzers that accelerate the processes considerably.

All this research has great practical importance, among other things, for radio transmission. Radio waves travel long distances by virtue of the electromagnetic properties of the ionosphere. An interesting phenomenon which has been known to scientists for some time manifested itself with particular force in the signals from the Soviet earth satellites. The power of the signals received increased at a point situated in the antipode of the transmitting radio station. The phenomenon is known as the antipode effect because the radio waves travel to a diametrically opposite point of the earth when favorable conditions persist in the ionosphere over a lengthy period of time.

The ionosphere may also play a negative role. When radio methods are used to steer a future space ship, for example, the ionosphere may be a source of error in taking bearings or determining velocity. Its structure and characteristics must therefore be known if these errors are to be accounted for. That is why these studies being made by Soviet scientists are so important.

Density Measurements

Another upper atmosphere research problem is the determination of density. This is studied through various approaches. By comparing the changes in the times of revolution of the sputniks around the earth resulting from their slowing down, one can, with fair accuracy, determine the value proportional to atmospheric density at the orbit's perigee, the point nearest the earth.

With the help of a special gauge, first mounted on Sputnik III, the density at altitudes of 140 to 310 miles was measured. The average density of the upper atmosphere, at altitudes between 200 and 600 miles, was computed from data obtained from the radio signals of the first and second sputniks. An original method was used, based on observation of the diffusion of a cloud of sodium vapor discharged from a high-altitude rocket at 265 miles. Atmospheric density at this altitude was calculated on the basis of the theory of diffusion and the character of the diffusion of the cloud. This same type of cloud was used later to create the artificial comet thrown off by the Soviet space rocket.

These coordinated studies made accurate atmospheric density measurements at altitudes between 375 and 500 miles possible for the first

time. They also provided information about upper atmosphere temperatures. At altitudes between 140 and 230 miles the temperature varied between 800° and 1,500° Centigrade. The Soviet studies proved that several postulates which had been accepted before the sputniks made it possible to determine latitudinal and diurnal variations in density were fallacious.

A mass-spectrometer in Sputnik III registered the large number of mass spectra of positive ions that characterizes the chemical composition of the ionosphere at altitudes from 140 to 620 miles. These mass-spectrometrical measurements established the fact that from an altitude of 140 to 500 miles the main gas component of the ionosphere is atomic oxygen. Also detected were ions of atomic nitrogen and heavy particles with a molecular weight of 28 and 30 atomic units. Ions with a mass of 30 may be identified with ions of nitrogen oxide.

The great amount of data received made it possible to discern a definite dependence of all the detected ionospheric components on geographical latitude.

Important results have been obtained in determining the concentration of charged particles. From the ground, by various radio methods, we are able to determine the distribution of electron concentration only up to the height of the ionosphere's main maximum which varies in different circumstances between limits of approximately 185 to 250 miles. Previous to the time the first sputnik was launched the electron concentration changes above the main maximum were problematical.

An analysis of the trajectories of the radio signals of Sputnik I made it possible to determine average electron concentration changes in the outer ionosphere, above the main maximum, at heights of between 200 and 400 miles. The distribution of electron concentration up to altitudes of 290 miles was measured directly for the first time when a Soviet geophysical rocket was launched vertically on February 21, 1958. Analogous data were obtained from other rockets launched the same year.

Concentration of positive ions along the sputnik's orbit, up to altitudes between 550 and 620 miles, was first measured by the ion traps carried by Sputnik III. Since the concentration of positive ions in the upper atmosphere approaches that of electrons, the results yield information on electron concentration.

Study of concentrations of charged particles above the ionosphere's main maximum shows that the dwindling of electron concentration above the main maximum is slower than its growth in the lower part of the ionosphere.

We can assume from these data that at altitudes between 1,240 and 1,960 miles the electron concentration should reach values of not less than several hundred electrons per cubic centimeter or be equal to the conjectured value of its density in interplanetary gas. The earth's atmosphere apparently extends at least to heights between 1,240 and 1,960 miles rather than the 620-odd miles we assumed previously.

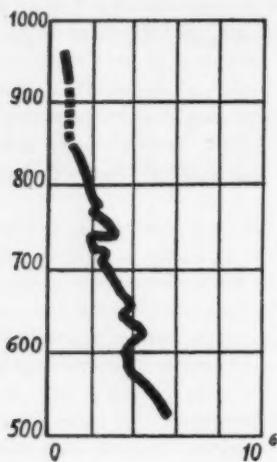
With the Soviet cosmic rocket the first direct study of the gaseous component of interplanetary substance was made. The equipment in-



One of the many stations in various parts of the country to observe the cosmic rocket by telescopic means. This one is at the University of Kiev.

RESEARCH IN OUTER SPACE

This chart shows changes in the concentration of positive ions with changes in altitude.



stalled in the rocket was intended for the first research stage, direct experimental detection of ionized interplanetary gas in the region between the earth and the moon. With this apparatus it was not possible to measure accurately the concentration of positive particles. Such measurements will be made later. But it was possible to get primary estimates based on the values of the currents registered. These currents characterize the concentration of particles of ionized gas encountered by the rocket.

The data is still being processed but certain interesting conclusions may be drawn even now. To judge by the preliminary data the concentration of the positively charged particles at an altitude of 930 miles in the unlit region of the atmosphere is on the order of 1,000 particles to the cubic centimeter. As the altitude increases to 1,240 miles, also in the unlit region, the concentration of positive particles decreases roughly by a multiple equal to 1.5. At a distance of 13,000 to 13,600 miles the concentration of positive particles proves roughly equivalent to the concentration at an altitude of 1,240 miles in the shaded region. At distances ranging from 68,000 to 93,000 miles the currents registered in the traps warrant the conclusion that the concentration of positive particles in this section of the rocket's route is on an order of 300 to 400 particles per cubic centimeter.

The Earth's Magnetic Field

Magnetic determinations made by instruments carried in the third Soviet sputnik conclusively proved that ionospheric factors were responsible for the variations connected with the perturbation of the earth's magnetic field. They may be ascribed to the spatial heterogeneity of the ionospheric current local systems crossed by the satellite. The data is very important for constructing a physical model of the ionosphere as well as for a quantitative theory of magnetic perturbations.

New data was obtained for study of the earth's permanent magnetic field. The most interesting information was yielded by the sputnik's flight over the area of the East-Siberian world magnetic anomaly known as the "Asiatic maximum of the geomagnetic field intensity." An analysis and comparison of magnetograms with the ground curves of magnetic field intensity along the sputnik's route point to a slow attenuation of the anomaly. This is important for solution of the problem of the bedding depth of world anomalies as well as for studies of the structure and character of the earth's magnetic field.

Measurements of the earth's magnetic field conducted with the cosmic rocket provided data of great value. At a distance approximately two radii off the earth's center the discrepancy between the measured values of the field and those calculated theoretically becomes discernible and then increases. This change of the earth's magnetic field can be accounted for only by the assumption that the rocket crossed a current stratum

at altitudes of 12,400 to 13,000 miles. The change therefore points to the probable existence of an outer ionospheric current system, a fundamental supposition for a valid theory of magnetic storms and polar lights by which the current explanations for these phenomena may be critically appraised.

The third sputnik carried instruments to record the number and force of impacts by meteoric particles. The energy was determined by the impulse recorded on a gauge by the explosion of a meteoric particle colliding with the surface of the instrument.

Assuming a theoretical dependence between the energy of a meteoric particle and the impulse, and further assuming the average speed of particles to be equal to 25 miles a second, the gauge recorded the impact of particles with masses of from one eight-billionth to one two-hundred-millionth part of a gram and with energies ranging from ten thousand to a hundred thousand ergs.

More impacts were recorded on May 15, 1958 than on subsequent days, as many as 4 to 11 impacts per square meter per second. On May 16 and 17 the number of impingements decreased to one four-thousandth, then to one fifty-thousandth and finally to one six-hundred-thousandth. The numerical value of the ratio between the impulse registered by the gauge and the energy of the particle will be determined experimentally—by modeling.

From the study it may be inferred that particles with a mass of about one thousand-millionth of a gram are likely to strike the surface of a rocket once in several hours. It is therefore apparent that danger from meteors and micrometeors is insignificant.

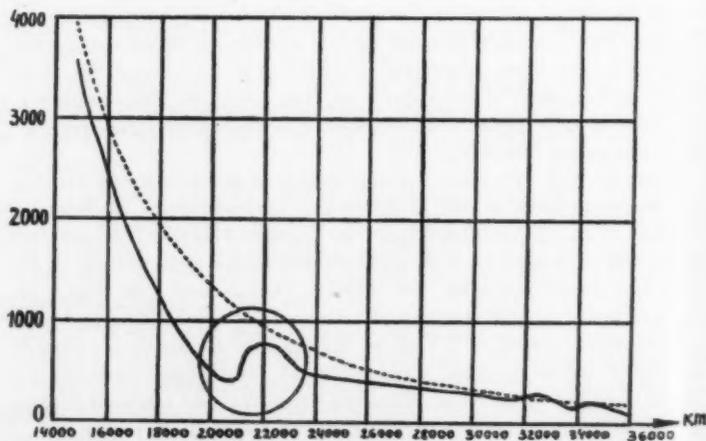
Research in Space Biology

A new branch of knowledge—cosmic biology—is in the making today. Its major task is to make space flight safe. Rocket flights with test animals warrant the conclusion that no perceptible disturbances of a harmful kind occur in the basic physiological functioning of test animals under conditions closely approximating those of space flight.

Probably the most difficult of the problems tackled was to bring the animals safely back to earth. Progress has been made in this respect; test animals were returned safely from an altitude of several hundred miles. Further experimental work is projected with test animals in artificial earth satellites where biological conditions most closely approximate those in space flights.

Analysis of data from the second sputnik yielded interesting conclusions with regard to weightlessness, among other factors. It is noteworthy that the test dog carried demonstrated no unfavorable metabolic or motor reactions.

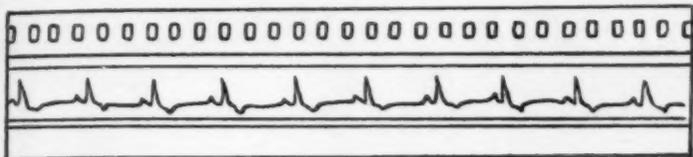
The graph of the dog's heart activity at various stages of the sputnik's flight shows changes in the frequency of contraction. The accelerations, vibrations and noise when the sputnik was orbited sharply increased the frequency of pulsation to maximal magnitude. In conditions of weightlessness pulsation frequency returned to the initial level. Further, respiratory and motor activity show no perceptible deviation from the



This chart shows the change in the intensity of the earth's magnetic field, with changes in altitude recorded during the flight of the space rocket.



This frequency curve of Laika's heart contractions during various periods of the flight was recorded by instruments carried in the dog's container.



This electrocardiogram of the dog's heart action during the interval of weightlessness was recorded by instruments in the second Soviet sputnik.

normal which indicates that the conductivity of the cardiac muscle was not affected.

All in all, the data presently evaluated proves that highly organized animals stand up quite satisfactorily in conditions that closely approximate those in space flight.

New Research Directions

What are the basic directions of cosmic flight research? One is the creation of sputnik's definitely oriented in space. This orientation would help solve many scientific problems. For example, it would be most desirable for research on a number of problems connected with the sun to have a sun-oriented sputnik.

For studies connected with the earth and its atmosphere the most suitable orientation would probably be to have one of the sputnik axes directed toward the earth and the other coinciding with the orbital direction. For astrophysical research a sputnik would probably be placed so that it retains a constant position with respect to fixed stars.

Another research area involves a variety of highly complex problems of biological safety related to manned flight. We must make certain that the space pilot can function properly during periods of ascent and descent when his body is subjected to great strains, and during the period of orbital flight in conditions of weightlessness.

An area of study being examined is the possibility of using a system of special sputniks to relay TV programs. This would permit long-distance transmission in ultra-shortwave bands without the need for constructing relay lines and cable mains.

With sputniks it would be possible to set up a permanent service for observing the sun's corpuscular radiation and to forecast the phenomena that take place in the upper strata of the atmosphere.

Another major group of research problems relates to the moon. The Soviet cosmic rocket is the prelude to moon-bound flights and flights in near-solar space. Manual flight to the moon with a landing and return to earth is on the agenda of science for a future not too remote.

It will be followed by the construction of special stations on the moon, much like those now set up in regions of the earth difficult of access, like the polar areas. These are projects for a more remote future since they present a whole complex of difficult problems.

Still another group of cosmic flight studies are those connected with research into near-solar space and the planets of the solar system.

The launching of planet-bound rockets equipped with automatic apparatus will make it possible to study a planet's magnetic field and band of

radiation and obtain a detailed representation of its surface; to investigate the atmosphere of the planet and its temperature; and even perhaps to see into the possibility of life on planets other than our own.

The development of cosmic flight poses for science and engineering a great number of complex problems in scientific research and technical designing. The most important is long-distance radio communication. The Soviet cosmic rocket made it possible for the first time in history to establish radio communication at a distance of some 300,000 miles away from the earth.

Flights in the solar system require radio and tele-communication over distances of tens and hundreds of millions of miles. In view of this, it is especially important to solve the problem of very light, compact and unbreakable radio equipment that can perform without attention for months and even years on a minimum of fuel.

New Chapter in Astronomy

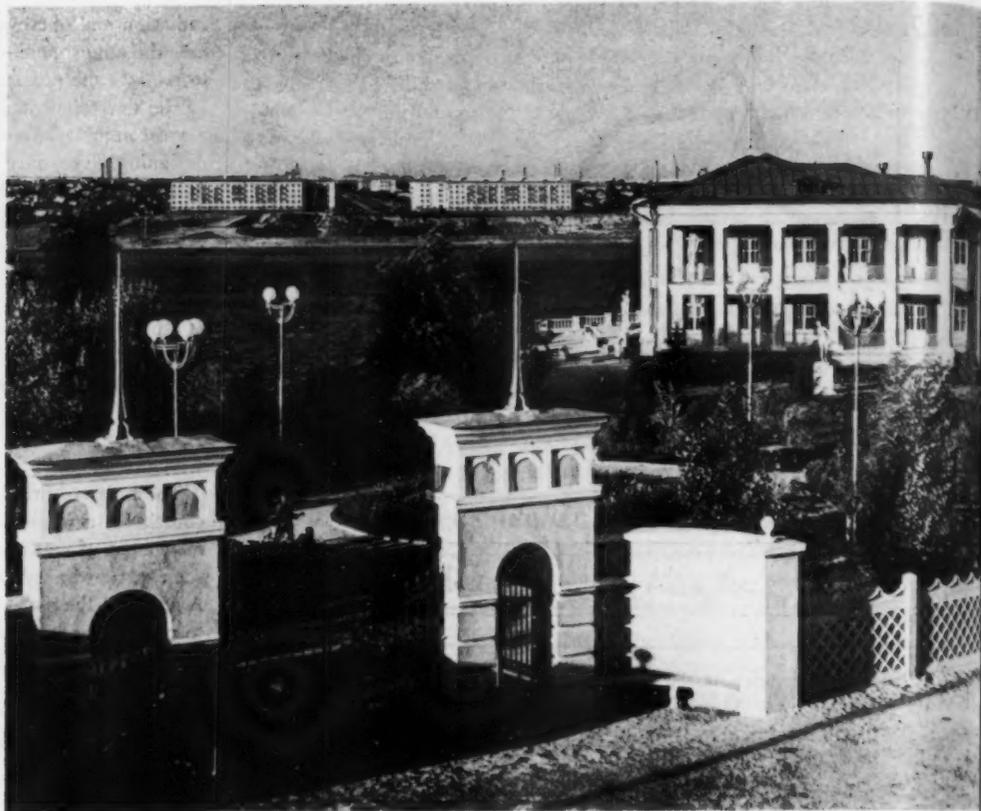
The range of problems involved in calculating a cosmic ship's motion constitutes a whole new research area in astronomical mechanics. The movement of artificial astral bodies must now be calculated, including such extraordinary astral bodies as are likely to influence their motion. A study of the movement of these artificial bodies will make it possible to obtain new data on the astronomic constants of the solar system and gravitation fields. We are now witnessing the beginnings of a new chapter in astronomy that may be called experimental heavenly mechanics. (*Digest of an address at a general meeting of the USSR Academy of Sciences.*)

A new radio telescope with a parabolic reflector 22 meters in diameter. It is designed for detecting radio-radiations from different cosmic sources.



HEALTH SERVICE for MILLIONS

By Prof. Vasili Trutnev



A UKRAINIAN STEEL MILL CLINIC FOR OVERNIGHT CHECKUP AND TREATMENT.

All doctors must be on call for home visits. The medical and health care services are entirely free of charge and are available to every citizen.



SOME THREE million people, including 360,000 doctors, about one million nurses, doctors' assistants and midwives, many workers of the health services, pharmacologists and others are engaged in caring for the health of the Soviet population. There are more than 17 doctors and 56 junior medical workers for every 10,000 people in the USSR.

All medical workers are state employees. The Soviet state allocates tremendous sums annually for medical service, for medical preventive care and for children's institutions. There are tens of thousands of medical institutions in the country: hospitals, polyclinics, maternity homes, dispensaries, and women's and child consultation centers. All-round clinical service and treatment for all citizens is ensured by hospitals with a capacity totaling 1,500,000 beds.

The new hospitals under construction will provide another 530,000 beds. Hospital accommodations in 1965 will exceed two million beds—about 96 beds per 10,000 people. There will be 500,000 doctors by the end of the seven-year period, one doctor for every 420 people. The junior medical personnel will grow to 1,500,000 people.

The steady improvement in the well-being of the Soviet people, the all-round development of health protection, and ample medical service ensure a high birth rate, a sharp decline in the death rate, particularly among children, and an extension of the life span. The USSR has a high birth rate, more than 25 per thousand of the population, and the world's lowest death rate, 7.5 per thousand. The death rate is declining in the USSR each year: compared with 1913, it dropped 75 per cent, and among children almost 85.7 per cent. The average life span of 67 years in the USSR is double that of the pre-revolutionary period.

Such dangerous infectious diseases as recurrent fever, smallpox, the plague and cholera have been wiped out in the Soviet Union. There has also been a sharp drop in the incidence of other infectious diseases which will be completely eliminated in the next few years.

The medical and health care services are entirely free of charge and are available to all people.

Children's institutions are an example. More than 3,400,000 children are today receiving preventive care in the nurseries and kindergartens. Appropriations by the Soviet State for the construction and maintenance of children's pre-school institutions in 1958 amounted to 10 billion rubles, almost double the 1953 expenditures. Pre-school facilities will be doubled in the current seven-year period, the state having allocated more than 103 billion rubles for them.



TRACER ATOMS ARE USED WIDELY FOR DIAGNOSIS AND TREATMENT OF DISEASE.

Large industrial enterprises in the Soviet Union have their own medical departments with polyclinics and other medical units providing treatment and preventive care. The Likhachev Automobile Plant in Moscow has a medical staff of thirteen top specialists, 142 doctors in various specialties, 250 doctors' assistants, midwives and nurses, and has a hospital, a polyclinic, 17 first aid stations in shops, four health centers, holiday homes and sanatoriums near Moscow, on the Riga coast and in the Black Sea area.

The experience of the medical department at the Podolsk Engineering Works, Urals Machine Works (in Sverdlovsk) and others show the success that can be achieved in improving working conditions and lowering the sick rate when physicians work in close contact with the trade union organization. The medical department at the Dolomite Works in Gorlovka (Ukrainian Republic) has set up a council to promote the health service. The plant director and the chairman of the trade union committee make a periodic study of the causes of sickness among the workers and take measures to improve conditions.

The personnel of the hospitals and polyclinics, resorts and dispensaries operates in close contact with scientific workers. The Academy of Medical Sciences of the USSR, established in 1944, is the center of scientific activities. Its main task is to introduce the latest scientific achievements in practice.

The Soviet Union has 80 medical colleges, 11 institutes giving refresher courses for doctors, and 278 medical scientific-research institutes. Over 30,000 scientific workers are engaged in all these institutions, including more than 2,500 with a doctor's degree and about 12,500 with a master's degree, some 2,000 postgraduates and more than 4,000 clinic interns.

The current seven-year plan provides for a further improvement in public health measures: 360 billion rubles have been allocated to construct public health institutions and to further improve medical services during the 1959-1965 period.



SCIENTISTS STUDYING THE EFFECT OF ULTRASONICS ON THE CELLS OF MICROBES.

"ELECTRIC SLEEP" APPARATUS—ONE OF MANY NEW INSTRUMENTS FOR HEALING.





This is a view of Chelyabinsk, a large industrial center in the Urals, where steelmen and machinists double as actors, singers and dancers.



Molière's "George Dandin" is staged by the workers of the city's metallurgical plant.

By Mikhail Tsaryov *Director, Moscow Maly Theater*

PEOPLE'S ART



The hundred member amateur chorus is led by professional Mikhail Kaplansky.

The Malyarovsky brothers, nineteen-year old metal workers, do a Moldavian dance.



WE HAVE five hundred theater companies in our country. These are professional groups. In the past two or three years the number has been swelled by some eight hundred "People's Art Theaters", amateur companies which perform on a high level of competence. Not infrequently they reach very high professional standards.

These amateur groups—instrumental and dance ensembles, choruses, opera and dramatic companies—function at a good many of the larger factories, on collective farms and in the colleges. They are coached by our most eminent actors, musicians, dancers and directors.

Our Maly Theater, for instance, helps the drama group of the Hammer and Sickle Plant stage plays. The directors and actors of the world-famous Moscow Art Theater work with the Krasny Proletari Plant amateur drama group. Every one of our five hundred professional companies is an active sponsor of one of these People's Art Theaters.

These new theater companies are somewhat different from the more customary amateur drama groups that rehearse in odd corners of clubs and community centers and usually have to fight half a dozen other club activities for rehearsal space.

A People's Art Theater has its own permanent stage for rehearsal and production, is subsidized by the trade unions and the govern-

ment, and has a professional director, and perhaps a few other professional people, depending upon the size and quality of its productions and such other relevant matters.

Besides the considerable number of flourishing people's theater groups in towns they have been formed on farms like the Bessonovka collective farm in the Penza which budgets 25,000 rubles yearly as a subsidy for its amateur dramatic company. The group makes about the same sum from ticket sales for its productions and the total is more than sufficient for all running expenses. Boris Yashinin, a professional theater man, is producer. The theater council elected by the village helps to choose the repertory and to organize audience discussion forums.

The Bessonovka Theater has yet to celebrate its first birthday. Nevertheless, it has already staged two plays—the Russian classic by Alexander Ostrovsky, *Poverty is No Sin*, and *Mother of Her Children* by the Soviet playwright Alexander Afinogenov.

Forthcoming productions now in rehearsal are Ostrovsky's *Dowerless Bride* and the dramatization of Mikhail Sholokhov's panoramic novel of Cossack life, *The Soil Upturned*.

This ambitious amateur company plans to produce four full-length plays and four one-acters a year for performance in its own theater and at the nine village community centers of the big collective farm.

The amateur artists usually stage their popular performances at the very commodious Chelyabinsk Opera and Ballet Theater.



RTHEATERS

An Amateur Theater is born

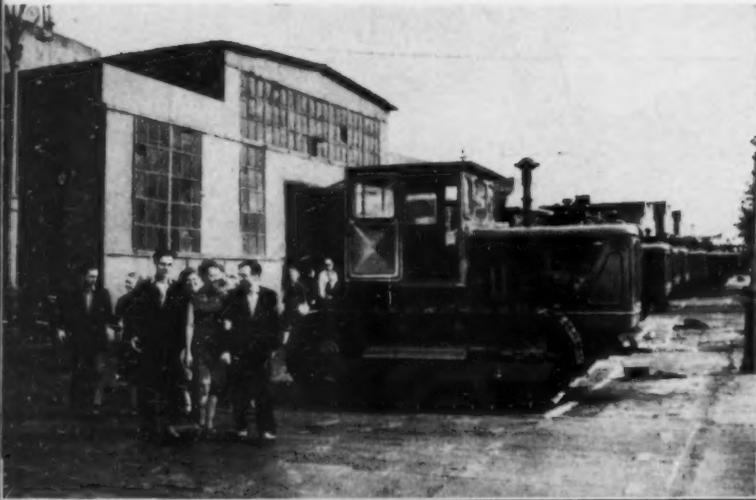
LAST January show bills plastered all over Chelyabinsk, the big industrial center in the southern Urals, announced a new variety company opening at the city's Opera House. The 300 performers were amateur musicians, singers and folk dancers and the concert was the debut of the regional People's Art Theater.

The program was an elaborate one. It offered a folk song chorus and orchestra, a folk dance ensemble, and a ballet group—all people employed at the Chelyabinsk Tractor Works. The city's steel mills were represented by a brass band, a men's chorus, ballad singers and vocal and instrumental soloists.

These various ensembles had outgrown the confines of their own community clubs. The history of the chorus of the Chelyabinsk Iron and Steel Plant is fairly representative. It was one of the amateur singing groups formed at the plant's Palace of Culture. The chorus grew up very fast and now has a hundred members—blast furnace and rolling mill operators, model makers, engineers, office workers and unskilled laborers.



THE AMATEUR DRAMATIC GROUP AT THE TRACTOR PLANT GOES OVER A SCENE IN THE SCRIPT.



These young Chelyabinsk tractor builders are fine amateur musicians. There are 26 music schools in this art-conscious city.

People's Art Theaters

The Chelyabinsk People's Art Theater has an active core of more than 800 amateur performers and enthusiastic audiences in the thousands.



Driver Vitaly Tyunegin has a fine bass much in demand at concerts and parties.



These band musicians are blast furnace and rolling mill operators, engineers and office workers employed at the Chelyabinsk Metal Plant.





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BLACK





Coaching and advising the amateur performers are many of the country's most eminent professional artists.



Some of the members—people like engineer Alexander Astakhov and crane operator Nikolai Shershun—devote literally all their free time to the chorus. The group is led by a professional conductor, Mikhail Kaplansky, and its musical standards would do credit to many professional singing groups. Its repertory includes old Russian and foreign songs, as well as the popular songs of many countries. The chorus performs in many of the towns in the region.

When several such fine amateur groups began to perform in the Chelyabinsk Region, the idea cropped up of getting them all together.

That is the background for the Chelyabinsk People's Art Theater with its present 800 amateur singers, dancers and actors.

A few of the performers: Zoya Tipikina works in the planning department of the Chelyabinsk Tractor Plant. Her forte is folk singing. She expects very soon to enroll at one of Chelyabinsk's 26 music schools to get a thorough-going musical education. Her hope—to sing professionally.

Galina Kazhanova, 22, is a construction foreman. Her passion is dancing and has been ever since childhood. But she also likes science. She manages both somehow and expects to keep up her rehearsals even after she enrolls in the physics faculty of the Polytechnical Institute. Galina does solo parts in folk dances and in waltzes by Strauss and Tchaikovsky.

Klara Antonova, another member of the plant's dance group, was recently asked to join the professional ballet corps of the Chelyabinsk Theater and, of course, happily accepted.

Coaching the amateur singers, dancers and actors are Alexander Kuleshov, Maria Kudryavtseva and other *artistes* of the Chelyabinsk opera and professional theaters. They frequently attend rehearsals, lecture on the history of the theater and hold consultations with their amateur colleagues.



THE GRAND KREMLIN PALACE, CHIEF MEETING PLACE
OF ALL IMPORTANT CONGRESSES AND CONFERENCES.



