

# USSR

SOCIAL SCIENCES

POSTAL OFFICE  
PEACE  
AND PROSPERITY  
IS THE GOAL  
DEC 1956

No. 5—20 Cents

Dec. 1956



# USSR

ILLUSTRATED MONTHLY

1706 Eighteenth Street, N.W.

Washington 9, D. C.

ADams 2-3426

The magazine *USSR* is published by reciprocal agreement between the governments of the United States and the Soviet Union. The agreement provides for the publication and circulation of the magazine *USSR* in the United States and the magazine *Amerika* in the Soviet Union.

	Page
<b>We Are Willing To Trade with All Countries</b> —says the President of the USSR Chamber of Commerce	1
<b>Frank Conversations</b> by Boris Polevoi	3
<b>American Doctors in Soviet Union</b> by Leon Bagramov	4
<b>The Year Ahead, The Year Behind</b> Interviews with a Cross-Section of the Soviet People	5
<b>Via Intercontinental Passenger Rocket Liner</b> by Karl Gilzin	6
<b>They Were Born on New Lands</b> by Semyon Freedlyand	8
<b>A Tajik Village Club</b>	10
<b>Winter in Russia</b> by Gennadi Sibirtsev	12
<b>Aram Khachaturyan</b> tells about his music	14
<b>New Lights of Irkutsk</b> by Alexander Rydannikh	15
<b>Last Days of a Military Academy</b> by G. Pavlov and A. Cheprunov	16
<b>Protecting The Rights of Citizens</b> by Anatoli Volin	20
<b>Novosibirsk, Thriving City</b> by Arkadi Uralov	22
<b>The Farmer Who Rejected a Fact</b> by Gennadi Fish	25
<b>Saturday Night Dance</b> by Nikolai Rozhkov	28
<b>Excursion into the Future</b> by Vasili Zakharchenko	31
<b>Moscow Says It with Flowers</b>	34
<b>A Visit to a Textile Mill</b> by Yakov Usherenko	36
<b>Under the Big Top</b> by Yuri Dmitriev	40
<b>Young Legislator for a Young City</b> by Dmitri Gudkov	46
<b>Cartoonists Corner</b>	52
<b>Bear Hunting</b> by Vadim Gippenreiter	54
<b>Poems for Children</b> by Samuel Marshak	58
<b>Chess Marathon</b> by Alexander Kotov	60
<b>The Olympics in Retrospect</b> by Victor Kuprianov	63

**Front cover:** Youth Ball at Trade Union House in Moscow. See Story on page 28.

Anything in this issue may be reprinted or reproduced with due acknowledgement to the magazine *USSR*.

#### Subscription Rate:

6 Months .....	\$1.00
1 Year .....	1.30
2 Years .....	3.00

Published by the Embassy of the Union of Soviet Socialist Republics in the USA.

Second Class mail privileges authorized at Washington, D.C., with additional entries at Milwaukee, Wis. and Chicago, Illinois.

Monotone printing and binding in the United States by The Cuneo Press, Inc.



# We Are Willing To Trade with All Countries

*Says the President of the USSR Chamber of Commerce*

Foreign trade is more than a statistic, it is a measure of the general state of health of our economically interdependent world. With this in mind, we asked the Chairman of the Chamber of Commerce of the USSR, Mikhail Nesterov, to give us a picture of Soviet trade relations, particularly with the United States.

**Question:** Did the Soviet Union expand its foreign trade relations in 1956?

**Answer:** Considerably. We signed trade agreements for mutual delivery of goods with Canada, Indonesia, Yemen and Pakistan. An agreement was signed with Egypt for an exchange of 200,000 tons of wheat and 300,000 tons of crude oil for Egyptian goods.

The Soviet Union at present trades with sixty-odd countries. These figures will give an idea of our foreign trade increase. On the eve of the Second World War, we stood twenty-second on the list of countries engaged in foreign trade; in 1955 we stood sixth. Or take these figures: our foreign trade in the early years totaled around one billion rubles annually; in the thirties it increased to seven billion; and in 1955 it came to more than 25 billion.

Along with increasing trade, the Soviet Union is expanding its scientific and technical cooperation with other countries.

We concluded agreements in 1956 with the People's Republic of China for the construction of fifty-five new industrial enterprises amounting to roughly two and a half billion rubles. The agreements provide for the construction of a new railway from Lanchow in Central China to Aktogai, a station in the Soviet Republic of Kazakhstan, and for supplementary deliveries of goods by both countries. This is in addition to earlier agreements which are in effect and have been carried out without any hitches.

Scientific and technical cooperation with Yugoslavia has been developing successfully. It includes assistance in building a nitrate fertilizer plant, a superphosphate works, a 100,000-kilowatt thermal electric station and the reconstruction of three mines.

The Soviet Union is helping to construct more than 500 factories and plants in Poland, Hungary, Rumania, Bulgaria, India, Burma, and Afghanistan. Long-term loans amounting to more than 21 billion rubles were granted to various countries in 1956 on very favorable terms.

We have found that one of the important contributing factors leading to increased foreign trade is contact with businessmen. Last year we were visited by trade delegations from India, Pakistan, Egypt, Argentina, Japan, Denmark, Sweden, Britain and other countries. These delegations were able to become familiar not only with their own areas of manufacturing and trade, but with the way the Soviet economy operates.

We also took part in a number of international fairs last year as another step toward improving economic and cultural relations with other countries.

All these things, it seems to me, point to the fact that our country is following a consistent policy of developing mutual trade relations with all countries, regardless of their social systems.

**Question:** What would you say about the present state of Soviet-American economic contacts?

**Answer:** Unfortunately, I would have to say that it is not very satisfactory. For the first half of 1956 American exports to the Soviet Union



MIKHAIL NESTEROV, PRESIDENT OF THE USSR CHAMBER OF COMMERCE.

amounted to only a little more than two million dollars. This is a drop in the bucket compared with 100 million dollars a year in the thirties.

**Question:** Are the possibilities present today for increasing Soviet-American trade? What could the USSR buy from the United States, and what could it offer for sale?

**Answer:** All the possibilities for increased trade exist. This last year showed that American business firms were increasingly interested in mutual trade. Take the visiting delegations of American farmers and of businessmen and manufacturers; or the interest shown by American fur dealers who came to the Leningrad fur auction.

Both countries produce goods that provide a basis for exchange. The USSR could buy industrial equipment, machinery, instruments and apparatus which American manufacturers want to sell. Besides our usual export items like manganese ores, furs and lumber, American buyers are interested in certain types of industrial equipment we turn out. Dresser Industries, for example, found our turbodrills very satisfactory. If this is true when economic ties are almost non-existent, it certainly demonstrates the possibilities for trade development with better relations.

**Question:** What do you think needs to be done to develop healthy trade relations?

**Answer:** It is obvious that extensive trade between two people or two countries can be carried on only if there is complete equality of the parties concerned. That is true in any case, and particularly so when the countries concerned are sufficiently independent to get along even if they do not do any business with each other but wish to trade in order to profit from what I might call division of labor.

Trade relations that really amount to something between the USSR and the United States promise many advantages to both countries. That is why I am inclined to be optimistic about the prospects for not only the resumption of healthy trade, but even its expansion much beyond the prewar level. ■



FORTY-FIVE AMERICAN BUSINESSMEN TOURED THE SOVIET UNION RECENTLY. THEY VISITED MOSCOW, LENINGRAD, KIEV AND KHARKOV. HERE ARE FOUR OF THEM IN A SHOP OF THE FIRST MOSCOW BALLBEARING PLANT. THEY STOPPED TO TAKE PICTURES AND ASK LOTS OF QUESTIONS. A STORY ABOUT THEIR TRIP WILL APPEAR IN THE NEXT ISSUE OF USSR.

# FRANK CONVERSATIONS

By Boris Polevoi

I was glad to have the opportunity to say a few words to American readers through the magazine *USSR*. Perhaps this brief message will reach the people who received me so warmly during my tour of the United States with six other Soviet journalists in 1955. With great pleasure I recollect frank conversations and friendly discussions which gave me a chance to see personally the desire for peace, so strong in the average American.

The same desire is found in the people of my country and the world over. During the summer my wife and I spent our vacation visiting a

number of European countries. Everywhere we toured—in Bulgaria and Greece, Italy and France, Holland and Sweden—we could feel the growing tendency toward mutual understanding among different countries. Once under way, this general tendency toward the development of the contacts and cooperation works like a chain reaction.

As the father of three and as a man who has experienced war, I welcome mutual understanding in international relations. I hope that friendship between peoples of varying views and countries with different systems will grow in geometrical rather than arithmetical progression.



Boris Polevoi was born in Moscow in 1908. His first work was a book of short stories published in 1927, and in 1939 his first novel was published. During the Second World War Polevoi was a correspondent for *Pravda*, and his reports from various fronts were printed in that newspaper and then in the book *From Belgorod to the Carpathians*, published in 1945.

The wartime assignments gave Polevoi the theme for the novel which estab-

lished him as a first-rate writer both in the Soviet Union and abroad. It was in 1943, while writing from the front, that he met Alexei Maresyev. Early in the war Maresyev's plane had been shot down, and he had lost both legs. This Soviet pilot's fight to fly again, to live a normal life, is *A Story About a Real Man*, which came out in 1946.

Among Polevoi's other books, published after the war, are *We Are Soviet People*, *He Has Returned*, *Gold* and

*Contemporaries*. Like the top-notch journalist he is, Polevoi writes what he sees, and all his novels are factual portrayals of Soviet people and their life.

In 1955 Polevoi visited the United States, heading the delegation of Soviet journalists. When he returned to the Soviet Union, he spoke at various meetings and wrote a series of articles describing his impressions. This, in brief, is what he had to say in an article in *Pravda*:

## INTERESTING TOUR OF AMERICA

"Touring America . . . we heard all the same questions about our Soviet life . . . And we saw how happy the people were, yes happy, to hear our lively refutations of all anti-Soviet legends. We saw with what great interest they listened to the stories about our life, about our gigantic construction projects, about our social achievements, about our plans and our dreams.

"We saw a great deal of interest in America. But of all we saw and heard, we liked best the frank conversations and hearty talks when we visited Americans in their homes. These were talks in which real mutual understanding was being established.

"Unacquainted people of different nationalities, with opposing political beliefs, somewhat hampered by their suspicion of each other, sat around a family table. And then the simplest truth became clear:

both love their countries, both love their families, both love their national customs and traditions, and both are striving for peace and mutual understanding, for the re-establishment of friendship . . .

"Now, when I think about our interesting tour of America, I remember first of all not the skyscrapers, not the excellent roads, not the miracles of Hollywood technique, but the good open faces of average Americans. I recollect the hearty, frank conversations which we enjoyed of an evening in their homes. I believe that this nation, like any other nation the world over, doesn't want war, doesn't want destruction of what was created by the skillful hands of the country's people, doesn't want senseless sacrifices and sufferings. I believe that average Americans, like any other people, want to live in peace and to cooperate with other nations."

# American Doctors Visit the Soviet Union

By Leon Bagramov

Both the United States and the Soviet Union have a common enemy in heart disease. That statement of Dr. Paul White, leader of the medical delegation that visited the Soviet Union last summer, is perhaps the most eloquent summary of the nine-day tour of hospitals and research institutions. Besides Dr. White, who is President of the International and the American Society of Cardiology, the delegation included Dr. Ancel Keys of the University of Minnesota; Dr. Howard Rusk of New York University; Dr. Herman Hilleboe, Commissioner of Health of New York State; Dr. James Watt, Director of the National Heart Institute; and Dr. Mark Field, sociologist.

When Dr. White was asked what he would especially like to see of Soviet medical practice, he replied, "I am a clinical physician and, therefore, principally interested in the patient."

That became increasingly evident during the short but very crowded nine-day visit. Everyone was impressed with the tireless energy of the seventy-year-old doctor in examining patients, with his searching questions and with his interest in the smallest details of hospital procedure.

## A Stitch in Time

"What is the patient's name?"  
"Julia Korolyova."  
"Age?"  
"Thirty."  
"Work?"  
"Engineer."  
"What's wrong with her?"  
"Nothing right now. She's well," the attending physician, Dr. Helena Damir, answered.

*Continued on page 44*

WARD SECTION, BOTKIN HOSPITAL IN MOSCOW, WAS VISITED BY THE AMERICANS.



Dr. Paul White, left, head of the American medical delegation which visited the USSR, agrees with his host, Professor Alexander Bakulev, that the visit "is a very good thing," both for the advancement of science, and for the promotion of mutual understanding between the two countries.



Dr. Howard Rusk, member of the staff of New York University, recounts an experience for these four Soviet colleagues with scientific detail.



# I LIKE MY JOB

says Ivan Begoun, Construction Worker

People I meet for the first time always ask me how I got my nickname. I tell them it isn't a nickname, it's the one I was born with—Begoun, it means racer.

But it's a good description of the way things have been moving for me the past couple of years, especially this last one.

I came to Leningrad only four years ago. I had just finished my army service. I went to work in construction—a building for a clinic that the Lenin Machine Plant was putting up for its workers. My job? Heave and grunt work; I didn't have any kind of trade.

We finished the clinic and I went to work on another job for the same plant, two apartment houses for the factory personnel. Then we put up a five-story apartment house for the construction workers. That's when I got this apartment. While all this was going on I also acquired a wife and daughter.

When I tell you that during all these four years I was learning construction, both on the job and in study after work, you can see that I didn't have any trouble filling up my time. Now I'm leader of a team.

Last spring the chief engineer asked me if

I wanted to take a crack at a different type of construction. It was a project for a whole block of buildings. The unusual thing about the job, for most people on construction around here anyway, was that it was the first job in Leningrad in which a whole block of buildings was being put up with big prefabricated sections.

I jumped at the chance, of course, because it meant learning how to handle these big sections. That's the job I'm working on now and I like it. It still gives me a kick to signal the crane operator and watch him maneuver the big panels into place. They are pretty nearly finished when we get them, the exterior side all set, the interior side already plastered and painted, the window panes all set in, and even the sashes done. A house goes up fast this way. We figure an apartment finished every day and a whole floor in a week.

We work on schedule, and if we look as if we're going to fall behind, the sidewalk superintendents—we've got a bunch of steady customers there—let us know soon enough.

Generally I'm the one they hand out advice to. They yell up, "Come on, Racer, get a move on." ■

"BRING HER DOWN!" CRIES IVAN BEGOUN TO THE CRANEMAN.



*the year ahead...*

... THE YEAR BEHIND



REINDEER BREEDER AT 102

## The Most Important Thing

By Ivan Alexandrov

You want to know what happened to me in 1956? Listen and I'll tell you.

First, there was my wedding. Not a regular wedding, of course. I'm a little too old for that. It was our diamond wedding, and all the members of our collective farm helped us celebrate. As for Ulyana, my wife, she told me that except for an item here and there, she likes me as much as she did 75 years ago, when we were first married.

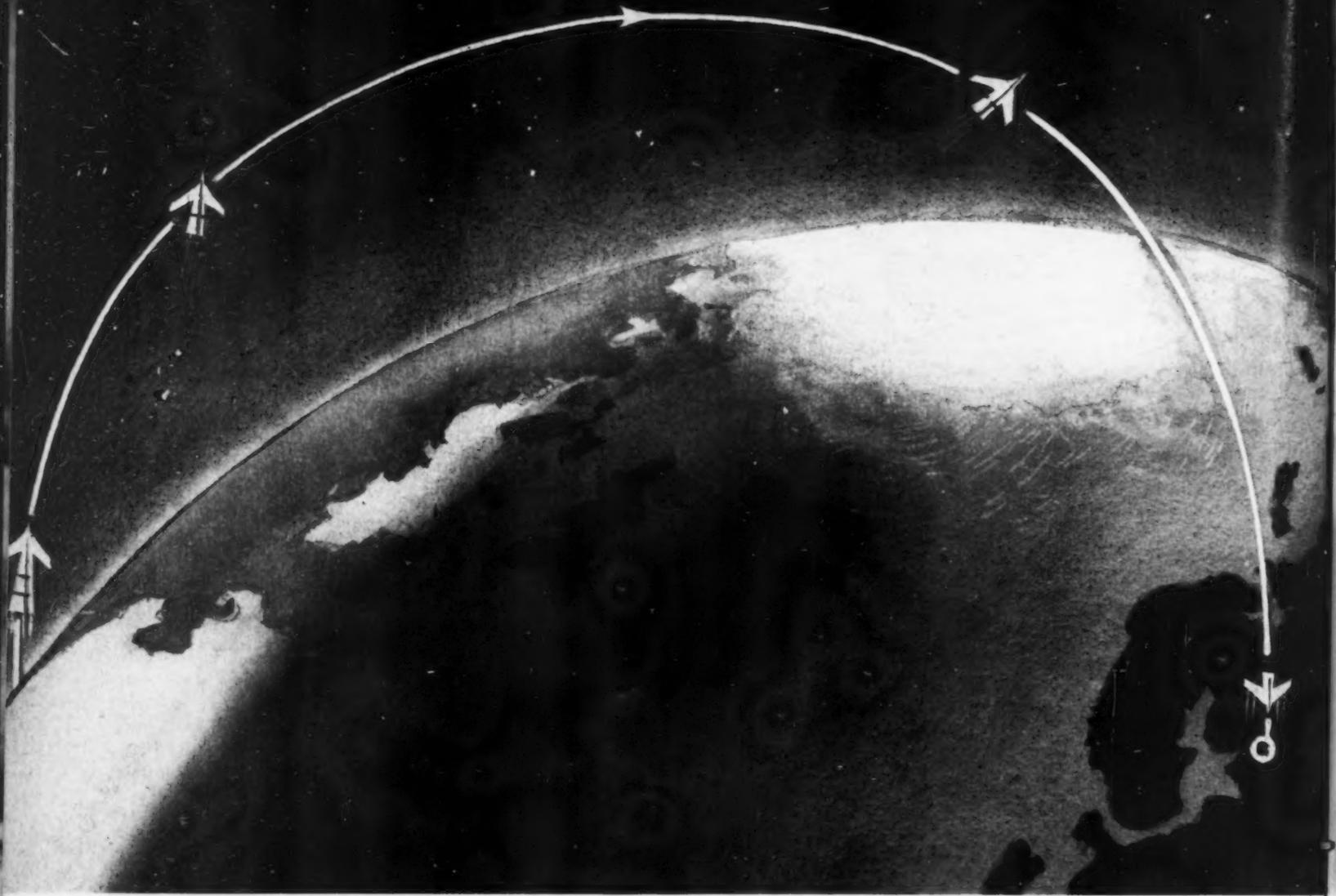
That was last spring, the wedding, and in the summer they picked me, as one of the prize reindeer breeders and hunters, to go to the Agricultural Exhibition in Moscow. It was a long trip by water and then by train. I had a good time, but as far as I'm concerned, Moscow is a place to visit, not to live in.

For me, I'll take Yakutia. I get homesick without animals around. I've lived in Siberia all my life, hunting and trapping and breeding. I love to have trees and space around me. I can't understand how people can like being cooped up in cities.

Another important thing that happened last year is the university which opened in Yakutsk. My granddaughter, Natasha—she's a very smart girl—was accepted as a student.

Now that the new year is here, I hope it will bring good things like that for everybody. After all, the most important thing about living is for a man to be happy. I've lived 102 years, and I ought to know. ■

Interviews continued on page 14



# VIA INTERCONTINENTAL PASSENGER ROCKET LINER

## From Leningrad to New York and Return

By Karl Gilzin

An enormous sphere, 8,000 miles in diameter, tears along in boundless cosmic space. Surrounded by the radiating corona of the atmosphere, it rotates slowly about an invisible axis. The shape of continents emerge, surrounded by dark spaces of seas and oceans. Mirrored in them is a tiny sun, twinkling like a bright star.

This is our familiar, strangely beautiful planet as seen by a cosmic traveler approaching the earth in his space ship.

The earth draws nearer and nearer. Now it is only a thousand miles from the approaching space ship. There are the Arctic ice fields and the North Pole.

Suddenly the ship's delicate instruments, its eyes and ears, alert. Sensitive indicators begin to vibrate, colored lights begin to flash on and off and buzzers to sound.

An outline of an object takes shape on a phosphorescent emerald screen. The instruments record that it is moving toward the space ship at an incredible speed from the lighted part of the earth's sur-

face. Is it an intercontinental missile our space traveler sees?

The ship's uncannily sensitive instruments fix the trajectory of the object. It is moving along the arc of a huge ellipse. Is it threatening the space ship?

Suddenly the buzzers sound again and the lights flash. On the screen appears a tiny image of another missile speeding toward the ship, this time from the other side, the shadowed part of the earth's surface. Two missiles rushing toward the ship and each other. They are close now, dangerously close.

But our traveler in his space ship remains unperturbed. His instruments have fixed the trajectories. The two missiles pass clear of each other in space, pass clear of the ship, draw farther and farther apart, each one speeding along toward the part of the earth from which the other took off a little while ago.

Our imaginary traveler has just witnessed two intercontinental rocket ships passing each other for an instant high over the earth's pole.

### Not Fantasy

This hypothetical meeting of two intercontinental rockets over the earth's pole is not nearly as fantastic as it sounds. Certainly in our children's lifetime, perhaps in ours, we may witness such a meeting. Scientists and engineers are already working on just such rockets.

The secret lies in speed. You could throw a stone from one continent to another if you threw hard enough. The harder you threw, the faster and farther it would go and the higher it would rise.

The powerful force of the stream of gases escaping from a jet engine has catapulted planes at a dizzying speed and has sent up research rockets to an altitude of hundreds of miles to the edge of the ocean of air. This, of course, is still some way from an intercontinental rocket. But by using a jet engine a rocket can be raced up on a short take-off strip to the colossal speed of several miles a second. Over all the rest of the course, from continent to continent, the main engine does not work, and the rocket flies along the arc of a huge ellipse according to the laws of ballistics—the same laws which govern the motion of artillery shells or the stone in our example cited above.

To make an intercontinental flight an initial speed of several miles a second is required. In such a flight a rocket will ascend to an altitude of more than six hundred miles. For achieving high initial speed new and high-calorific fuel must be used and the rocket has to be a sectional one, made up of two or three rockets connected with one another. As the fuel is consumed, sectional rockets drop off and the required speed is built up.

### A Man-Made Moon

What has made the intercontinental rocket a real possibility is the rapid development of jet propulsion engineering.

The first ballistic rockets, the V-2's, were used in the latter stages of the Second World War. Flown across the English Channel by the Germans, they brought destruction and death to the British capital. Each of these death-dealing rockets, whose speed outstripped the sound of their flight, carried nearly a ton of high explosives.

The scientists and inventors whose ideas laid the foundation for modern work in jet propulsion engineering dreamed of other kinds of pay loads. Konstantin Tsiolkovsky, the Russian; Robert Goddard, the American; Hermann Oberth, the German; Esnault Pelterie, the Frenchman, must have seen visions of thousands upon thousands of rockets of all kinds carrying not bombs, but scientific instruments; flying not to destroy, but to build knowledge and advance humanity.

Hundreds of ballistic rockets in these last few years have already ascended to the upper strata of the atmosphere carrying sensitive instruments which have returned with scientific information. Much of this information, invaluable to progress in astronomy, nuclear physics, meteorology, radio engineering, geodesy, cartography and scores of other areas of knowledge, could have been obtained in no other way.

Ahead, and not far off, lie still greater possibilities. High-flying research rockets have been limited by their very short flight duration. Work on long-flying rockets has been going on for a considerable time now and has progressed far beyond the experimental stage. In another year or so, such rockets will be seen blazing across the sky—artificial earth satellites traveling in an orbit around the earth not for brief minutes, but for days and weeks, perhaps for months, their instruments recording important data for the world of science.

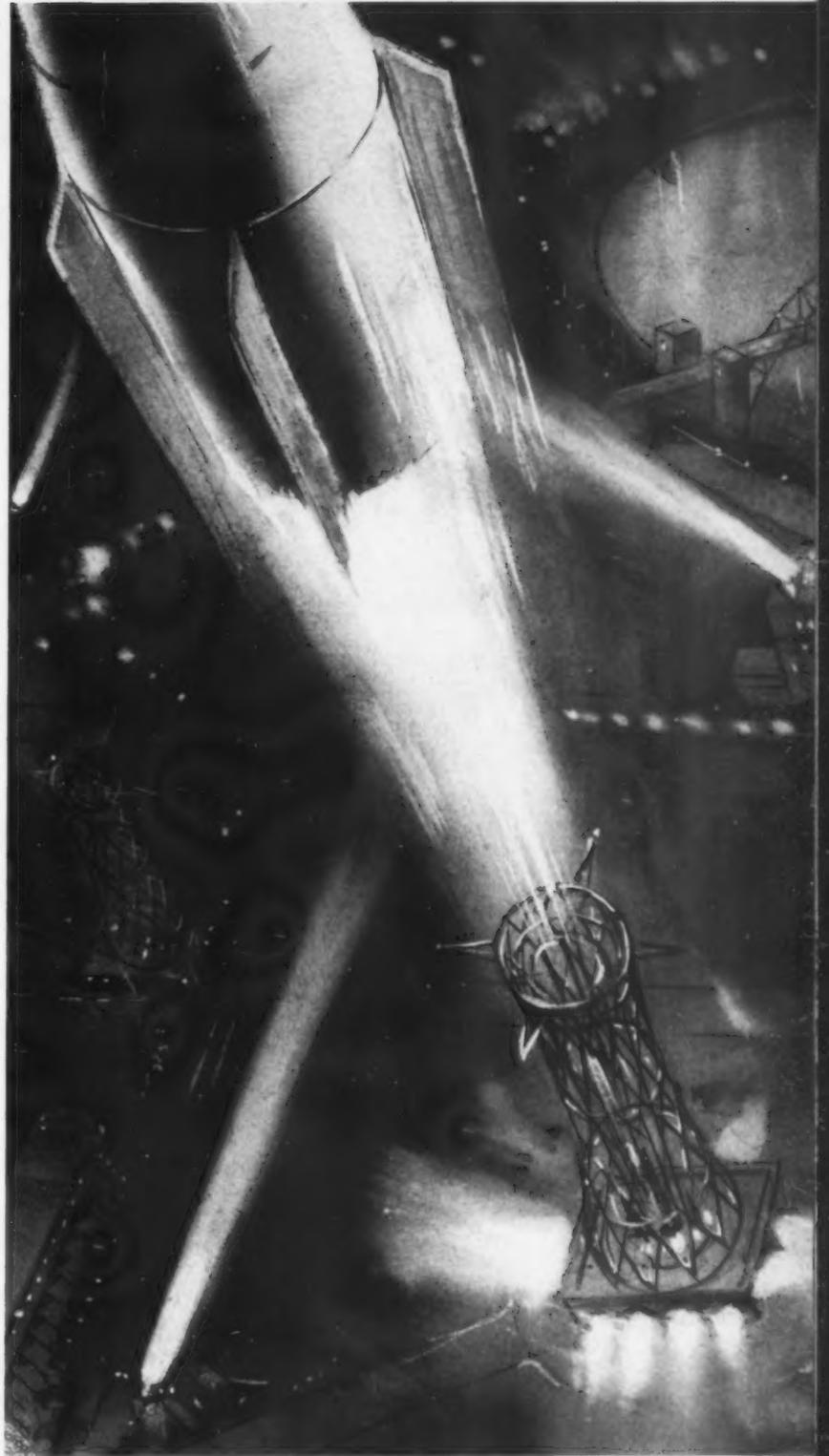
These artificial satellites will be the highlight of the International Geophysical Year which begins July 1, 1957, to last for a full eighteen months. At least forty-seven nations of the world will be setting a pattern for cooperation and exchange of knowledge.

### Fast Mail

Ballistic rockets have a long record of service. They have been used to render assistance to ships wrecked at sea, and to mountain settlements cut off from the rest of the world by avalanches. They have been used to deliver mail to isolated and inaccessible areas.

We can, without stretching imagination too much, think of regular mail delivery by rocket. In half an hour mail could be delivered to any point on the globe. That would be postal service indeed!

And why only mail? How about drugs for epidemics? Fast news-reel delivery? Perishable fruits? Intercontinental rockets could carry freight over regular routes extending far out into the cosmos to people



who are impatiently waiting for delivery on the other side of the globe.

We need not even stop here. How about intercontinental rocket airliners? Granted this is more difficult than freight rockets, passengers being a rather crotchety and delicate kind of pay load, but the possibilities are all there. Much will have to be done before the first rocket travelers will be carried from continent to continent. But science has no doubt that the day will surely come, whether five, ten or twenty years from now. With our eyes focused to a not too distant future, we can see the same picture of the earth which our imaginary interplanetary traveler saw on the screen of his space ship.

### A Week-End with Friends

A deafening roar blasts across the rocketdrome just outside the big city. Inside the intercontinental rocket liner, however, passengers are

*Continued on page 48*

THIS LITTLE GIRL'S NAME IS AISHET. SHE IS DAUGHTER OF A KIRGHIZ SHEPHERD WHO CALLS HER MOUNTAIN FLOWER.

## THEY WERE BORN ON NEW LANDS

By Semyon Freedlyand

The virgin-land expanses of Kustanai Region in Siberia were beautiful last fall. Whichever way the eye chanced to turn, it encountered a golden sea of tall wheat reaching to the distant steppeland horizons. As I was jotting down in my notebook some information about the new state grain farm, young in years but rich in events, I was thinking what figures would best show the beauty of the abundance created on land where only two years ago wild grasses were bowing before the wind.

Patently answering the questions I asked him, Alexei Grachov, who is in charge of machinery on the Buskul State Farm, suddenly said:

"Would you like to take a look at another crop of ours, a crop even more valuable than this first-class wheat? Of course, there is really no comparison between the two, but I can guarantee that you'll enjoy seeing it."

Our jeep, barely taller than the bright tops of the ears of grain, sped back to the farm community, stopping near a sunny birch grove. The serious look on the face of my companion gave way to a pleasant and slightly sly smile. We entered a shady corner of the woods, an ideal spot for a landscape artist.

"Here's our second wonderful crop!" Grachov said as we approached the grounds of the farm's nursery and kindergarten. Scores of noisy toddlers were taking their evening walk. Dressed in red, yellow and sky-blue shirts and matching caps, from a distance they looked amazingly like bright wild flowers dotting the green lawns.

Some had evidently learned to walk recently, and they were bravely employing their new-found maneuverability with obvious pleasure. Their younger colleagues were noisily and persistently practicing crawling on wide sheet-covered blankets.

"How are you?" I asked the nearest toddler, a blue-eyed little boy. His interest in the horned beetle he was watching was tinged with apprehension.

"Good," he answered laconically.

If Seryozha Serov's vocabulary had been larger and if he had been a few years older, he could have gone on to say that he had lots of fun at the nursery. He probably would have told me that in the two years the Buskul State Farm has been in existence, 149 children, as healthy and strong as he, had been born there. He surely would have said that he and his playmates had recently moved into a new and comfortable building in which there were many bright rooms and even more diverting toys. Perhaps he would have told me about his daddy, a big and jolly tractor driver.

But, alas, the interview did not materialize. Another youngster tried to get hold of the beetle Seryozha had picked up, and in the battle that followed Seryozha completely forgot the reporter.

But was there really any need for an interview? I think the camera did the job very well. Just looking at the wonderful sturdy children born on this generous new land—the children of tractor drivers, combine operators, engineers and builders—shows what deep roots life has taken in the new land. ■



R OF  
WER.

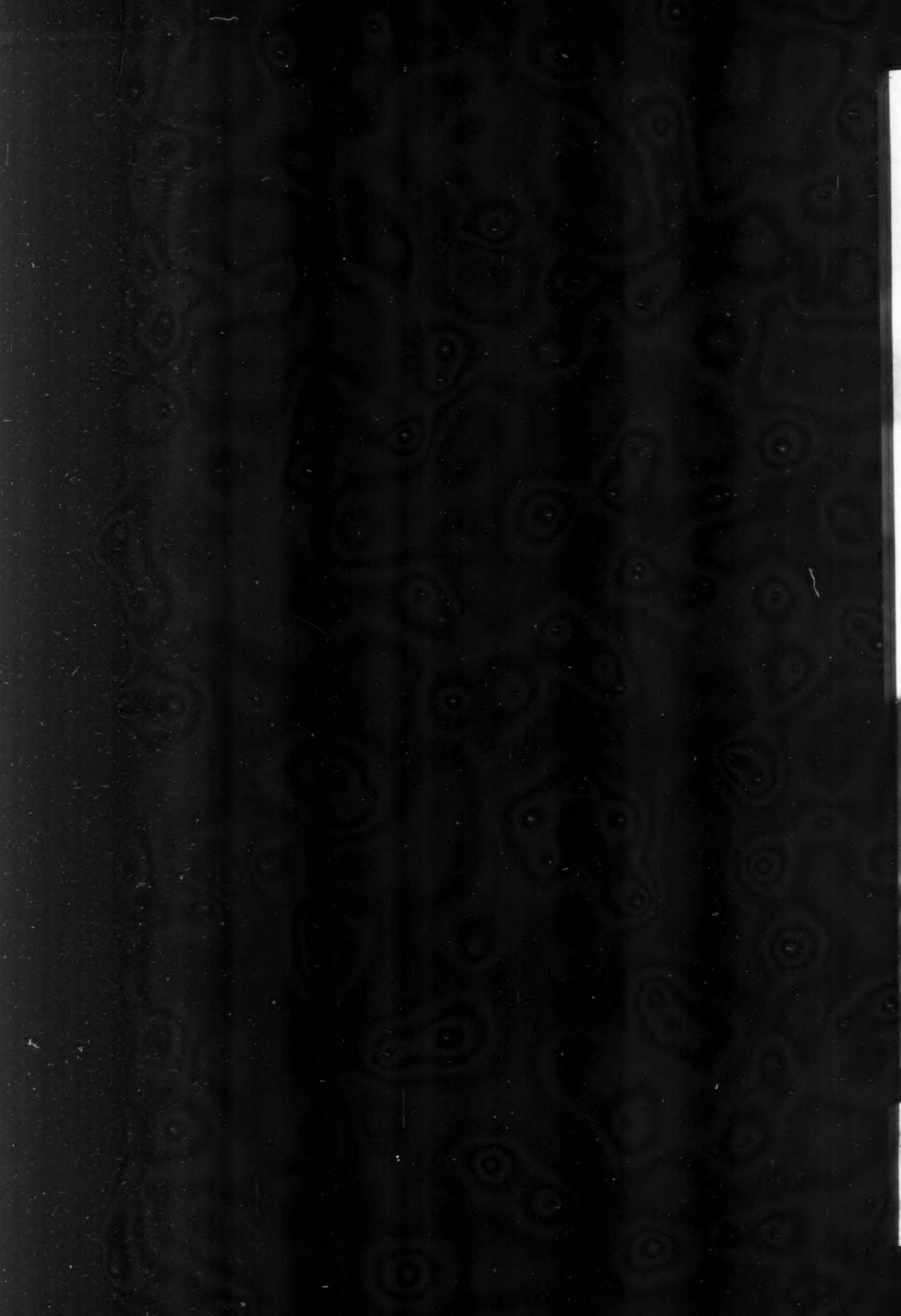
re-  
their  
leas-  
isily  
wide

tod-  
t in  
nged

been  
lder,  
lots  
ould  
skul  
lren,  
born  
and  
new  
were  
rting  
bout  
r.  
alize.  
the  
the  
for-

inter-  
very  
urdy  
nd-  
pera-  
deep









PUTTING FINISHING TOUCHES ON THE CLUBHOUSE

WOOD CARVERS AND ARTIST DISCUSS CLUB DESIGN

# A Tajik Village Club



Tajikistan is one of the Central Asian Republics of the Soviet Union, bordering on China and Afghanistan. Until the twenties of this century it was a region of abject poverty and almost total illiteracy. One would hardly have thought of social centers or clubs in these mountain communities so far removed from progress.

Today the club is a regular feature of many villages, not to mention cities. And the older, more modest clubs built before the Second World War no longer satisfy Tajik farmers. Their new centers are modern, spacious and well-equipped.

One of these was built by the collective farm at Undzhi, in the northern part of Tajikistan. This village club is richly decorated with the work of Tajik artists and wood carvers. It has a theater with 1,600 seats, a moving picture hall, a large gymnasium and a well-stocked library. Special clubrooms are provided for amateur groups, among them dramatics, chorus, music and dancing. There are also studios for painting and handicraft.

TAJIK DESIGNS SHOW EXQUISITE USE OF COLOR

Constructed at an outlay of approximately ten million rubles, the center belongs to the farmers of the community. They chose the building design and paid for construction out of funds from the collective farm's treasury.

The Undzhi farmers are very proud of their social and recreation center. They call it a palace of culture, and it really deserves that name. A building like this would do justice to a large city, let alone a small village.

Many changes have taken place in the economy of Tajikistan and in the lives of its people since it became a Soviet Republic. Farm machinery and irrigation, combined with modern agricultural science, have resulted in bumper crops of cotton and fruit and great flocks of pedigreed sheep. Millions of rubles are added every year to the income of Tajik collective farms.

It is for this reason that money is available for clubrooms with activities that help to enrich the lives of these farmers.

The Tajik farmer of today has leisure time that he likes to spend with friends in pleasant surroundings. He has learned to enjoy the theater and concerts. He likes to read newspapers and magazines, and he finds all these in his village club. ■

A CORRIDOR OF THE CLUB AS IT NEARS COMPLETION ▶





## WINTER IN RUSSIA

By Gennadi Sibirtsev

IT'S FUN TO SKI WITH DADDY



FLOODED CITY PARK LANES MAKE GRAND RINKS



There is something breathtaking in the Russian winter. Majestic pines weighted with snow, the steppes like a white frozen sea, city streets glistening with frost.

The famous troikas that one time were a sight in Moscow have been supplanted by automobiles and buses. But in the villages the tourist can still see horse-drawn sleighs on the country roads. And on the same roads, trucks and cars pass the horses with their tinkling bells.

To Russian children winter means sleighing. To athletes it brings thoughts of skiing, skating and iceboating. To hunters it means open season. And to poets it means new and glittering phrases. Pushkin, Gogol, Nekrasov and Yesenin all paid their tribute to the magic of winter.

But to city janitors it seems like an endless sweeping of snow and scraping of ice from sidewalks. And to the whole army of men in charge of keeping the roads in shape for traffic it often means working all night with the snowplow so that morning finds little sign of the quiet storm of the night before.

What winter means for everybody is fur caps, mittens, warm coats and fur-lined shoes.

For everybody? Not quite. While people who live in Eastern Siberia, for example, begin to put on fur coats in September, people on the Black Sea coast in the Caucasus are sun-bathing on the sandy beaches.

During the winter, weather reports from different parts of the country show the same sharp contrasts, with temperatures ranging anywhere from forty below to sixty above zero.

But, even so, winter now lords it over large sections of the country. ■

the  
with  
city  
  
ere a  
d by  
lages  
ns on  
oads,  
their  
  
hing.  
ating  
open  
itter-  
and  
ic of  
  
end-  
f ice  
y of  
hape  
with  
sign  
  
s fur  
lined  
  
eople  
e, be-  
eople  
are  
  
from  
same  
nging  
above  
  
over



FRESH SNOW IS SURE TO TEMPT FUTURE SKI JUMPERS

*the year ahead...*

... THE YEAR BEHIND

## ARAM KHACHATURYAN

### *Tells About His Year's Music*

I always prefer talking about work I have already finished rather than the work I plan to do. There are too many factors that interfere with good intentions, particularly in creative work.

My work last year was principally with the cinema and the theater. I wrote the music for four films, including *Othello*, and the Maly Theater production of *Macbeth*. For a long time, I have been interested in creating a musical setting for Shakespeare's characters, a task both difficult and challenging.

For the new production of the ballet *Gayane* at the Bolshoi Opera, I reworked the score and added some scenes.

Last year I also wrote a vocal-symphonic work, *Ode to Joy*, for forty violins, ten harps, and a mezzo-soprano, accompanied by a mixed chorus.

Now I am eagerly awaiting the production of my new ballet, *Spartacus*, which is to run in two theaters—the Kirov Opera House, in Leningrad, and the Bolshoi, in Moscow. I have tried in this work to express in music the spirit and feeling of ancient Rome.

In addition to my creative work, I teach composition at the Moscow Conservatory and the Gnesin School of Music. I have some very promising pupils.

Andrei Eshpai and Lev Laputin have already taken their places alongside the best of the young composers. Eshpai has done concertos for piano and violin, and Laputin has written the ballet *Masquerade*, based on a story by Lermontov, which has been having a successful run in a Novosibirsk theater.

Then there is another bit of work I have which I am very fond of. I am the director of an amateur music group for a factory club. Our young people are fond of music, and it is always a pleasure to get together with them.

I traveled a good deal last summer. My most enjoyable visit was with Jan Sibelius in Finland. Of course we talked about music—modern music and its problems.

"Music springs from the heart," said my ninety-year-old host, to which I added, "That is why it needs no translators."

I was especially heartened last year by the increasing exchange of friendly visits between our artists and those abroad. Communication is as necessary as breath itself for the creative growth of artists the world over.

Although this cultural exchange as yet is only of modest proportions, it is a most encouraging beginning. I am sure that my col-

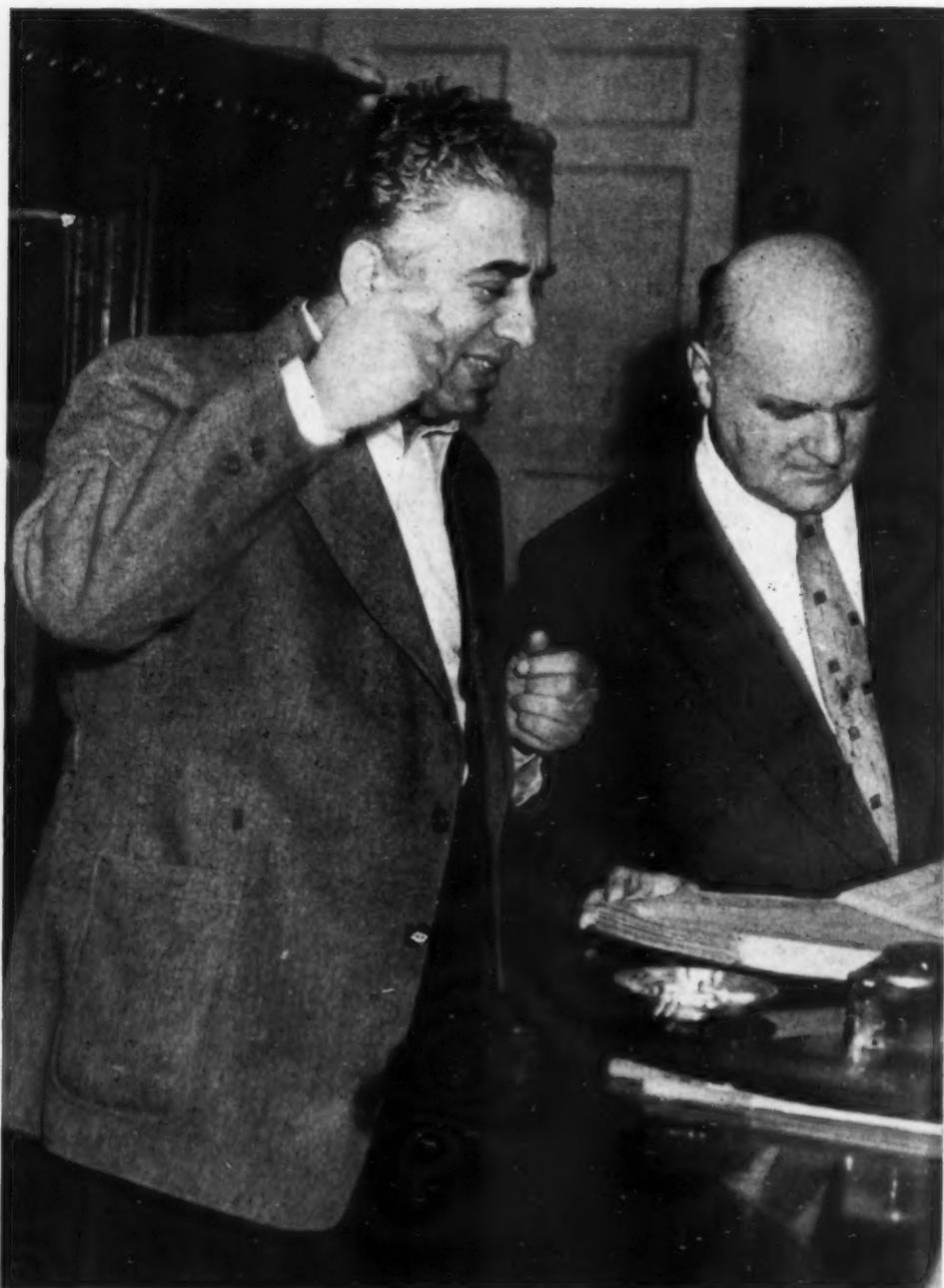
leagues in other countries will agree with this.

Our recent American guests, the violinist Isaac Stern and the conductor Charles Munch, and the musicians of the Boston Symphony Orchestra will, I am sure, have told American musicians about the very hearty welcome they

received from audiences in our country. We shall be happy to welcome other American artists as well, and I, personally, am especially eager to meet the composers.

For my part, I hope to make a concert trip to the United States this year. ■

ARAM KHACHATURYAN (LEFT) SHOWS A FRIEND HIS LATEST COMPOSITION.



# NEW LIGHTS OF IRKUTSK

By Alexander Rydannikh,  
Excavator Operator

For me the most outstanding event in our country in 1956 was the opening of the first units of the Irkutsk Hydroelectric Station.

I remember when I came here and saw the swift-flowing chilly Angara for the first time and estimated the distance from one bank to another. Frankly, I was a bit puzzled. I wasn't convinced that it was possible to tame such a mighty river in only a few years.

I didn't say anything about how I felt. I had come here to work because I wanted to get my hands on a mobile excavator, and there are many at the construction site. I had dreamed about it ever since I learned about these huge machines.

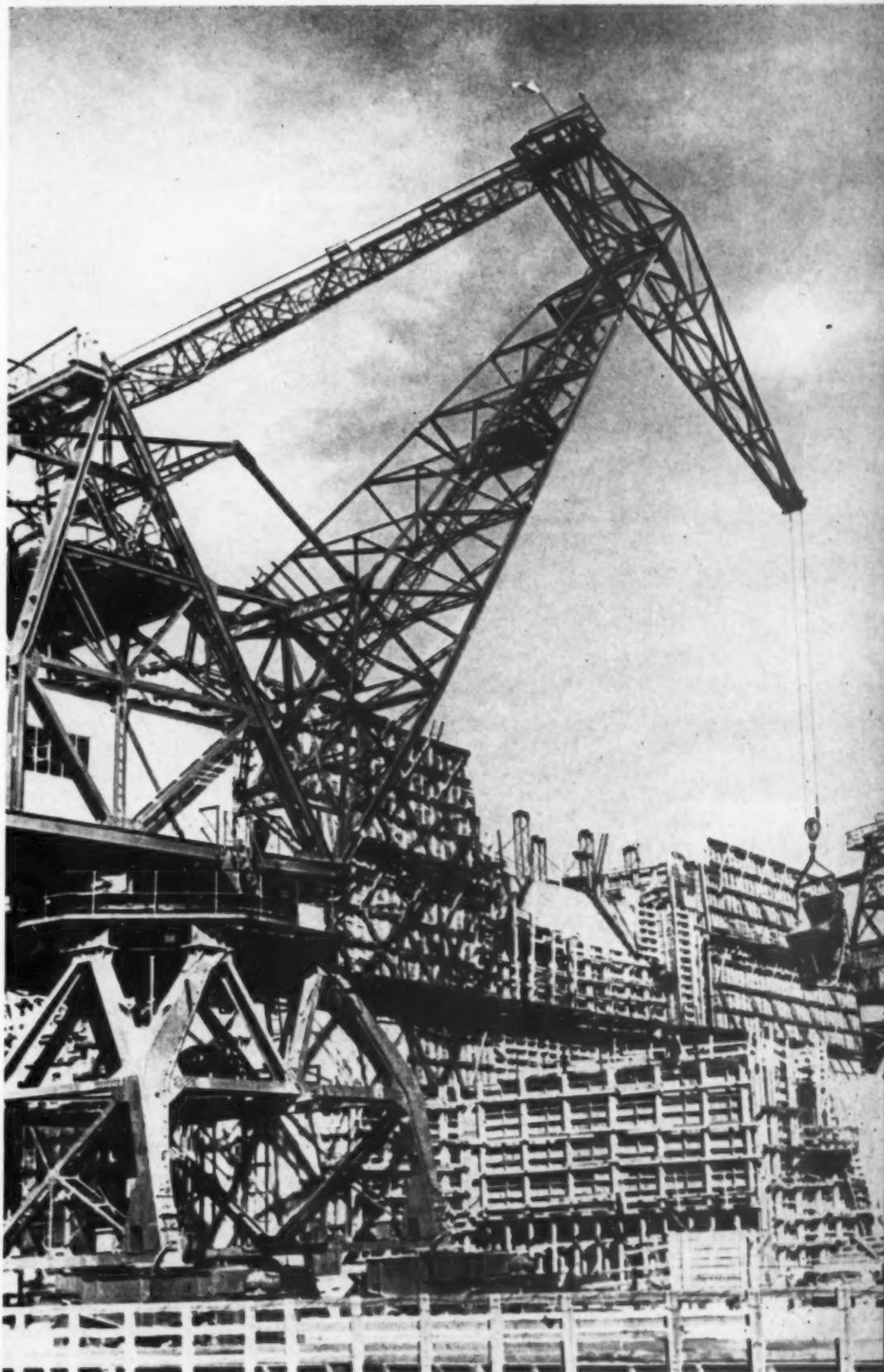
But it wasn't so easy. I was told: "You have to begin by studying. Your high school education will help, but it's not enough to run such a machine. You have to learn about it first."

Well, within six weeks I passed my examination proving that I knew how to operate an excavator. Since then I have been a member of the crew of the huge machine made by Urals workers.

I saw the Angara River harnessed with my own eyes, and I did my bit to help. Straddled by a dam, the river for the first time in its history had to halt its impetuous run. Our dam, after all work is completed, will be 6,900 feet long. The power generated by the new station will infuse the rich Siberian area with new life.



ALEXANDER RYDANNIKH OPERATING HIS EXCAVATOR



AT THE CONSTRUCTION SITE OF THE IRKUTSK HYDROELECTRIC STATION

The Irkutsk Station is the first to go up on the river. It will be followed by others of the magnificent Angara cascade which will be generating tens of billions of kilowatt-hours annually. The other stations are under construction and within ten years the entire development will be completed. Although I came here to satisfy a personal ambition, I must say that it makes me feel good to take a direct part in such a big job.

When I first came here I lived in a hostel. Now I have a two-room apartment of my own.

It is not completely furnished as yet. I have enough money to buy the furniture—I make over 2,000 rubles a month—but so far I haven't been able to find any I like. But this will soon be remedied, especially since I have a good adviser in this respect. Her name is Lida. She works as a draftsman at our project and intends to enroll in a correspondence building institute this year. I'll join her if she doesn't mind.

*Interviews continued on page 24*



BEFORE



AFTER



BEFORE



AFTER

## The Last Days of a Military Academy

By Georgi Pavlov and Alexander Cheprunov



"It's a little like ordering my own discharge," General Mikhail Bogdan told us. He smiled, but it was a melancholy kind of smile, in keeping with the words. "In five days I shall read the order for the closing of the Academy—our swan song, so to speak. Then we pack up and leave. Both cadets and instructors will be demobilized."

The Belgorod Artillery Academy, which General Bogdan heads, was shutting down. And we had come to this pleasant sunny town four hundred miles south of Moscow to report the last rites.

### Tribute to a School

For two decades the Academy had trained artillery officers. Its thousands of graduates won an honored place in Soviet Army history, with more than their proportionate share of brigade and regimental commanders. During the Second World War many Belgorod-trained officers won the highest military honors for valor and distinguished service in the field.

The Academy was staffed by experienced officers. General Bogdan himself was appointed superintendent of the Academy not too long before the decision was made. He had previously been a regimental and divisional commander and in 1945 was heralded by the newspapers as "the first to enter Berlin."

Following the decision of the Soviet Union to curtail its armed forces in the interests of world peace by 1,200,000 men by May 1957—this is in addition to the 640,000 men demobilized in 1955—a reduction in the number of trained officers and professional soldiers was naturally indicated. The Belgorod Academy was one of the military schools ordered closed by the decision.

We visited the Academy a number of times during its last five days. Had we not been aware that the school was to close, we would have detected no outward change in the strict and ordered military routine. The physical training, drill, sentry duty and classes followed each other in their prescribed and seemingly permanent order.

As a matter of fact, the General commented that the cadets were particularly meticulous in observing the smallest details of military ritual. Their salutes were brisk, and the drills moved like clockwork. It was as though they were standing at attention as a sort of tribute to the faculty until the formal order was given to close the school.

### After Thirty Years of Service

On the final day, when the order was given by General Bogdan, there was a change which was almost startling, it happened with such speed. The auditoriums and classrooms emptied, military equipment vanished from the drill fields. Even the atmosphere suddenly altered from military to civilian, the barracks

The parade ground, busy here, is now a quiet and deserted spot on the Academy's grounds.



ORDER OF THE DAY: "MINISTER OF DEFENSE GEORGI ZHUKOV DIRECTS THE DISBANDMENT OF THE BELGOROD ARTILLERY ACADEMY."

THE NAME PLATE COMES DOWN. THE ACADEMY IS CLOSED.

loud with talk and laughter and good-bys.

We spoke to the cadets. Now that the school was formally closed, they were eager to be on the way home to family and friends. What were they going to do, we asked, now that they had unexpectedly become civilians?

Some planned to enter universities, others to train and work as builders, engineers, journalists, geologists, almost as many trades or professions as students.

We talked to instructors also. Some spoke, as had General Bogdan, with a certain regret. Like Colonel Mikhail Serdyukov, they were professional soldiers who had spent their lives in the army.

"Of course," Colonel Serdyukov said, "I realize that disarmament is a long step toward peace and that it's a happy sign for the future that we feel we can close the Academy. But after thirty years of service. . . ."

"To tell you the truth, I haven't had time to give it much thought yet," he answered when asked about his plans for the future.

When we made our last visit to the Academy just before leaving Belgorod, the instructors and cadets had all gone their separate ways; the buildings were empty, waiting for new tenants; and the funds which up to a few days ago had supported a military establishment had already been diverted to peacetime uses.

*Pictures on page 18*





AFTER TWO YEARS OF BARRACK LIFE, PACKING UP TO GO HOME IS A PLEASANT TASK.

FURNISHINGS AND BUILDINGS ALIKE ARE TURNED OVER TO THE CIVIL AUTHORITIES.

### Military Academy *Continued from page 17*



VICTOR MEZHERITSKY, EX-CADET, WIRES HIS PARENTS: "ARRIVING HOME SOON."



AT A FAREWELL SUPPER FACULTY STAFF MEMBERS HAVE A FRIENDLY TOAST.



TOWN GIRLS SAY GOOD-BY WHEN CADETS LEAVE BELGOROD FOR CIVILIAN LIFE.

PACKING THE ACADEMY'S REGIMENTAL STANDARD FOR SHIPMENT TO A MUSEUM.



# PROTECTING THE RIGHTS OF CITIZENS

By Anatoli Volin,  
President of the Supreme Court of the USSR

Chief Justice Volin is a typical representative of the middle generation of men and women who hold public office in the Soviet Union. The son of a fisherman, during his early youth he worked in a fishery and studied after working hours. He secured admission to Leningrad University where he studied law. He has had a long career in law, both practicing and teaching. For some years now he has sat as President of the highest court of appeal in the Soviet Union. We

asked Justice Volin to tell our readers how the rights of the individual citizen are protected by the Soviet courts.

The major function of our judicial system is to safeguard the personal rights of citizens guaranteed by the Soviet Constitution.

Our Constitution secures to all citizens the inviolability of person and home. It establishes the equality of men and women and the equality of all races and national groups. It guarantees the right to a job, to security in old

age and illness or disability, the right to personal property, the right to an education. It further guarantees freedom of worship, speech, press and assembly, including the right of citizens to hold mass meetings, street processions and demonstrations, and their right to unite in public organizations.

Any denial of these constitutional guarantees or violation of these personal rights or liberties is deemed a criminal offense punishable by the courts.

## Righting Injustice

The serious abuses of the basic rights of citizens and miscarriage of justice practiced by Beria, Minister of Internal Affairs before 1953, and by his accomplices have been the subject of intensive re-examination by our courts. The Soviet courts rehabilitated the innocent people who had been unjustly convicted and punished those responsible for the criminal perversion of justice.

Punishment for crime under the Soviet law and Constitution can be meted out only by a court and in conformity with due process of law.

The highest judicial body in the country is the Supreme Court of the USSR. It exercises supervision over all judicial bodies of the country. The President of the Supreme Court may, on the appeal of a person convicted or on his own initiative, demand and obtain the record of any trial to judge whether sentence was legal or warranted by the circumstances of the case.

Here are a few of the cases concerned with the fundamental rights of Soviet citizens which have come up before our courts for decision.

## The Right to Work

Dr. Maria Nemirovskaya worked as a physician in a children's hospital in Odessa. Over her objection she was transferred by the director to a hospital in one of the outlying districts of Odessa. She brought suit for reinstatement. The lower court decided against her.

She appealed to the Supreme Court. The court ruled that under Soviet law a worker may not be transferred from one locality to another without his consent. Dr. Nemirovskaya was reinstated and awarded full wages for the time lost.

This case had wider ramifications, however, than was at first evident. The appeal disclosed that similar illegal transfers of physicians had been made in some other cities as the result of instructions issued by the Minister of Public Health of the Ukrainian Republic. The Supreme Court revoked the instructions.

## On Pensions for Disability

Pyotr Boykov worked as a loader in a wood-working factory in the city of Ashkhabad. While handling logs he fractured his leg. He was granted a pension based upon partial disability.

Boykov sued for the difference between the wages he received before the injury and the amount of the pension. The record disclosed that the factory management was responsible for the accident since it had failed to institute

CHIEF JUSTICE VOLIN OF THE USSR SUPREME COURT



safety measures for loading operations. The local court awarded Boykov the decision. It ordered the defendant, the woodworking factory, to pay the difference, which amounted to 789 rubles a month.

### Freedom of Worship

Soviet law, in the spirit of the Constitution, guarantees the right of citizens to unite in religious associations.

Believers so united are given for use, free of charge, special buildings and objects required for their religious worship, and any encroachment of this right is severely punished by law.

There are special bodies concerned with the affairs of the Russian Orthodox Church and other denominations. They see to the enforcement of the laws, but they do not interfere in the internal affairs of the religious associations.

The district authorities of Kobrin, a town in Brest Region, Byelorussia, passed a decision closing the Russian Orthodox Church in the village of Cherevatichi for failure of the congregation to pay the insurance and land rent. Without waiting for approval by the regional authorities, the head of the Kobrin Finance Department had the church closed and sealed, making it impossible for the congregation to worship. The Council for the Affairs of the Russian Orthodox Church brought the matter to the attention of the regional authorities. The illegal decision of the Kobrin district authorities was revoked, and the head of the Finance Department was reprimanded.

In another case, a complaint by the Reverend Konoplev, chief priest of the Troitsa Church in Moscow, was entered against three men who walked into the church while services were in progress. They refused to remove their hats, although requested by members of the congregation to do so. They were tried and convicted as hoodlums.

### An Eviction Case

Under Soviet law tenants enjoy unlimited occupancy. The bulk of housing is public property and does not, therefore, serve as a source of income for anybody. The rental is just enough to cover necessary repairs and maintenance. If a tenant repeatedly fails to pay his rent, the law permits eviction.

An action for eviction was brought against Voldemar Alperin for failure to pay rent three months in succession. At the trial the tenant pleaded temporary financial difficulties. The court refused to order the eviction. It decided that although the tenant had failed to pay, cancellation of the lease was permitted only if non-payment was deliberate. In this case it was not.

### Illegal Arrest

Soviet law sharply defines those cases in which a citizen may be arrested. Violation of personal liberty is a criminal offense.

Police officer Vladimir Lopatchenkov detained Fyodor Kononov for selling articles without a license on the platform of the Kursk railway station. Kononov was taken to the police station and was fined.

While in the station the police officer



EVERY CITIZEN HAS THE RIGHT TO BE RECEIVED BY THE CHIEF JUSTICE.

searched Kononov, although the law prohibits searching persons who are summarily fined. When Kononov protested, police officer Lopatchenkov put him in a cell and kept him there for forty minutes. When the case was brought to trial, the court found the police officer guilty of exceeding his authority and sentenced him to three years in jail.

### Right to Defense

In all Soviet courts cases are tried in public. Only in exceptional instances, where state security or the intimate relations of litigants are involved, are cases heard behind closed doors. The decision of the court is always made public.

Proceedings are conducted in the language of the particular republic or national group. Persons who do not know the language are given an interpreter. The accused may employ a lawyer. If he is unable to pay for the services of a lawyer, the court will appoint

one for him. A sentence passed by a court in violation of the rights of the accused to defense will be reversed by a higher court.

A man by the name of Vostrikov was sentenced by a local court in the Tajik Republic following conviction for robbery. The testimony made it abundantly clear that Vostrikov was guilty. The lawyer for the defense did not appear at the time of trial. In order not to delay the case, the court suggested to Vostrikov that he waive his right to a lawyer and had him sign a statement that he would act as his own counsel.

The decision of the Supreme Court was that the defendant's waiver of his right to a lawyer was forced on him and, therefore, his right to defense had been violated. It reversed the decision and ordered a new trial.

These are a few of the many instances which show how our courts in their day-to-day work protect the rights of the individual citizen guaranteed to him by our Constitution. ■



THE RAILROAD DEPOT AT NOVOSIBIRSK

# NOVOSIBIRSK, THRIVING CITY

A FACTORY CLUB BUILDING



By Arkadi Uralov

A VIEW OF THE CITY'S MAIN THOROUGHFARE



Imagine that! I got out of the taxi, looked around, and ducked back.

"What's wrong?" the driver asked.

"You brought me to the wrong place," I grumbled. "I told you to drive to Yeniseiskaya Street!"

"But this is Yeniseiskaya!" exclaimed the driver, a little annoyed.

The driver was right. I hadn't recognized my own street, it was so changed. There were new houses and a big park around the corner, where I remembered only a rickety old cottage. The young poplars along the sidewalks were new, too. And I had been away from home only about 18 months . . .

This was an incident which really did happen to an old-timer of Novosibirsk, Feodor Titov, an accountant who sat next to me on the Moscow-Novosibirsk plane. The incident typifies the growth of Siberia's largest city.

Endless and rapid changes are really the most characteristic features of Novosibirsk. The city is expanding so quickly that it always has streets which have not yet been given names and houses which have not yet received their numbers.

In thirteen prewar years the population of Novosibirsk quadrupled. Today the population exceeds 730,000, almost twice the prewar figure.

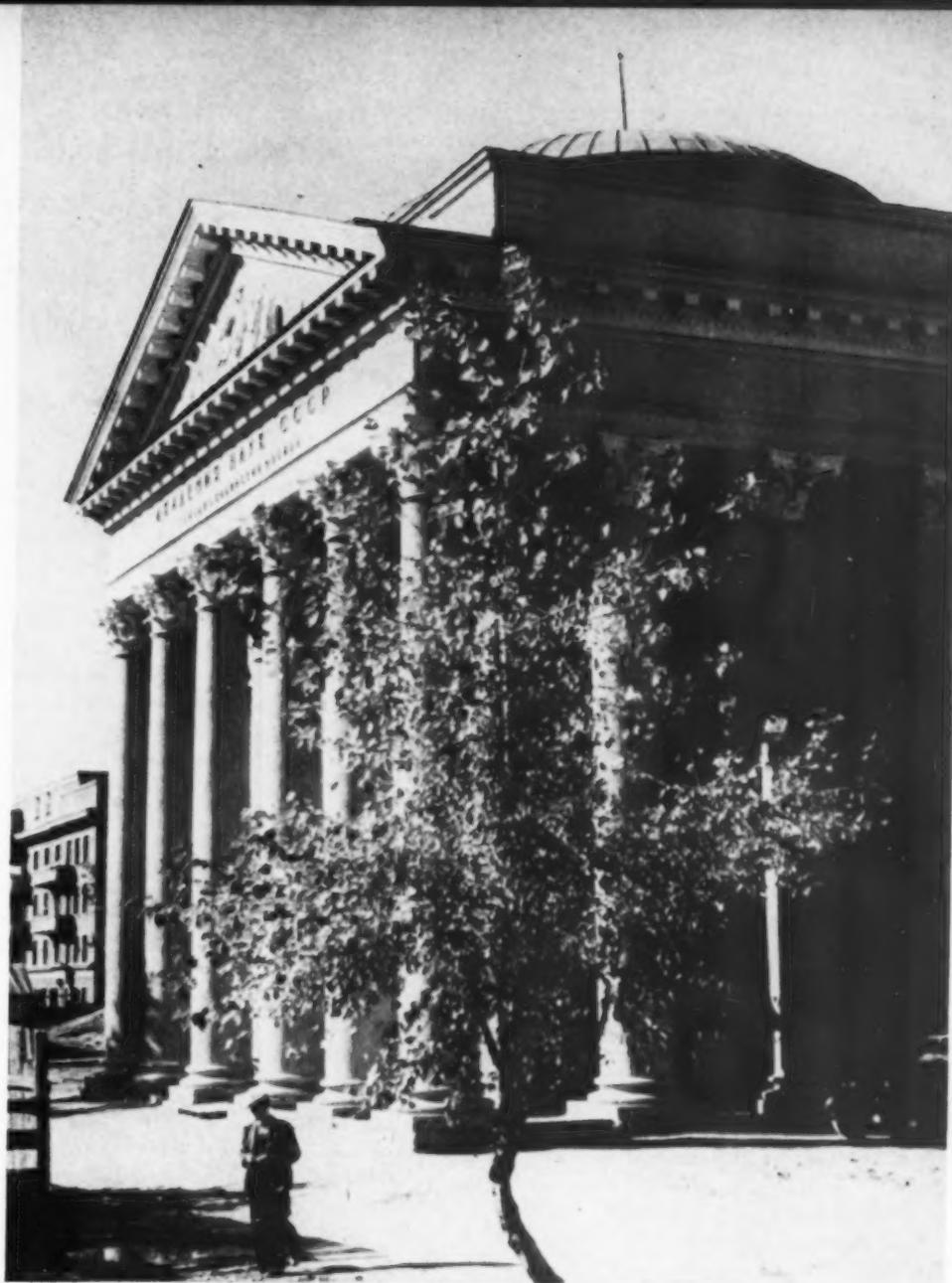
Novosibirsk was a small settlement founded at the end of the last century near a railway station on the bank of the Ob, in the wilds of the Siberian forests. Before the eyes of my contemporaries it has developed into a big, bustling modern city, with tall apartment houses, wide boulevards and beautiful squares.

The city is the embodiment of the bubbling energy with which the Soviet people are cultivating the vast expanses of Siberia, tapping its inexhaustible wealth. At first only an administrative center of West Siberia, it has rapidly spread out into a big industrial and cultural center.

Seven flour mills constituted the peak of industrial achievement of pre-Soviet Novosibirsk. Today it is known for the powerful turbogenerators and other modern machines made at its factories.

Once college-trained specialists could literally be counted on one's fingers at Novosibirsk. Now competent engineers, pedagogues, doctors and musicians are educated in the city itself, which has nine colleges, including a conservatory of music opened last year. There are three theaters—an opera and ballet theater, a drama theater, and a theater for children and young people. Novosibirsk has hundreds of schools, clubs, libraries, two museums, a planetarium and many motion picture theaters. It has its own newspapers, magazines, book publishers and telecast service.

And most important, Novosibirsk is steadily advancing along with Siberia as a whole. New blocks and streets are being built in the city, while its old streets are being modernized. The ramshackle wooden houses are being torn down, and buildings with all modern conveniences are replacing them. ■



LOCAL BRANCH OF THE USSR ACADEMY OF SCIENCES



APARTMENT HOUSES ON THE OUTSKIRTS OF THE CITY

*the year ahead...*

... THE YEAR BEHIND

## When a Man Starts Getting Old

By Mikhail Yezhov, shoemaker



This year starts my seventh decade. I've just rounded out my sixties. And all my life I spent in the shoe repair business. I've put in 24 years in this shop alone. So I guess I ought to be pretty good at the work.

Was there anything new in my family's life last year? Yes, of course.

First of all, my son Vladimir came home after his five years of service in the Baltic fleet. He was so tall and husky when he walked in that we hardly recognized him.

Before he went into the service he became an apprentice in a jewelry shop. He didn't forget the work while he was in the navy, and now he makes rings, brooches, earrings and bracelets. That's good clean work, and he brings home a thousand rubles a month.

He met his wife in the same shop. She works there as bookkeeper. Her name is Lyusya. They had a good wedding, and they get along fine.

My daughter Margarita is graduating from high school next spring. She wants to be a fabric designer. The entrance exams for the Textile Institute are very hard, but she's got real talent for drawing. Let her try, I say, it's a young people's world.

What else can I tell you that's worth telling? My wife and I do not go out much. We like to stay home. So I bought a television set. This last year we have seen more new things than in our whole life before—plays, songs, music, all kinds of things.

I'm not planning to retire yet although I'm entitled to my pension. I want to work for a few more years. I'm used to working, and I don't like the idea of sitting around with my hands folded doing nothing. That's when a man really starts getting old. ■

## The Pleasures and Perils of My New Profession

By Ruth Peramets

Announcer, Tallinn TV Studio, Estonian Republic

Another year has just passed. And it seems that the years come too quickly—or is that only a woman's reaction?

It seems only recently that I was working as an engineer, satisfied with my profession and not dreaming of anything else. Then after an amateur theatrical performance in which I appeared, the managers of the Tallinn Film Studio offered me a part in the film *Andrus' Happiness*. This was soon followed by the movie *Yachts Take to Sea*. Then at the same time I was offered a job as announcer for the recently constructed television studio in Tallinn.

I accepted and found new interests and cares. Yes, and excitement too. But perhaps we'd better go back and take this chronologically.

When an individual changes his profession, the consequences are not immediately apparent. True, I got to know what was expected of me quickly enough and was glad to learn from many TV fans that our programs were not inferior to those of Moscow or Leningrad. But I did not even dream that the new job would bring with it some ticklish problems.

The point is that I receive many letters. There is nothing really wrong in that. They come almost daily from Estonian cities and small towns, as well as from Finland, where our programs come in loud and clear, as Hel-

sinki is only 43 miles away. And a New Yorker wrote for my autograph after viewing me on the screen of a Finnish set.

But not all the letters are of such a modest nature. Many ask point-blank whether I am married and, sometimes without waiting for a reply, the writer offers me his hand and heart along with a real or imaginary list of his personal merits and charms.

One day my four-year-old, Priit, got into those letters while I was out with my husband. He spread them out fan-wise across the room. When we returned home, my husband had a good laugh reading some of them. But it might not have been so funny if he had taken them seriously.

With the new year under way our TV station will soon double its power and put permanent relay stations into operation in Kohtla-Jarve, Pärnu, Tartu, Viljandi and other Estonian cities. We began a special program for Finland last October, and we will have relay lines to Moscow, Leningrad, and also to Riga along with our own tele-theater. Also, I don't think it would be too bad to organize an exchange of TV programs with other countries this year.

All these developments mean that our audience will increase, and so will the number of those letters. ■

*Interviews continued on page 39*

RUTH PERAMETS IS HERE ANNOUNCING THE NEXT TV PROGRAM.



## Terenty Maltsev Transforms Agriculture



By Gennadi Fish

TERENTY MALTSEV (THIRD FROM LEFT) DISCUSSES HIS METHOD WITH VISITORS AT THE USSR AGRICULTURAL EXHIBITION IN MOSCOW

# THE FARMER WHO REJECTED A FACT

There are certain ideas which everyone accepts as self-evident until someone else comes along and begins to ask questions. And it turns out that what seems to be a self-evident fact is not a fact at all.

One of these "self-evident" ideas that has been current for more than two centuries is that if you want to grow a good crop, you have to plow the soil and turn it over.

Previous to the eighteenth century the plow was no more than a hoe dragged along the ground. It merely scratched the surface of the soil. Early in the century the moldboard plow—that is the type everyone is familiar with—was introduced into England and from there spread throughout the world. The new moldboard plow was able to dig down below the surface, turn the soil over and expose the

undersurface to the action of the weather. For these hundreds of years, the moldboard has been thought of as one of the simple inventions which changed agriculture completely.

But in 1943 an American by the name of Edward Faulkner wrote a book called *Plowman's Folly*. He posed a simple question: "Is it necessary," he asked, "to plow in order to get a good crop?" And he answered the question himself with a good deal of supporting evidence and sound sense. His answer was, "No." He went even further. He claimed that if land is *not* plowed, it will produce larger crops. A revolutionary idea!

A few years afterward Terenty Maltsev, Soviet farmer, quite independently came to the same conclusion and proceeded to confirm it by an experiment on an area of several

thousand acres, a highly successful experiment which promises to change the whole nature of farming.

The idea behind Terenty Maltsev's new method of farming, now being tested in every corner of the Soviet Union, on collective and state farms and by research institutes, can be found in embryo in the writings of the ancients. It was also reflected in the writings of the Russian scientists Mendelejev and Kostychev during the nineteenth century and worked out in greater detail by their Polish contemporary, the agronomist Owsinsky.

But Maltsev took the idea a step further. He shaped it into a consistent and theoretically sound system of farming and then proceeded to prove the correctness of the theory

*Continued on page 26*

## THE FARMER WHO REJECTED A FACT



Terenty Maltsev and observers with the plow he designed without the customary moldboard.

*Continued from page 25*  
by putting it to work on several thousand acres.

When the first outlines of the new system of farming began to take shape in his mind in 1948, Terenty Maltsev was already 52 years old. Aside from five years of army service in the First World War, he had spent his life farming.

He was never able to attend school. He taught himself to read and write. His passion for books and learning converted the simple farmer into a creative scientist. Today this untutored farmer is the author of many scientific works, a regular contributor to newspapers and agronomy magazines, and a participant in scientific congresses. Last year he was elected Honorary Member of the USSR Academy of Agricultural Sciences.

### Testing a Fact

In 1930, when the Zavety Lenina Collective Farm was organized in his village, Terenty Maltsev was asked to take over the care and supervision of 7,500 acres of fertile plowland. In the years that followed he set up 3,000 experimental plots to work on difficult crop problems.

He improved scores of varieties and worked out growing techniques which enabled his collective farm to obtain high and stable yields in spite of the harsh and capricious climate of the Transurals.

But the practical significance of his work began to be widely recognized only in the spring of 1948, when, for the first time, he

sowed spring wheat in an unplowed field and gathered a larger crop than he had in previous plowed sowings.

He was testing out in practice the old truism, accepted without question for centuries, that wheat must have a thoroughly plowed and pulverized soil.

In 1949 he once again sowed spring wheat on a plot of unplowed land which he had disked only to loosen the soil. His experiment was again successful.

He began to draw the tentative conclusion pointed to by these experiments. Perhaps land should not be plowed every year, he conjectured. There are times when a tractor drill passes along the edge of a road and the end disks accidentally push wheat seeds into the compact, trampled soil. What happens is that wheat sprouts up along the edge of the road and its spikes are even larger than planted wheat.

One question led him to another. If we stop plowing, he thought, will there be enough air in the soil to keep the useful bacteria developing? There seemed to be enough for the two crops. There should be enough for more. Perhaps we ought to plow, but at much longer intervals. And then we ought to plow as deep as we can.

So he began another series of experiments. He worked out a six-field rotation which was to be plowed only once in six years. The first year the land lay fallow, the second year perennial grasses were sown and for four years the fields were sown to grain in unplowed, loosened soil.

HEAVY-HEADED WHEAT IN A FIELD SOWN UNDER THE METHOD DEVELOPED BY MALTSEV. HIS METHOD IS NOW BEING TESTED IN EVERY CORNER OF THE SOVIET UNION.



Wheat, high and thick, covered the unplowed fields that fall. But Maltsev was not convinced that the good harvest was due only to the elimination of plowing. Perhaps it was the perennial grasses that were responsible for the success. What if the grasses were omitted? And so he tried the five-field rotation without perennial grasses, plowing only once.

The next step was to replace the traditional type of moldboard plow. This plow digs in deep, as much as ten inches, and then turns up the lower soil layers. In the process of turning up the lower soil, it buries the surface mulch, plant rubbish and decaying leaves. Maltsev wanted the mulch left on the surface.

to prevent evaporation and preserve moisture.

He took the moldboards off the tractor plows and had the plowing done without them. The shares of the plow ripped the surface, loosened the soil but did not turn it over. There was plenty of room for air and moisture, and the microbes that work deep in the soil, like cooks in a kitchen, could prepare food for a new generation of plants. The results exceeded his expectations.

#### Collective Farm into Experimental Station

In September, 1950, I visited the Zavety Lenina Collective Farm. To the right of the

road was a thick stand of ripe, clean wheat that reached to a man's chest. To the left was another stand—not nearly as good. In some places it had lodged because of rain.

"Here," Maltsev pointed to the right, "we sowed wheat on an unplowed field, the soil was cultivated only with a disk paring plow. The wheat on the left was sown on a plowed field. You can see the difference."

Later, over a cup of tea, he told me about his new plans. He was very pleased with the support the Government was giving his experiments. An experimental station of a very special type was to be organized on the collective farm with the specific function of carrying on Maltsev's experimental work.

The entire project was to be financed by a state subsidy. The experimental station was to be the whole collective farm. Its director was Maltsev. Aside from four specialists, the remainder of the workers at the station were to be the collective farm members. The income of the farm members would depend upon the success of the experimental work done.

#### To Convince the Skeptics

It is four years now since the experimental station was organized. The high yields achieved have more than confirmed Maltsev's ideas. In August, 1954, a conference was held to study his methods.

From Moscow and Alma-Ata, from Omsk and Barnaul, from all parts of the country, agronomists, collective farm chairmen, directors of machine and tractor stations, government officials and professors came to Maltsev's village, more than a thousand persons in all. To house such a large number of guests the collective farm had to set up a whole town of tents.

The conference had its usual quota of

*Continued on page 49*



TERENTY MALTSEV SHOWS FARMERS AND AGRONOMISTS THE STRUCTURE OF SOIL AFTER PLOWING BY HIS METHOD.

ON.



HE'S TRULY TICKLED WITH HIS HOBBYHORSE PRIZE.

## Saturday Night Dance

By Nikolai Rozhkov

We had our dances in the old days when I was younger, but they were a much different kind of affair from the ball at the House of Trade Unions in Moscow that I attended, not to dance, but to write a story about.

I grew up during the twenties. These were hard years. The country had been laid

bare by a long and destructive war, and we had no one to depend on but ourselves. We knew that only the concerted efforts of all the people could keep us from economic beggary.

We young people had our fun, we played and we danced when we found time, but we had to rebuild a country. We were like the

hard-working young man, who, building a home without credit, spares no effort, watches every minute and gladly deprives himself of the transient pleasures of the present for the sake of the future.

Our dances and balls are different today because the lives of our young people are different. I could write a whole book about the dances our young people attend.

Very likely I'm old-fashioned, but I have my own reactions to these affairs.

Some of our balls are dedicated to holidays, either national holidays or such holidays as New Year's. These functions always strike me as a little on the pompous side. Other balls, held in factory and village clubs to celebrate a local event, seem to me a trifle too familiar and sometimes resemble family get-togethers.

Last summer combining fashion shows with balls was the rage. Judging by their popularity, I suppose many people liked them. But I find it hard to see how people can amuse themselves with competitive exhibits of women's clothes. But then, I don't wear dresses. That's undoubtedly a factor in my reaction. And as I said, I'm past the first blush of youth.

The kind of ball I like is one where all sorts of people, mostly young ones, get together in clubs or halls to have a good time in a holiday atmosphere. A nice, simple, enjoyable Saturday evening dance.

And that's just the kind of dance that was waiting for me—and the photo-reporter who was with me—at the House of Trade Unions.

The House of Trade Unions is one of the best of the Moscow concert and amusement halls. It appeared to be more holiday-looking than usual that evening. The main hall was decorated with flowers, and the white marble columns reflected the play of chandeliers and spotlights. But as beautifully arranged as the hall was, its gay young guests were its brightest attraction.

I don't know whether everyone would have agreed that each one of the girls met all the qualifications for a beauty prize winner, but

THE BOUNCING BALLOONS ALWAYS MAKE QUITE A STIR.



A DASHING MUSTACHE TRANSFORMS OUR YOUNG HERO.





GIRL TALK—IT'S THE SAME EVERYWHERE.

to me they were all very young and all very lovely.

Most of the guests were students and workers. The hosts had arranged all sorts of entertainment to suit varied tastes. In one of the smaller halls there was a lottery with trick prizes. In another, guests walked out with huge handle-bar mustaches and big pink false noses. In the most unsuitable corner we found the usual pair of chess players frozen over a board, each one with a cluster of advisers grouped behind him.

But when the music struck up in the main hall, the chess players promptly agreed to call it a draw and hurried off with everybody else.

The dance was followed by a concert of popular singers. Then came a comic act. Then a magician solemnly swallowed a string of long pins and promptly produced them again before the audience could begin squealing.

Then the dancing began again. While the dances changed, a group of judges, elected on the spot, grappled with the problem of choosing the best dancer, both in jazz and folk dancing, the best jokester, the best reciter, and the prettiest-dressed girl. All this with much laughing and its normal quota of excited argument.

And as always, there were pairs of young people who walked around in a blissful fog, oblivious of everybody but themselves.

This was my Saturday night at a ball. A long way from the balls I danced at in my day. But perhaps not so different after all—we were young, happy, active and perhaps even as beautiful as these young people.

I really should confess—I danced, too, that night. The girls insisted.

*Pictures on following page*

THE DANCE LASTS FAR INTO THE NIGHT. ►





THIS YOUNG COUPLE TAKES TIME OUT FOR REFRESHMENTS.



## SATURDAY NIGHT DANCE

*Continued from page 29*

CROWD JOINS IN ON A NEW SONG WITH THE M.C.

# EXCURSION INTO THE FUTURE

By Vasili Zakharchenko

The dreams of scientists must be very strange indeed, their realities are so fantastic. With thinking machines, artificial satellites, and only science knows what else, we would seem to have broken down whatever distinction once held between the real and the imaginary.

## Let Us Build Another Sun!

Imagine an artificial satellite of the earth shot up into cosmic space. It flies around our planet at an altitude of hundreds of thousands of miles. Somewhere inside this little satellite, the future source of heat is born, thermonuclear reaction sets in. The small sun was set aloft by man, and this sun flies over the regions of the earth where warmth and light are inadequate. It sheds its light over those regions of the planet where the darkness of Arctic night hovers for six months. Over certain spots the artificial sun sheds its heat sparingly, while over others it flashes forth with greater intensity. At the lofty height where the man-made sun, our "helio-satellite," moves, it cannot cause any harm, it only changes the earth's climate. As months go by, the helio-satellite exhausts its energy, but a new sun has already been catapulted into the sky.

It is possible! Man has reached out for sources of light and heat which are truly inexhaustible. Experiments are now in progress with the aim of trying to secure control of the most powerful of all forms of energy existing on the earth, thermonuclear energy. The idea of building a new sun for the earth and making it move along the orbits predestined by the human mind may seem like imagination run riot. But when man learns to control thermonuclear sources of energy—and that day, relatively speaking, is around the corner—the

*Continued on page 32*

The artificial sun will travel at an altitude of thousands of miles.



THE HELIO-SATELLITE WILL BRING LIFE AND WARMTH TO THE BARREN REGIONS OF THE EARTH.



THE GREAT DAM CONNECTING ALASKA AND CHUKOTKA ACROSS BERING STRAIT WILL BAR COLD ARCTIC WATERS FROM THE PACIFIC.

## EXCURSION INTO THE FUTURE

*Continued from page 31*

problem of building another sun may become quite real.

### Central Heating for the World

The Soviet poet Vladimir Mayakovsky says in one of his poems that our planet is poorly equipped for happiness. So far as climate is concerned, that is certainly so. Unendurable cold in Siberia and Alaska and unendurable heat in the tropics. And the temperate zone, where conditions for life are most favorable, is largely filled up by oceans.

Is it too fantastic to think of re-equipping our planet properly?

Consider, for example, one of the local problems of climate change which scientists have long been studying.

A glance at the map will show that America is very close to the Soviet Union. A few dozen miles separate the shores of Alaska and Chukotka. There was a time when that gap between the continents we now call the Bering Strait did not exist. It was all one land mass. And in those prehistoric times, science says, our distant forbears could move freely by land from Asia to America.

The climate was milder then. There was no strait, and the cold currents of the Arctic Ocean could not pass through to Alaska and Kamchatka, so that the warm waters of the Pacific washed the shores.

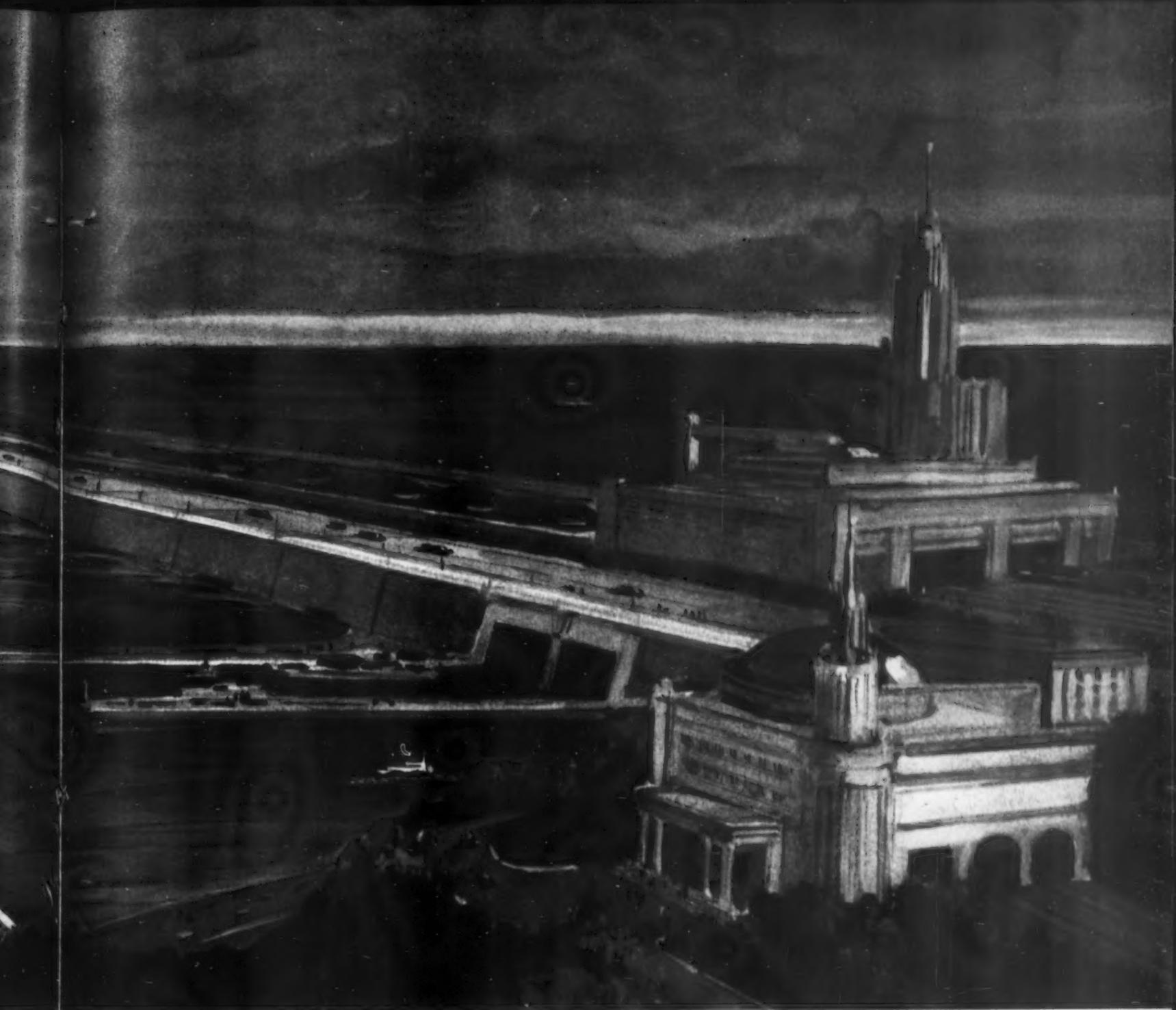
Let us ask this "fantastic" question—sup-

pose the Bering passage were closed again! The strait is only about fifty miles wide and about 150 feet deep on an average. What if the gap were filled up and the icy door shut tight? For science and engineering today this is far from an impossible job.

Suppose a dam were built at that point. The cold waters of the Arctic Ocean would be diverted, and temperatures would rise sharply through a vast area of land and water in the northern parts of Asia and America.

Scientific thought explores even further. What if the huge source of heat represented by the Pacific Ocean could be put to work as a central heating system for the whole of the North!

Let us imagine that huge pumping stations have been constructed. Built into the body of



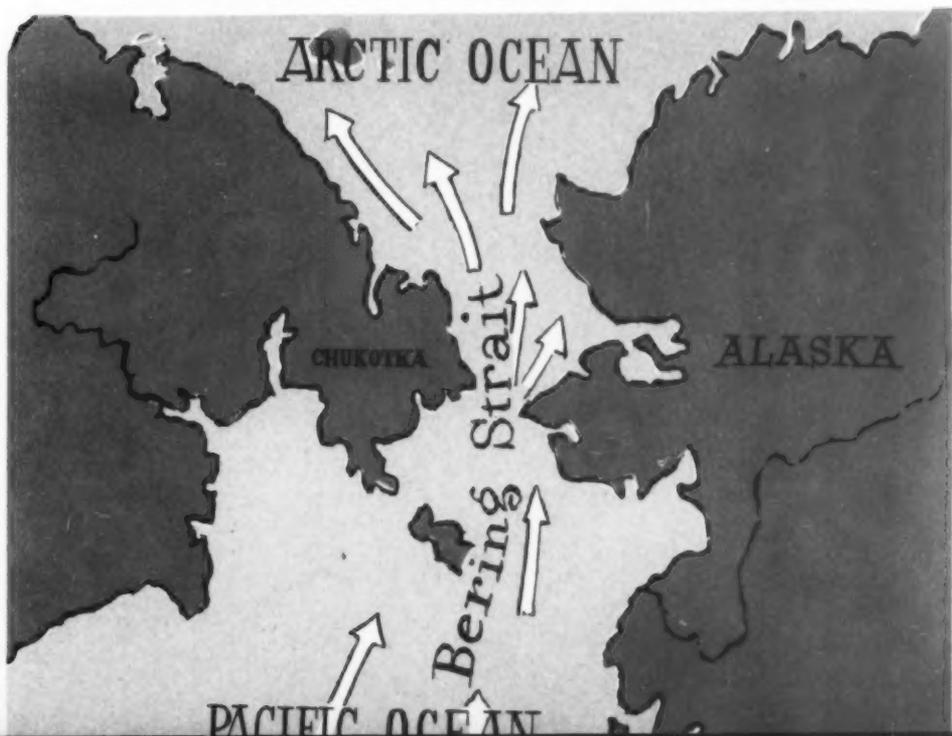
WARM WATERS PUMPED INTO THE ARCTIC OCEAN WILL PUSH BACK THE ICE BARRIER.

the dam, they trap the warm currents and drive them farther to the North. A current equal in power to the Gulf Stream skirts the northern extremity of Siberia and Alaska. The ice barrier is pushed back to the North. The soil fettered by ice for thousands of years becomes moist and soft, and orange groves begin to blossom in Kamchatka and Alaska. . . .

"But, yes," the skeptics—they are always with us—will say, "it is easy to imagine a new Gulf Stream crossing the Bering Strait, but you will need fantastic power to do it."

Scientists have already figured that it will take a capacity of two million kilowatts. A lot, certainly. But would it be necessary to build high-tension lines from the faraway rivers of Siberia and America to the Bering dam? Or

*Continued on page 62*





*Moscow says it  
with Flowers*







Muscovites like flowers. They decorate squares and boulevards, gardens and parks. Even industrial plants are spotted with flower beds.

Moscow grows more flowers every year, raised and tended by a large staff of gardeners. In 1956 two million roots, bulbs and shoots of all varieties were planted to add to the many millions of flowers which adorn the city already.

Many thousands of amateur flower growers in Moscow do their own window-box and balcony gardening. Others lay out colorful flower beds in their country homes or on out-of-town garden plots. There are few homes in Moscow which do not have at least a flower box.

The most enthusiastic of these amateur gardeners are organized in flower clubs. They arrange lectures and flower shows and exchange seeds and bulbs. Many of the members grow rare plants and hybrid novelties.

The autumn flower exhibit shown here drew its usual large crowd. Flowers of all sizes, shapes and luxuriant colors were exhibited. To the layman who came to look on, each of the flowers shown seemed perfect in its own way. But the experts were of a much more demanding opinion. They decided that none of the exhibits merited a first prize.

Other cities vie with Moscow in their floral displays. Even Karaganda, in Central Asia, grows flowers in its rocky, sun-scorched soil, and Norilsk in the frozen ground beyond the Arctic Circle. ■





▲  
A YOUNG IVANOVO TEXTILE WORKER

MANY GIRLS ATTEND NIGHT SCHOOL  
▼



## A VISIT TO A TEXTILE MILL

By Yakov Usherenko





o  
a  
m  
m  
w  
y  
st  
as  
to  
ri  
le  
ki  
pe

The Dzerzhinsky Textile Mill is typical of the many thousands of industrial plants in the Soviet Union.

How does it operate?

Where do its workers come from?

What happens to its profits?

What about wages, working conditions, housing, child care, medical treatment?

I visited the mill to find the answers to some of these questions.

The Dzerzhinsky Mill is in Ivanovo, the biggest textile center in the country. It was built twenty-nine years ago, a group of light and airy four-story buildings, in sharp contrast to the dark squat shops of Ivanovo left over from czarist times.

When the mill was opened it had 115,000 spindles. Now, with 228,000, it is one of the largest spinning mills in Europe.

The equipment of the mill has also gone through a process of evolution, with the installation of automatic machinery, powerful openers and scutching machines of the latest design. Only at the beginning of the spinning process, when the cotton is placed in the machine, and at the end, when the woven fabric is removed, does the human hand touch the material. Every day the mill turns out sixty tons of yarn, which goes into the production of hundreds of thousands of yards of all kinds of plain and decorative fabrics.

#### The Mill Is One Big School

Since the mill has been expanding steadily, it has a permanent problem of shortage of the skilled workers needed for the spinning departments and the weaving shops. This is true even with the high level of automation. As a result, it has to train its own workers, and the management maintains a network of various free courses.

The mill has its own vocational school which admits young people who have finished seven years of schooling. The course of study is one year, and from the day they enroll these future workers are paid a stipend. When they graduate, they are placed in one of the shops.

Although 250 to 300 workers are trained at the school every year as spinners, rovers, warpers, or weavers, there are not enough workers to fill all the jobs. That is why another kind of training is also used.

Apprentices are assigned to a teacher who gives them instruction right on the job. This is supplemented by a theoretical course of lectures given by mill engineers and technical-school teachers. This kind of training usually lasts six to eight months. During this period the trainees are paid 275 rubles a month.

In addition to elementary training, the mill offers a whole group of advanced technical courses. More than 2,000 workers in the last four years have perfected their skills and raised their wages through these courses.

Some of the workers continue their studies in their free time at the Ivanovo technical schools and institutes. There is also a branch of the Ivanovo Textile Technical School at the mill where correspondence courses are given. With all these facilities at their disposal, it is not surprising that dozens of workers have become engineers, fabric designers, technicians and executives.

*Continued on page 38*

VETERAN FOREMAN SERGEI BEZENOV INSTRUCTS A BEGINNER AT THE MACHINE



A NIGHT VIEW OF THE DZERZHINSKY TEXTILE WEAVING MILL AT IVANOVO





## TEXTILE MILL *Continued from page 37*

When the mill first opened in 1927, its three engineers had to be obtained from Moscow and Leningrad. Ivanovo had no technical schools of its own at that time. Today the mill employs 276 engineers and technicians. Most of them, like engineer Mikhail Fomichov who is now the mill's director, were educated at the local textile institutes.

### Where Do the Profits Go?

The Dzerzhinsky Mill carries on its financial operations through the State Bank. Money for goods sold is credited to its account by buyers for trading organizations in various parts of the country.

The bank transfers from the account whatever purchases the mill makes: cotton delivered from Central Asia; lumber and building materials from the Archangel region; machinery and equipment bought from plants in Moscow, Leningrad, Kharkov; electric power supplied by the Ivanovo Power Station.

At the Ivanovo branch of the State Bank I met Leonid Yefimov, head bookkeeper of the mill. I introduced myself and said I had some intimate questions I wanted to ask.

"Fine," he said. "Fire away."

Yefimov, I learned in the course of conversation, comes from a long line of Ivanovo weavers. He is a business school graduate and has been working in the accounting department of the mill for twenty-odd years.

"What's the financial situation of the mill?" I asked.

"Can't complain," Yefimov smiled. "We're a long way from going bankrupt. Last year we made a profit of forty million rubles."

"Where did the profits go?" I asked.

"I'll be through here in a minute," he said. "Come on back with me to my office and I'll give you some figures."

At the office he dug into some thick ledgers. From the data he gave me, I got a pretty good idea of where the profits go.

Inasmuch as the mill belongs to the whole nation, all its profits become part of the national revenue and are spent for the national

*Continued on page 56*

# YOU CAN CALL THEM DREAMS

By Professor Venedict Dzheleпов,  
Nuclear Research Scientist

Looking back on those events of 1956 in which I participated directly, I find it hard to pick out any single one that I can call the most important, or the most unusual. These, after all, are relative concepts.

For example, a group of us completed a series of studies in 1956 that related to the dispersal of neutrons. Our findings were reported to the Geneva Conference. And three groups of scientists headed by Professors Mikhail Meshcheryakov, Bruno Pontecorvo, and Mikhail Kozodayev completed important studies at the nuclear research laboratory dealing with the formation and dispersal of pi-mesons.

These studies, by the standards of a few years ago, would have set the scientific world astir. Today they are accepted as more or less commonplace.

Progress in science is so rapid that the extraordinary thing of yesterday becomes the ordinary thing today. And although as an exact scientist I do not usually go in for paradoxes, I am tempted to say that it is perhaps this commonplace character of the unusual that characterizes the scientific events of this last year.

1956 will also be associated for me with scientific meetings where I met colleagues from other countries. We met at the Moscow conference on the physics of high energy particles, at Geneva and at Amsterdam.

On three different occasions last year I had the pleasure of meeting the American physicist Emilio Segre and his collaborator, Owen Chamberlain, who discovered the anti-proton. Unfortunately, our conversations were confined to science and we had no time for

closer acquaintance. Professor Segre's group is working on the anti-neutron now. I hope that we shall get the good news this year that the investigation was successfully concluded.

Last summer, during our stay in Switzerland, a group of us together with the American Professor Donald Glaser, who developed the bubble chamber method, took a trip to Chamonix, one of the most picturesque spots in the French Alps. The Professor told us he was planning to build a big xenon chamber in 1957 and he spoke of it with the same enthusiasm as he did about his music—he plays the viola.

One of the people I was happy to meet was the remarkable American physicist, Wolfgang Panofsky, of Stanford University. I remember him saying that one of his daughters was studying ballet and that she dreamed of becoming a ballerina, "no worse than Ulanova."

I have a couple of dreams of my own. Who of us hasn't? Perhaps to sound scientific, I should call them projects.

First, this year I want to begin research on the properties of new particles by means of a big diffusion camera placed in the magnetic field of a synchrotron to be put into operation at our institute. In this massive and complex machine, which is worked by remote control, a beam of protons acquires the enormous energy of ten billion electron volts, almost equal to that propagated by solar light.

And second, during our vacation this summer, my wife and I want to visit the Altai area to see the beautiful mountain country of this Siberian Switzerland. ■

## the year ahead...

... THE YEAR BEHIND

## MORE LETTERS FOR EVERYBODY

By Zakhar Boroday, Postman



I've been a postman in the Ukrainian city of Dnepropetrovsk for going on forty-three years now, and I wouldn't want to change my job for any other kind I can think of. A postman gets to know so many people that he can teach a writer something about their lives.

Last May I dropped in on my old friend Grigori Kovalenko—he's a steelworker, and I brought him the newspaper.

"Read it carefully," I said, "there's an item in it that has to do with your family."

He looked through it and sounded annoyed, "Is this your idea of a joke, Zakhar? I don't see anything here about my family."

So I showed him the news about the reduction in the armed forces. "Doesn't this have to do with your family?" I said, "You ought to be seeing your son Nikolai home from the army pretty soon."

A few days ago I met Kovalenko in the street and he was grinning all over.

"Zakhar," he called to me, "you old crystal-gazer. Nikolai just got back home."

About myself? Nothing special I can think of. My wife and I live a quiet life. My Darya is a first-class cook and baker. If you happen to be in the neighborhood, drop in and we'll give you Ukrainian borsch and dumplings like you've never tasted before.

We live pretty well. The children help out a little. My daughter is an engineer, and my son, for some reason, has decided to become an artist. When he was young he used to mark up all the walls with pictures. He wrote us a letter from Kiev a short time ago to tell us that his picture won first prize. Well, I said, let him go ahead and paint.

You want to know my wishes?

Well, I'd like for everybody to receive more letters. The way I see it, the more letters you get, the more friends you have. ■

Interviews continued on page 51

PROFESSOR V. DZHELEPOV HEADS A LABORATORY IN THE INSTITUTE OF NUCLEAR RESEARCH IN MOSCOW.





# UNDER the BIG TOP

By Yuri Dmitriev



Yuri Dmitriev is historian for the Soviet theater, circus and vaudeville. His book, *Russian Circus*, and his biographies of great actors are read not only by theater people, but by a very wide public. He is a regular contributor to literary and theater magazines and is professor at the Lunacharsky State Theater Institute in Moscow.

Whether it's under canvas in a small village square way off the beaten path or in a magnificent theater in Moscow, the circus is still the greatest show on earth. In our country it is favorite entertainment for old and young.

The names of circus performers—clowns, aerial artists, equestrians, magicians—are as familiar as those of movie stars. Often enough they are movie stars.

Karandash (Pencil)—his real name is Mikhail Rumyantsev—is the most popular clown in the Soviet Union. Films in which he is featured run for months everywhere in the country. His picture appears in children's books, and statuettes in porcelain of him are sold in stores.

### A Grand Entrance

The lights are dimmed, the audience tense, waiting for the daring trapeze act. The spot-

light points a circle of bright yellow light. Karandash wanders in, looks around him vaguely, hunches his shoulders, warms his hands in the rays of the spotlight. With a single gesture, he shifts the mood and the audience goes into gales of laughter. He skates away on the sawdust like a boy on ice and appears a moment later, a desperado mounted on a donkey equipped with automobile license plates, horn and bicycle pedals.

Karandash does not use the traditional make-up of the clown. A speck of mustache, a dark hat and baggy suit, and he is the musty bachelor, the bookkeeper who sees only numbers, the absent-minded pedagogue

Bareback riders Isabella and Mikhail Korolev are favorites.

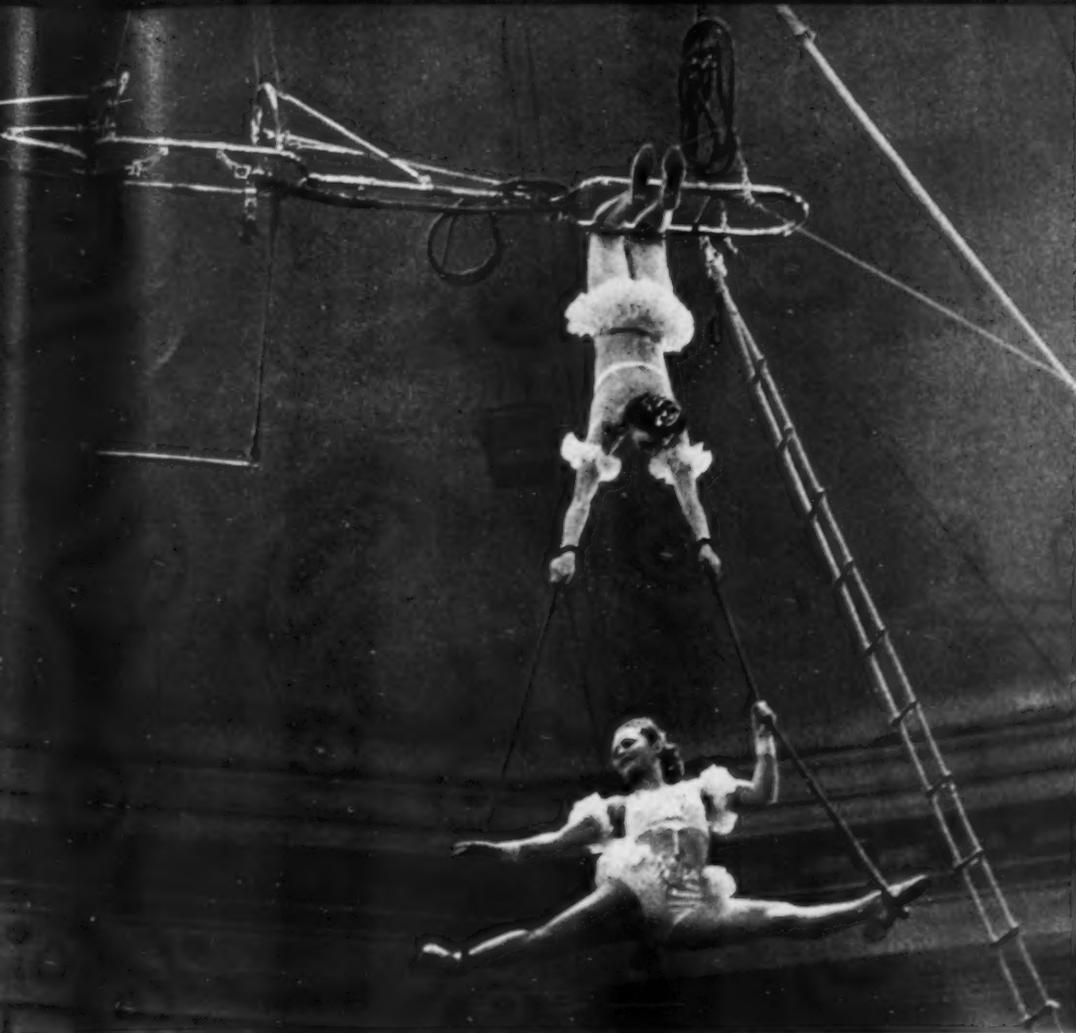


Clown Mikhail Rumyantsev, known as Karandash (Pencil), and his ever-popular act with Vaska, the jackass.



Vera Vorobyeva and Yevgeni Ivanov are top-notch acrobats.





An acrobat of the Kozhevnikov troupe is tossed high from a springboard, does an aerial somersault and lands on the top shoulders of a pyramid built by his three partners.

### Magic

Kio the magician has an entire program of tricks he has originated. A horse-drawn cab appears with a young man and two women in it. They all get out and run off behind the scenes. The inside of the cab is curtained off for no more than a second. When the curtains are opened, the same young man and the two women are sitting in the cab.

How did they ever get back? The cab stands in the center of the ring. There is not a stick of scenery around it, and besides, the eyes of the audience have been glued on it. You ask Kio how he does it and he says, "It's simple enough, but if I tell you how it's done, I'll have to change my profession and I like it too well."

### Caravans and Acrobats

The inspiration for Soviet circus art derives from folk art, performers say. It is changed and tailored to suit the spirit and special requirements of the ring.

The sounds of tambourines tinkle out a slow Oriental melody and a camel caravan moves swiftly into the ring. Then, with a brilliant display, acrobats somersault on the backs of the running camels. The acrobats and riders of the Kadyr Gulyam troupe, Central Asian performers, make their entrance that way.

The Ali-Bek Kantimirovs, equestrians, tumble on the backs of swift pedigreed horses, or hang from the saddle by a single heel with their heads inches away from the flashing hoofs.

Popular circus figures are the Tsovkra tightrope walkers, men from mountainous Daghestan, where rope running is a national pastime.

Then there is Nikolai Zherebtsov, who does an old-time strong man act. He places a merry-go-round with twelve riders on his

*Continued on page 42*

THE FLYING BUBNOV SISTERS ARE SO GRACEFUL AND SO LOVELY THAT THEY ARE BILLED AS AERIAL BALLERINAS.

too engrossed to care much for his appearance.

Oleg Popov, another very familiar circus name, is a juggler, tightrope walker and acrobat, but these are talents he builds into his act as clown. His comic ingenuity has delighted millions in the Soviet Union and in Warsaw, Brussels, London and other European cities.

### Aerial Artists

But clowns, as important as they are, do not make a circus by themselves. There are the feats of strength and daring and artistry.

The drums roll out, the curtain parts and

a great bird sweeps into the air. It pulls a brightly colored chariot carrying trapeze artists Victor Lisin and Elena Senkovskaya, a pair that perform in the air as though it were their natural medium.

The "Four Beautiful Bubnovs" are so graceful and so lovely in their act high under the big top that they are billed as aerial ballerinas.

The jugglers Kiss and Shirai keep eight rings or balls whirling in the air at one time, while they balance tables on their foreheads.

The four equestrians of the Aleksandrov-Serzh troupe do a thrilling simultaneous jump on a horse at full gallop.

Featured clown Oleg Popov is a center-ring star, widely acclaimed last year in London.

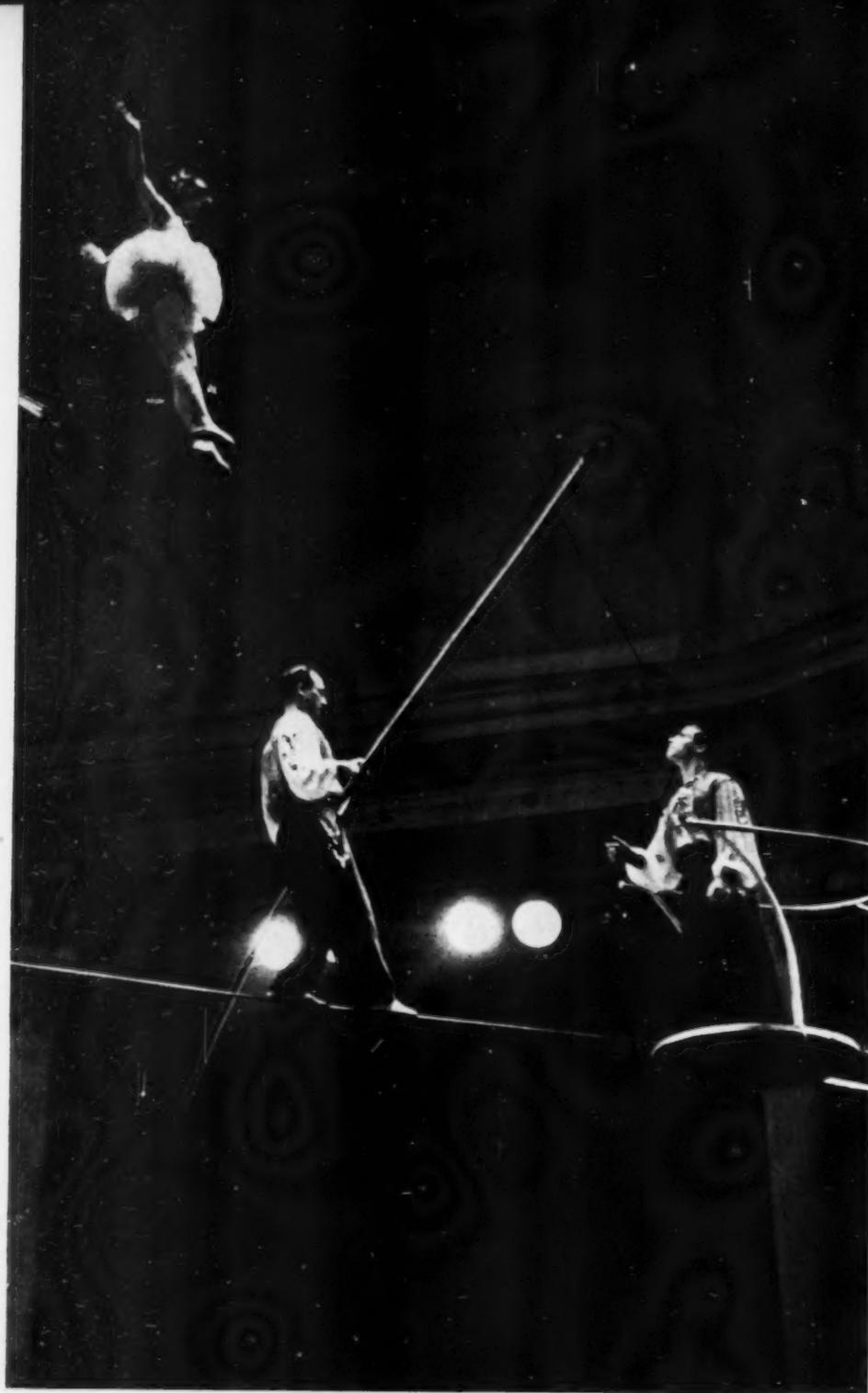


Jugglers Violetta and Alexander Kiss combine grace and precision in their act.



The boxing bears of Alexander Filatov shown here in the ring are internationally famed for their excellent performances.





**SENSATIONAL HIGH-WIRE ACT**

**LION-TAMER IRINA BUGRIMOVA**



**CLOWN BORIS VYATKIN**



*Continued from Page 41*  
 chest, bends horseshoes and swings two oxen on his mighty shoulders.

#### **Performing Bears**

Performing brown bears have entertained Russians from the earliest days of the country's history. They are still frequent guest performers, their repertoire modified to conform with the times. The bears roller-skate, bicycle, do motorcycle racing, switching the headlights on by themselves when the arena is darkened. They stand on one forepaw and juggle a stick with the hind paws. They do tightrope walking. Valentin Filatov, Elvira Padchernikova and other trainers have done such marvels that it would seem impossible that more could be done. Nevertheless, every season brings new bear tricks.

The Durov family of clown-animal trainers have been performing for generations now. Two of the Durovs, Vladimir and Yuri, are present day representatives of the family. There seems to be no bird or animal they have not been able to train. Doves and golden eagles, white mice and elephants, squirrels, foxes, zebras and seals are transformed into musicians, equestrians, barbers and football players.

#### **Enthusiastic Audiences**

Soviet circuses do not display freak shows, do not stress the element of danger to work up an audience, and avoid off-color material. Acts which are offensive to taste or humiliating to the artists are welcomed neither by the audience nor by performers.

Evening after evening the many circuses which play the country perform before packed houses. With that young enthusiasm so characteristic of circus audiences the world over, spectators applaud the daring skill of the acrobats, the courage of the animal trainers and the zany happiness of the clowns.

The circus is the oldest form of theater, but the big top seems not only to have learned the secret of perpetual youth; it has been able to keep its audiences young along with it. ■



CLOWN AKRAM YUSUPOV

"SCULPTURE IN BRONZE"



BRUINS ON THE TIGHTROPE

DAINTY SECOND ARABESQUE



# American Doctors

Continued from page 4

"If she's healthy, why is she in the hospital?" asked Dr. White.

"Well, you see, Doctor, that needs a bit of explanation. The patient suffered from a heart ailment, mitral stenosis. She was so weak that she was scarcely able to move, and her condition became steadily worse. Two years ago she underwent a cardiac operation. Now she is back at work and is leading the active life of a normal person, even goes in for sports. We have her in now for re-examination. We do that with all our patients."

Dr. White and his colleagues were interested in that phase of Soviet medical practice, with its emphasis on preventive or prophylactic medicine. They visited Pervomaiskaya, a rural hospital, where 5,000 farmers are registered for complete medical examination twice a year.

Thoroughgoing prophylactic examination has long been the rule in all Soviet plants, factories, mines and other work establishments. Each of these usually has its own clinic whose function is not only to treat sick people or those hurt in accidents, but primarily to prevent injury or sickness by steps taken in time. The personnel of the clinics are responsible for periodic examination of workers, for the physical working conditions in shops and for seeing that the plant provides special lunch facilities for workers who need special diets.

## Who Pays for Hospital Services?

I talked to Alexandra Ikonnikova, assistant to the chief at the Botkin Hospital in Moscow, during the long stretches when Dr. White and the other American physicians were examining patients. I asked her how many beds the hospital had.

"Two thousand four hundred," she answered, "but they are not always all occupied."

"It sounds like a big set-up," I commented.

"It is," she said and gave me the impressive statistics which proved it. The hospital's twenty-eight blocks of buildings stretch over sixty-two acres, an area big enough to contain a sizable town. It has 400 doctors, 800 nurses and 1,200 medical assistants. Its annual budget



THIS HOSPITAL IS ONE OF 24,000 MEDICAL INSTITUTIONS IN THE SOVIET UNION.

exceeds 45 million rubles, about three-fifths that of a town with a population of 100,000.

"Do you have any idea what the care and treatment of each patient costs the hospital?" I asked.

"That, of course, depends on what we are treating. One patient may be here for a day or two and another for several months. Some need expensive medicines, others only rest and quiet. I can give you some average figures if you like. We spend 47 rubles a day per patient. Our cost for maintaining a single hospital bed comes to 15,600 rubles annually."

"That seems like a very high figure."

"One of the British physicians who recently paid us a visit made the same comment," Dr. Ikonnikova said. "I explained that it was high because our patients do not pay for any hospital services—the cost of all medical treatment is carried by the state. I assured him that if he needed our services while he was in the country, he too would be entitled to free medical treatment. He laughed and said that he was so impressed with our services that he was almost sorry he didn't have to take advantage of our offer."

The American doctors asked much the same questions when they visited the Academy of Medical Sciences in Moscow. The Academy is the clearing house for Soviet medicine. It coordinates the work of dozens of research institutions that work on problems of medical theory and practice.

How many doctors do you have? How many beds? These are telling questions because they are indexes of over-all public health work.

The number of hospital beds in the Soviet Union as of 1956 total

"NO REASON FOR PESSIMISM," SAID DR. WHITE, AFTER THE EXAMINATION.



QUARTZ LAMP TREATMENTS ARE GIVEN TO UNDERGROUND COAL AND ORE WORKERS.





FIRST MOSCOW MEDICAL INSTITUTE STUDENTS GIVE THE AMERICAN PROFESSOR A ROUND OF APPLAUSE AFTER HIS LECTURE.



Prof. White tells the medical students that we often blame work for our illnesses instead of ourselves.

1,290,000, that is, 65 beds for every 10,000 of the population. This is five times more than in 1913. The number of doctors as of 1955 was 334,000, 16.7 for every 10,000 of the population. The comparable figure in 1913 was 1.7.

As for medical schools, there are 68, graduating from 13,000 to 16,000 doctors annually. The total number of students attending in 1955-56 was 135,000. Tuition in medical school is free. State stipends are given to students making satisfactory progress, and living accommodations are provided for students who need them.

#### Rest Homes

While the other five Americans were looking at Moscow hospitals, Dr. James Watt spent several days visiting the therapeutic bath centers and resorts on the Caucasian coast of the Black Sea.

There are 3,117 sanatoria, health resorts and rest homes in various parts of the Soviet Union. They accommodate five million patients and visitors annually.

In these rest homes and sanatoria, guests in most cases pay only thirty per cent of the cost for vacation or treatment; the remainder is paid for by the trade unions to which they belong and by the state. Many workers pay no charges at all. Sanatoria which care for children and which treat tuberculosis admit patients free of charge.

This last statistic best serves to indicate the development of public health. The death rate in the country as a whole was 3.6 times greater in 1913 than in 1955. Average life expectancy has more than doubled as compared with pre-revolutionary Russia.

#### A Summing Up

At a press conference held in the offices of Maria Kovrigina, Minister of Health of the USSR, and at a later farewell dinner, the visiting doctors summed up their trip.

Dr. Rusk spoke of his visit to the home for the aged in the suburbs of Moscow. He was impressed, he said, with the healthful and sympathetic atmosphere of the home and with its constructive program of activity and rest.

Dr. White was pleased to note that so many of the doctors and medical students were women. He had been struck by the devotion of doctors and nurses to their work.

Dr. White, a leading heart specialist himself, stressed the fact that

cardiology was a medical problem of primary importance in both countries.

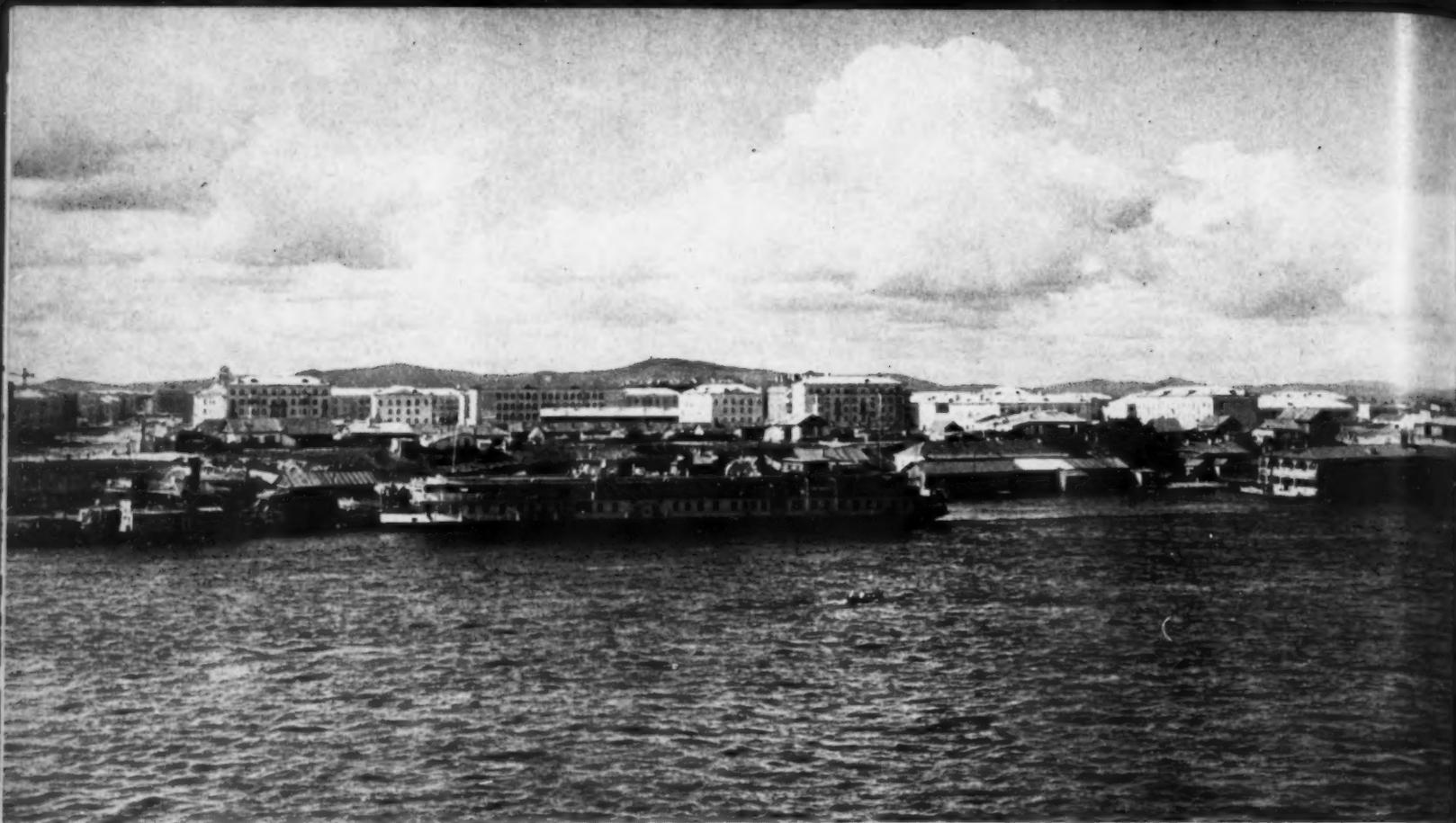
"Are there differences in treatment?" he was asked by a correspondent.

"Naturally," he answered. But these differences serve to stimulate scientific inquiry. Research must be international to take account of the differences in geography and in living habits. That is why, he went on to say, exchange of knowledge and experience was so important to scientific progress. Friendship among nations has a direct bearing on the health of mankind.

"May we thank you," Dr. White said, in farewell, "for the kind invitation to come to talk to you about a few of our mutual medical problems, for your warm hospitality, and for the friendly spirit with which we have been received everywhere, and which augurs so well for the future." ■

MARIA KOVRIGINA, MINISTER OF PUBLIC HEALTH, BIDS DR. WHITE FAREWELL.





THIS IS THE CITY OF KOMSOMOLSK, FOUNDED 25 YEARS AGO ON THE AMUR RIVER IN THE SOVIET FAR EAST.

# YOUNG LEGISLATOR for a YOUNG CITY

By Dmitri Gudkov

Alexei Voitovich is a young legislator who represents a young city. It is 25 years old, founded and built entirely by young people in 1932.

When their ship, appropriately named *Columbus*, sailed up the Amur River that spring, the hundreds of young people aboard must each have felt like that intrepid discoverer and explorer of a new continent. They were traveling into the heart of the taiga, far from the world of comforts and commonplaces.

Under their axes, shovels, tractors and machine tools, the wilderness moved back, gave way to streets and parks, to apartment houses, stores, schools and factories. They named the city "Komsomolsk," the city of young Communists.

Komsomolsk is represented in the Soviet parliament by steelworker Alexei Voitovich. Like his city, he is young, both in years and

in energy and enthusiasm. And like his constituents, he has ambitious plans for his city.

When they elected him, his voters gave him a list of things they expected him to do. Item number one on the list was Komsomolsk—to make it bigger and better.

At one of the early sessions of the parliament, therefore, the new legislator put in a bid for funds to develop the new city. He did not leave it at that, but buttonholed every person of any importance whatsoever who could get anything done for Komsomolsk, its industry, its housing, its schools.

His key point of buttonhole concentration was the Ministry of the Iron and Steel Industry. Komsomolsk is a steel town, and everything else flows from steel. If he could get the steel shops expanded, everything in Komsomolsk would expand with it.

Legislator Voitovich recently gave his constituents a full report of his activities. Komsomolsk, he said, would celebrate its twenty-fifth anniversary as one of the largest industrial and cultural cities in the Far East. He pointed out that Komsomolsk has by no means reached its pinnacle, that the emphasis now being placed on the development of the Far Eastern regions of the country and Siberia prophesy an even greater future for this young city.

The city now has a population of 170,000. It has five specialized secondary schools, two colleges, a theater, and several stadiums. A television station is almost finished. So is a new streetcar line which crosses the city with links to its outlying districts. Two hundred apartment houses were built in each of the last two years.

The legislator's report pleased everyone but himself. He cited all the things yet to be done.

ALEXEI VOITOVICH AT HOME WITH WIFE AND SON





VOITOVICH PAUSES FOR A SMOKE WITH A PAL.

But even he had to agree that it wasn't too bad for a start.

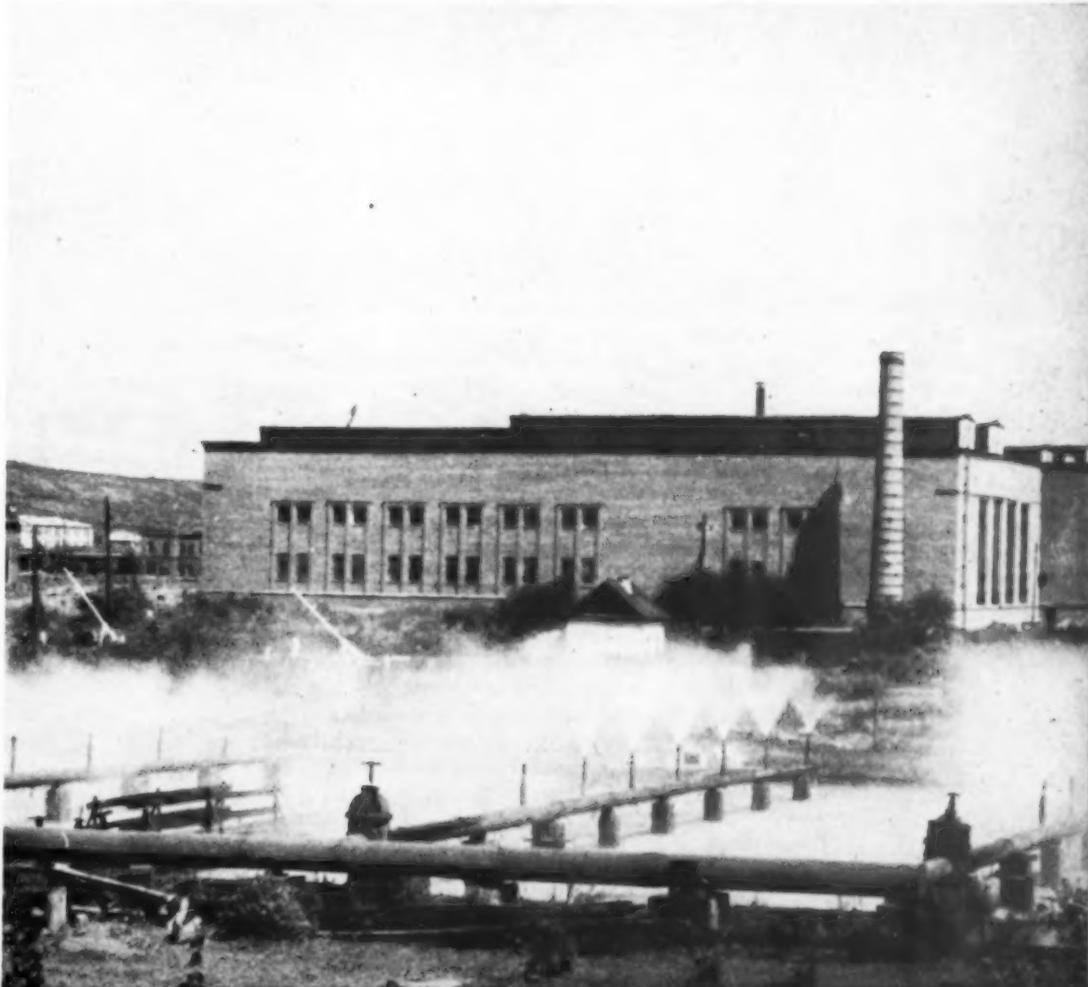
#### How a Legislator Spends His Time

Alexei Voitovich does not have to worry about what to do with his time.

There is his work as legislator, which means weekly meetings, conferences, and two evenings a month when his constituents drop in to see him. There is his job at the steel plant and three evenings a week at the Polytechnical Institute for study. And there is his gardening. He likes it, and more important, it gives him a chance to spend time with his family. His wife and his young daughter are as proud of their gladiolas, dahlias and asters as he is.

When Voitovich can steal a little time from gardening and Komsomolsk, he takes the family in his motorboat to one of the green islets that spot the Amur. He pitches a tent and then wanders off along the beach with his fishing rod. But it is likely that between bites he is thinking of whom to buttonhole next time he is in the capital to make Komsomolsk bigger and better for its next birthday. ■

THE STEEL MILL WHERE VOITOVICH IS EMPLOYED.



## INTERCONTINENTAL ROCKET

*Continued from page 7*

talking quietly and making themselves comfortable just before take-off.

Some of them take a last look through the portholes at friends who have seen them off. They can't make them out, of course. From the great height of the rocket, people on the rocketdrome field look like pygmies, the rocketdrome like a group of toy buildings outlined by the searchlights.

The pretty young stewardess says, "Ladies and gentlemen, please fasten your seat belts. We are taking off."

The pilot pushes a button and the silvery-blue rocket slowly and majestically leaves the ground and soars upward.

Its speed increases with every fraction of a second. Now it is about a mile off the ground. The starting rockets which helped to take off drop to the ground by parachute and the ship picks up speed. It is flying on powerful liquid jet engines fed by liquid oxygen and a new high-calorific fuel.

The engines run for only a few minutes until the required speed has been reached. Then they are shut off. The rocket has escaped from the gravitational pull of the earth. It is in free flight now and at once the force holding the passengers down in their seats disappears. They have become weightless. They could, if they wanted to, float up to the ceiling of the rocket plane. But that is not considered good traveling manners. And besides, there is the neat sign alongside each seat which reads, "Passengers who wish to leave their seats will please attach magnetized soles to their shoes."

The earth looks like a huge sphere. Despite the bright sun, which has again appeared at this altitude, there are myriads of stars in the black sky. Inside the plane everybody has settled down. The stewardess offers passengers coffee and liqueur. This is served in curious looking "interplanetary glasses" shaped like tubes. Since there is no gravity, liquids will not pour, they have to be squeezed out of the container. One of the passengers, a stout man, seems to be especially enjoying his coffee and cigar. He is probably pleased to have lost all of his 225 pounds at once, even if it is only for the duration of the flight.

The rocket has been off the ground only a quarter of an hour, but it is already over the Arctic Region. Most of the passengers are apparently old travelers. They do not bother to look at what was once an icy waste, now dotted with towns and cities.

None of the passengers noted the precise moment when the rocket reached the altitude required for the distance it is traveling and began to descend. Twenty-five minutes have now elapsed since the take-off, and the whole rear part of the rocket, which makes up about two-thirds of its length, becomes detached from the passenger section to drop to the earth by parachute. It will be used again for the next scheduled flight. The now considerably smaller rocket ship keeps going down at an increasing speed, and the landing engines are started to slow the rocket's fall.

The rocket lands on the water, a mile from shore. A tug tows the rocket to the landing platform. The passengers walk out on land which is flooded with bright morning sunshine.

### Where Are We?

But we do not yet know what city the rocket ship left from and where it arrived. And how it is that taking off in the evening, the ship landed in the morning, when it was in the air only half an hour.

You will remember that our imaginary interplanetary traveler in his space ship saw two rockets meeting over the North Pole. One was flying from New York to Leningrad and the other from Leningrad to New York. The passengers were going to spend the week-end

with friends on the other side of the globe. We have been traveling with one of these rocket ships. We can choose whichever one we prefer.

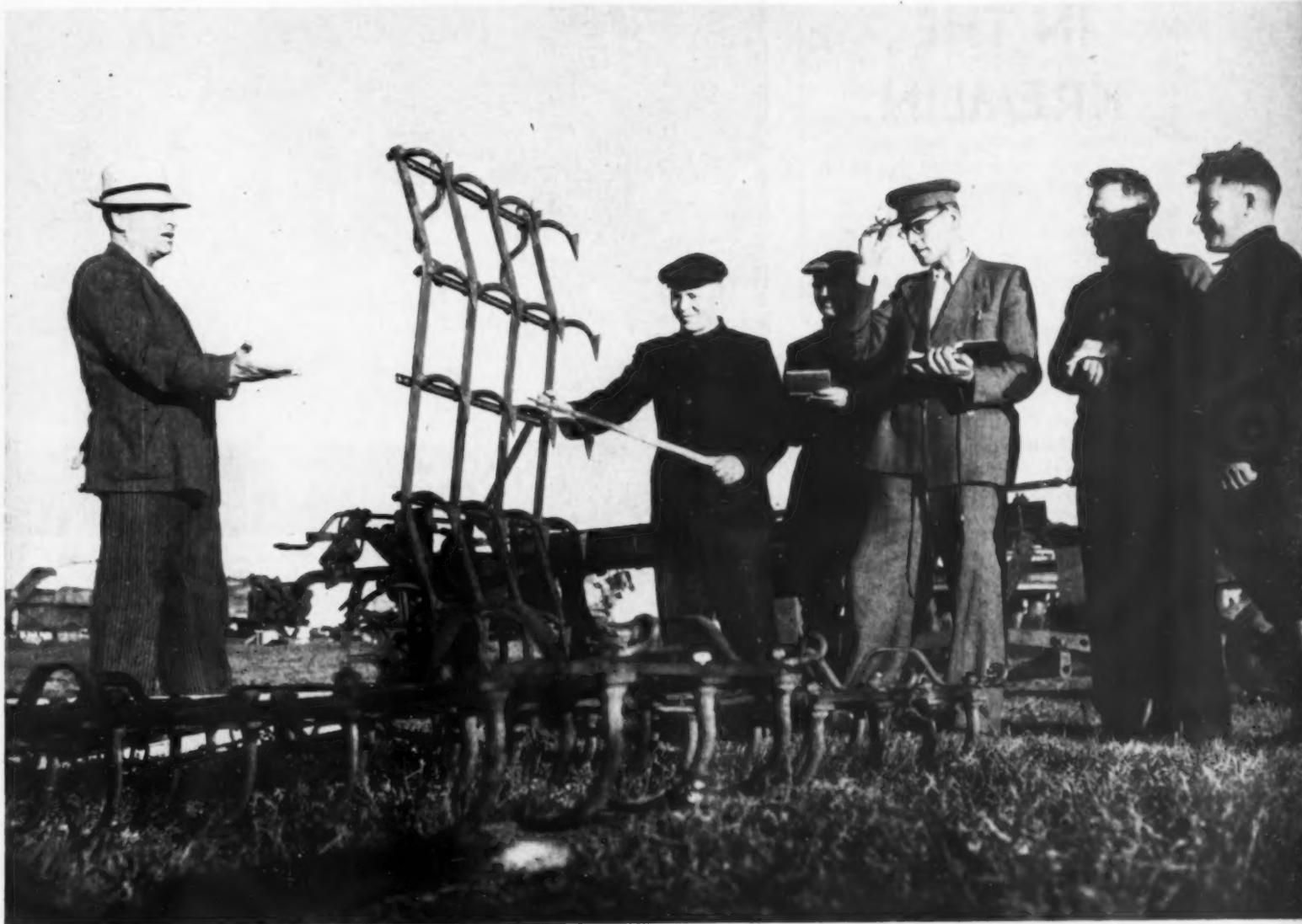
Scientifically speaking, we must qualify our story a little. Actually the two rocket ships could not have met over the Pole. Clocks in New York are twelve hours behind those in Leningrad.

But the time difference is the only thing that would make such a meeting impossible. The other vastly more important factors—growing international scientific cooperation and the very real possibility for intercontinental rocket liners—will see such scheduled trips within a generation, probably offered to passengers at excursion rates. ■

"LOOK AT HIM! HE ALWAYS FORGETS SOMETHING."



## THE FARMER WHO REJECTED A FACT



FARMERS FAMILIARIZE THEMSELVES WITH MALTSEV'S GRAB HARROW WHICH IS USED IN BLACK FALLOW AND AUTUMN PLOWING BEFORE SOWING WINTER WHEAT.

*Continued from page 27*

skeptics who attributed the high yields to soil, to good rainfall, to everything but Maltsev's simple discovery that plowing is not necessary.

But even the most obdurate of the skeptics stared open-mouthed at the stands of heavy golden wheat in fields which had not been plowed for three years.

They bombarded Maltsev with questions.

How should we apply your methods in Karelia? What sowing dates do you recommend for the Smolensk region? How many

years should we leave land unplowed in the Ukraine?

Maltsev had only one answer to all these questions. "I don't know. I cannot prescribe methods that will meet every situation and will work in every locality. A stereotyped approach is harmful. I don't want you to copy my methods. Use what is good and work out your own variations to suit your special conditions."

In the two and a half years since this conference was held, the new system of farming

has been tested in various parts of the country, under differing climatic conditions, in the Ukraine, in Kazakhstan, in the Caucasus. In the Transurals, Maltsev's method has already been applied over an area of close to two million acres. It is altogether likely that within a few years the unorthodox method of Terenty Maltsev, which developed out of his unwillingness to accept a "self-evident fact," will be in common use not only throughout the Soviet Union, but in many other food-producing countries in the world. ■

# U.S. TOURISTS IN THE KREMLIN



ANASTAS MIKOYAN, FIRST VICE-CHAIRMAN OF THE USSR COUNCIL OF MINISTERS, RECEIVES A GROUP OF AMERICAN TOURISTS WHO VISITED THE USSR LAST FALL.

GUESTS FROM THE UNITED STATES IN ONE OF THE HALLS OF THE KREMLIN IN MOSCOW.





ADIL EFENDIEV (CENTER) DISCUSSES A COVER DESIGN FOR A FORTHCOMING BOOK.

## READERS ARE NEVER SATISFIED

By Adil Efendiev, Director of  
Azerbaijan State Publishing House

The trouble with my job is that I can't ever satisfy the people who write in to me. I'm a publisher, and every morning my secretary hands me a big stack of mail. It comes from all parts of Azerbaijan. Whether it's a vine-grower in a mountain village, a school child, or an oilworker, my correspondents have one complaint in common—not enough books.

In 1956, our publishing house issued 350 titles with a circulation of more than five million volumes.

Because of the great demand for Azerbaijan classics we published a volume of verse by the twelfth century poet Meskhetly, the selected works of Natavan, a poet of the last century, and the tales of Alezker.

In modern Azerbaijan literature we published the works of Mirza Ibragimov, Suleiman Rustam, Rasul Rza, Samed Vurgun, Mamed Ragin and other authors and poets.

For translations from Russian, we have under way a fifteen-volume edition of Maxim Gorky's works in Azerbaijan, and we have just published a six-volume translation of Nikolai Gogol.

Works of foreign authors such as Charles

Dickens, Alexander Dumas, Theodore Dreiser, Lu Sin and Yaroslav Hashek, in mass editions, were sold out as soon as we got them to the book stores.

Our publishing house is the largest in the republic, but not the only one by any means. Each one of them publishes thousands of volumes, to say nothing of the books Azerbaijan gets from other parts of the country. But there still aren't enough to meet the demand, so that we have a perpetual job of trying to catch up.

This year we expect to publish half a million volumes more, and our translations will include Shakespeare, Schiller, Heine, Victor Hugo, Rabindranath Tagore, Saadi and Krishna Chandr.

For myself this last year? Well, in some ways it was not so good. I was the first to translate from Russian into Azerbaijan the works of Leo Tolstoy, Pushkin, Turgenev and Gorky. But last year my own work as translator had to go by the board because of the press of work at the publishing house. I'm hoping that I can find time for my own literary work this year. ■

*the year ahead...*

... THE YEAR BEHIND

## I Studied Life On Mars

Says Astronomer Gavril Tikhov

Since I am an astronomer, I'm inclined to see important events through a telescope. For the year 1956, September 10 stands out for me because Mars was then at favorable opposition, the closest approach to Earth in sixteen years.

We made some very interesting observations. Because of the comparative closeness of Mars to the sun, the temperature in the southern hemisphere of the planet rose sharply. This caused strong atmospheric turbulence, with snow in the median latitudes and sand and dust storms in the red Martian deserts. The sand and dust formed clouds which hid the southern polar cap from view and even penetrated beyond the equator into the northern hemisphere. In the middle of September the dust cloud settled down and we were able to observe a small polar cap lying on what was evidently a hill.

This gives us something to think about. The dust we observed in the Martian atmosphere makes it necessary to reconsider previous calculations of the density of the planet's atmosphere and of the planet's surface. What also has to be re-examined are calculations on the temperature of Mars.

Observations made by observatories all over the world, when they are collated and studied, will help to advance all work on the presence of terrestrial-type forms of life on Mars.

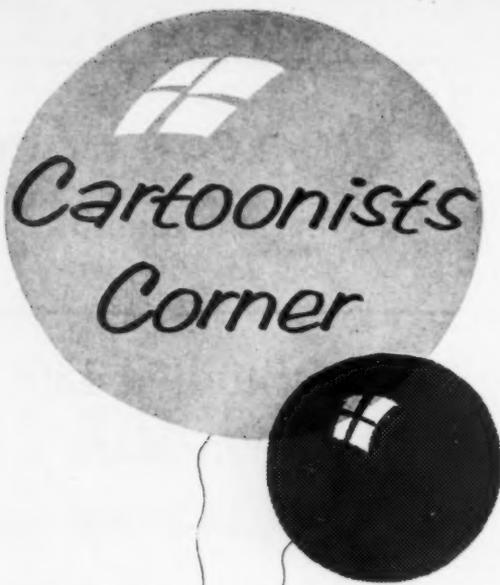
One other important event for all of us at the Astrobotanical Institute last year was the trip made by one of our graduate students, Sergei Stanko, to Yakutia, where he came across growing conditions which almost duplicated those on Mars. He found that the spectral qualities of the Yakut plants were very similar to those of Mars.

This year I hope that we can set up an international institute of astrobiology with representatives of all the related sciences: astronomy, physics, chemistry and biology. ■

*Interviews continued on page 52*

### SOME INTERESTING OBSERVATIONS



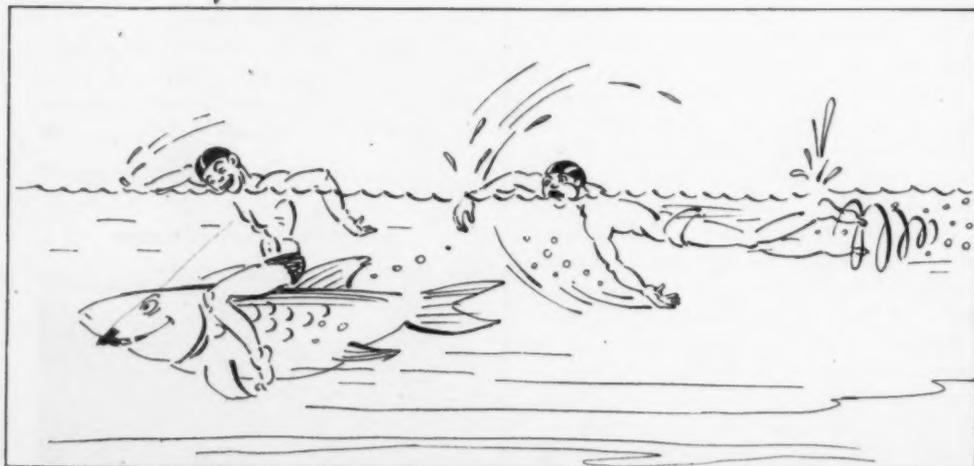


*the year ahead . . .*

. . . THE YEAR BEHIND

## THAT IS QUITE ENOUGH

By **Zulfa Pogarskaya,**  
*architect*



I graduated from the Institute of Architecture in Moscow six years ago, and since then have been working with one of the biggest designing organizations in the capital. I have helped to draw up plans for three apartment houses, each with 2,000 apartments, and one big office building. Last year I did the plans for another house of 1,000 apartments in the southwest district of Moscow.

Incidentally, there's a story connected with my plans for that house. The biggest critic of my plans proved to be my husband, who is also an architect. During the hot discussions we had he went so far as to call my ideas "half-baked." You can imagine how that contributed to peace in the family.

It turned out all right in the end, of course. But after that I decided not to subject our family ties to such a strain any more. So I suggested that we agree not to discuss architecture at home. The one who violated the agreement would have to buy the other a present. We put the agreement in writing, and both of us signed it. Since then, for almost a year, peace has reigned in our home, bolstered up every once in a while by a nice present from my husband.

My plans for 1957? I want to see the house I designed completed; I also want to do graduate work at the Academy of Architecture, visit Paris and, it goes without saying, strictly keep up our family agreement.

I think that is quite enough. ■

*Interviews continued on page 64*

Zulfa Pogarskaya, architect, supervising the construction of the apartment house she designed. ▶

...  
□

**H**

ture  
ave  
ign-  
ped  
ses,  
big  
for  
the

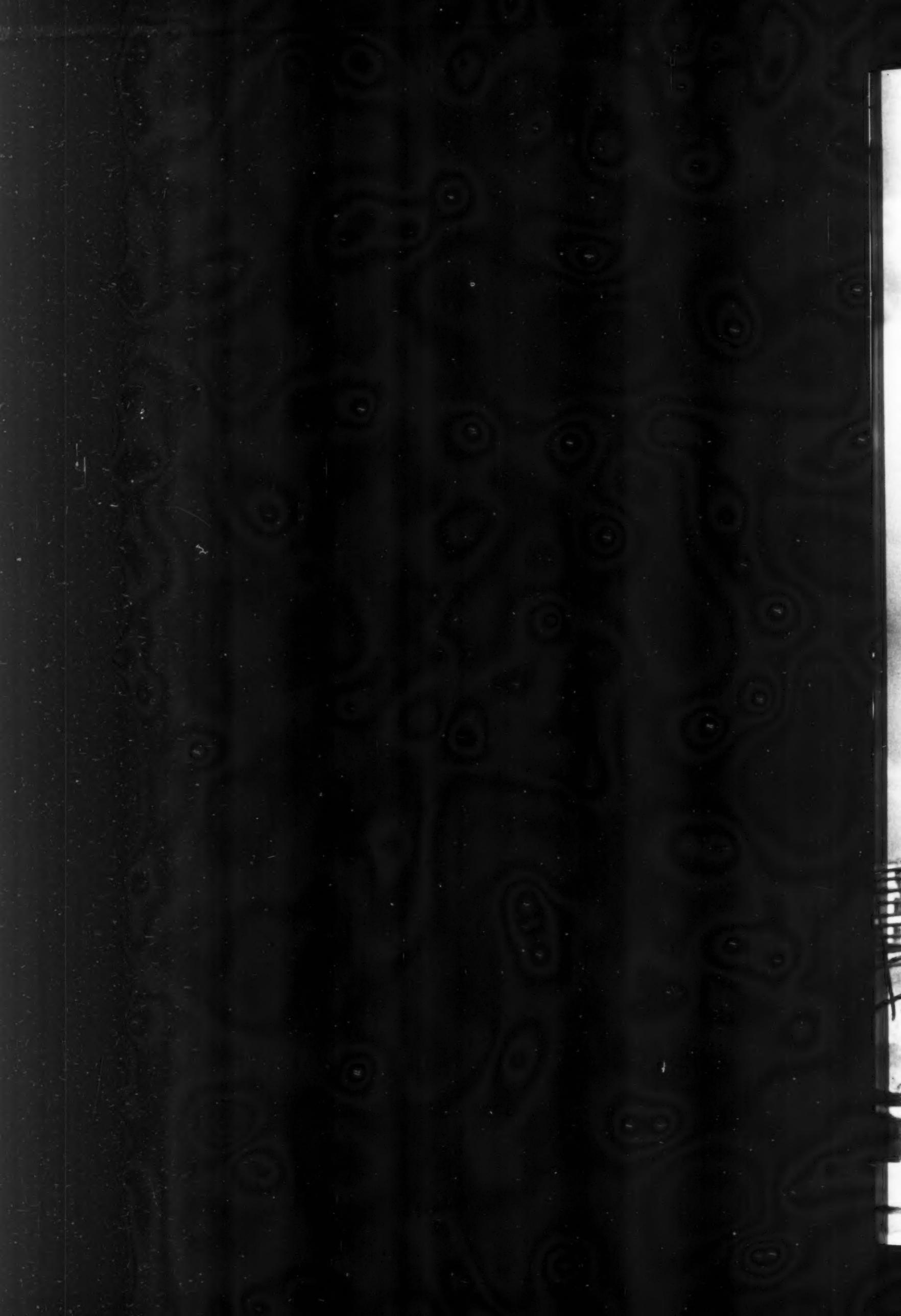
with  
of  
is  
ons  
eas  
on-

se.  
our  
o l  
hi-  
he  
a  
nd  
a  
ed  
nt

se  
do  
c-  
g.

■  
4

►  
l.







TRACKS AND HUNTERS



HUNTER AT READY

## BEAR HUNTING By Vadim Gippenreiter

The chill silence amid the slimy bogs of the dark forest is shattered by a thunderous roar. There is a crash of heavy bodies in the underbrush, a snarling, and then silence again.

At dawn ravens fly low, circling over the spot to the chatter of magpies. The broken, uprooted trees tell a plain story. The struggle was brief, and well-concealed in moss and twigs lies a big elk, hunted down by a bear. Another sign of Bruin's good hunting is the bark of a pine torn some six feet from the ground. That is where he cleaned his teeth and claws after an ample meal. He'll be back for another helping, and the wide-awake hunter will be waiting for him.

The bear is a cunning and mistrustful animal—not an easy prey. He will lie for hours listening to the forest noises before he returns to his kill. His astounding sense of smell has saved his life more than once.

There are all sorts of bears in our forests—from the huge animal weighing half a ton in Kamchatka and the fairly large bears of Siberia and European Russia, to the small Himalayan bears with black fur and white collars in the Far East, and the light brown ones of the Caucasus and of Central Asia.

To outwit the vigilance of a bear a hunter must be both capable and ingenious. His clothes must be well aired, so that there remains not even the remnant of a whiff of smoke; he must sit still for hours, scarcely daring to breathe; and he must hunt at dusk or at night for the best results.

I've followed the trail of a bear in the virgin forest of Archangel Region in the northwest of the country many times with a light and reliable 30-30 Winchester. Each hunting trip has new and exciting experiences, but there is one in particular I'll never forget. I was alone in the Archangel forests some 12 miles

from the nearest settlement. There was a lot of goose grass there, tiny tubers like onions, rich in starch. The bears eat them with relish to store up fat for their winter sleep.

The woods were not very thick, mostly small pines and birch trees, and everything was quiet. Here and there I could see patches of black earth dug up in the moss by the bears. The ground was soft, and I had to scramble over swampy mounds. There were fresh tracks everywhere. As time passed, I grew uneasy. Had I or had I not heard the grunt of a bear somewhere? I was startled even by the piping of a thrush and cocked my gun.

Within a few seconds a bear came rolling out among the birches. He was moving toward me quickly and not in the least clumsily. I pressed the trigger, and the impact of the bullet seemed to wheel him in his tracks. He rose on his hind legs, fell, but rose again. I fired again, never noticing the kick of the gun nor the sound of the shot. The only thing I was conscious of was that the animal in my field of view lay still.

But there was the snarl of a second bear. I could just see him flash by the trees and through the bushes. He was trying to escape. Raising the front sight a bit, I shot into the underbrush.

The third or fourth shot felled him, but he was up again and making for the woods. I could see the splash of red on his side. And then he was out of range.

Should I let him go? It was dangerous to go on alone—without dogs. A wounded bear is an ugly customer.

"He's a small bear," I thought. "I'll get him from a distance. The trees are not thick here and I can see him well."

The bear kept going, and I followed slowly.

Then the trail showed that he had made a loop.

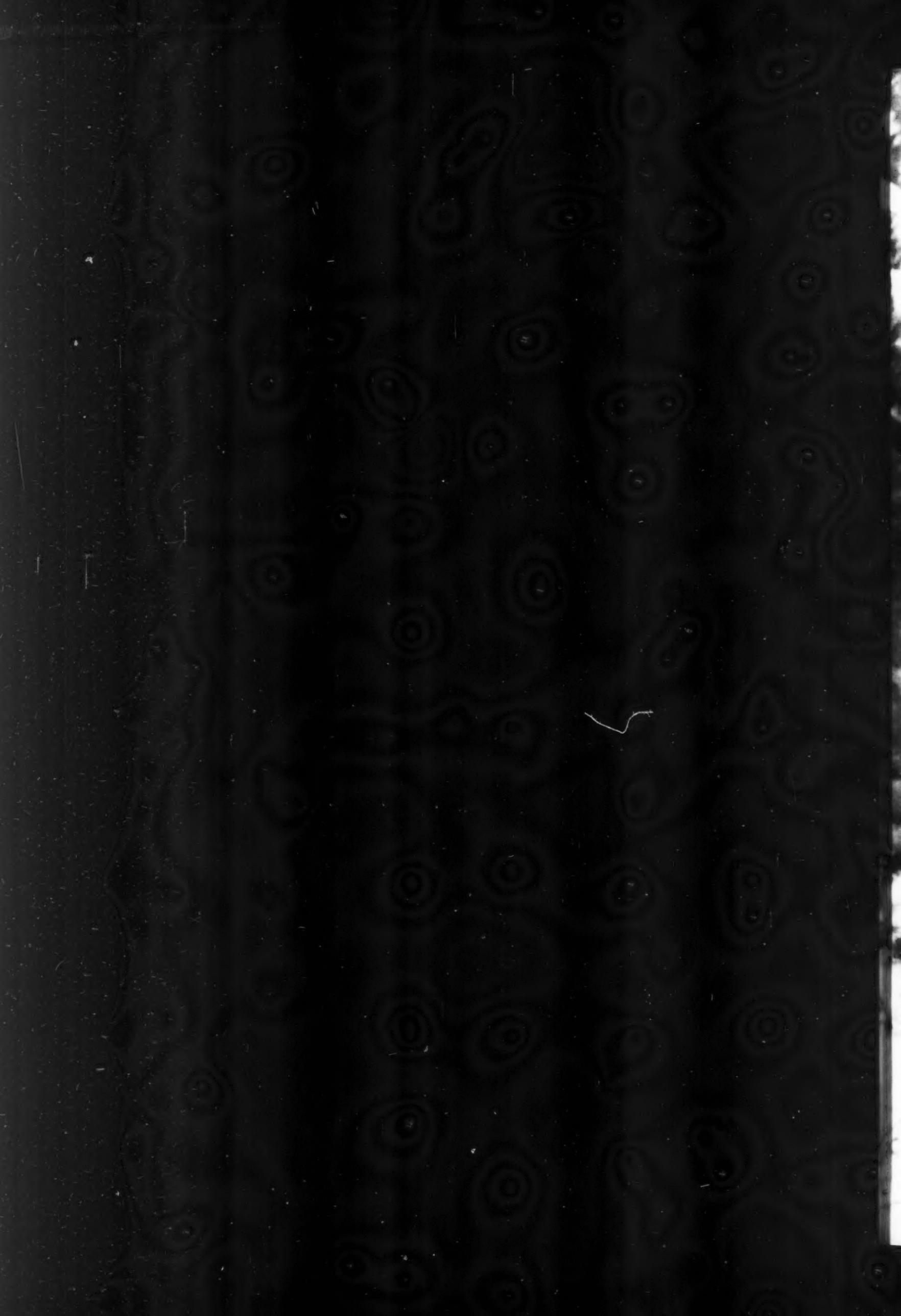
I stood for a second, wondering. Then something pounced upon me from behind, slightly from one side. I caught a glimpse of flattened ears, hairy legs and fangs. I fired wild. The animal was on me, I fell under him in the slushy moss. Kicking to keep my face from his claws and fangs, I grabbed my rifle and brought the butt down on his head just as he was about to lunge again. That finished him.

It was hard to get back to the camp, and it wasn't until I was sitting before the fire that I recovered.

Later, while skinning the bear, I saw that my last bullet had smashed his forepaw. "You were born lucky, brother," said my companion. "If he had been just a bit bigger, it would have been all up with you."



a  
en  
d.  
of  
ed  
m  
ce  
le  
st  
ed  
it  
at  
at  
ou  
n-  
it







◀ TAMARA ROMANOVA, THE MILL'S YOUNGEST WEAVER, ENJOYS HER JOB.

## TEXTILE MILL *Continued from page 38*

economy and the needs of the population as a whole. But after Yefimov had given me a breakdown of the allocations received by the mill for its own needs, I could see that a considerable share of the profit goes back to the mill's personnel. Here are some figures for 1955:

- 11 million rubles for mill equipment,
- 2.7 million for maintaining mill kindergartens and nurseries,
- 1.4 million for new housing,
- 0.5 million for personnel training,
- 0.3 million for medical services at the mill,
- 0.1 million for the mill's technical library.

Besides, the director of the mill is given a special fund each year. In 1955 it came to two million rubles. The disbursement of this fund is decided in consultation with the mill's trade union local.

Here is how the money was spent in 1955. Bonuses were given to 400 workers who submitted suggestions for improving work. Several hundred thousand rubles were appropriated to pay for rest home accommodations for mill workers. This was over and above the sum allocated for this purpose from the social insurance fund which is handled by the trade union organization. Considerable sums were spent for the upkeep of the summer camps for children which the mill maintains and for allowances to workers with large families.

### Wages

The wage scale, I learned, is established by annual agreement between the mill management and the trade union organization.

Wages are paid twice a month. For those of the mill's employees whose work can be rated, a piecework system operates. Workers get additional pay for larger output, for extra-high quality output, for efficient use of equipment, and for economical use of raw materials.

The average mill wage, varying with the trade, runs from 800 to 1,000 rubles a month. The director gets 2,500 rubles a month, shop superintendents from 1,200 to 1,600, and foremen from 1,100 to 1,200 rubles.

A bonus system operates for managerial and technical personnel, as well as for spinners and other workers. If a shop turns out more yarn than the original quota calls for, the personnel of the shop as a whole benefits. That means technicians, foremen and spinners all get a premium for each ton of yarn produced over and above the quota.



◀ FACTORY AND OFFICE WORKERS LIVE IN THIS APARTMENT HOUSE BUILT BY THE MILL.

THESE FIRST-GRADERS ATTEND THE ELEMENTARY SCHOOL NEAR THE MILL. ►

### In Addition to Wages

Wages in the Ivanovo mill, like wages of Soviet workers generally, do not reflect many very important benefits and services which either the government or the mill is responsible for providing. These include vacations with pay, free medical care, free education from elementary school through college and pensions.

The mill has an assistant director who is responsible for extra services. The job is held by Alexei Kurbatov. The son of a worker, he himself started at the textile mill when he was fifteen.

Housing is one of his responsibilities. In the past three decades the mill has built an entire street of apartment houses. Several new apartment houses are now under construction, one of them with 76 apartment units and another with 72. The mill builds and maintains these apartment houses. The rent and utilities come to no more than five per cent of the worker's wages. For workers who build their own homes, the mill provides building materials, hauling and professional advice.

The mill maintains two nurseries for 300 youngsters from three months to three years of age, and three kindergartens for 340 children from three to seven. The children are taken care of by experienced nursery-school teachers and pediatricians. Another kindergarten building to accommodate 110 children is now going up near the mill.

For kindergarten service the mill provides 500 rubles a month for each child and the parents from 35 to 110 rubles a month, depending upon their wages.

One of the wings of the mill's office building is occupied by the medical clinic, open from 8 A.M. to 8 P.M. and staffed by fifteen physicians in all the specialties and thirty-two assistants. At night a central first-aid station is open with a physician, two assistants and two nurses on duty. Every shop has a first-aid station open twenty-four hours a day. Each of the women's rest rooms in the various shops has a nurse on duty.

Another wing of the office building is a cafeteria. There are five other cafeterias in the shops which provide hot meals around the clock.

This is a picture of the Dzerzhinsky Mill as I got it, a picture different only in details from other plants, factories and mills throughout the length and breadth of the Soviet Union. The impression I carried away from conversations with workers, engineers and shop superintendents perhaps explains more than anything else the mill's success—the awareness of each of these many people I talked to that the better the mill, the greater the well-being of its workers. ■

CENTER PICTURE:

THE NEW PIANO BOUGHT BY A MILL WORKER PLEASES HIS 5-YEAR-OLD DAUGHTER.

EXPERIENCED TEACHERS KEEP THE YOUNGSTERS HAPPY AT THE MILL'S NURSERY. ►



## ZOO BABIES



### BABY ELEPHANT

They brought young elephant a shoe,  
He took it, stared at it through and through,  
And then remarked in some surprise:  
"I need at least *ten* shoes this size!"



### BABY PENGUIN

My front is white, my back is black,  
My shape is like a flour sack.

A sporting bird I used to be,  
I chased the ships that sail the sea.

But now I paddle in this pond,  
And of the Zoo I'm very fond.



### BABY OSTRICH

My neck is like a piece of string,  
I stretch it when I run.  
I wish that I knew how to sing,  
It must be lots of fun.

When I am very mad, I swing  
A hard and horny paw.  
But oh, I wish that I could sing,  
I cannot even caw.

## SAMUEL MARSHAK

*Drawings by Vladimir Lebedev*



Samuel Marshak was born in Russia in 1887. He began to write when he was nineteen and has devoted much time to translating the world's greatest poetry into the Russian language. His translations of Shakespeare, Burns, Byron and Heine retain the flavor, rhythm and depth of the originals. But he is best known as a writer of children's works. It would be quite safe to say that there is hardly a child in the Soviet Union who does not know his *Zoo Babies* and *In the Van*.

## *In the Van*

A lady sent in the van:  
A bag,  
A box,  
A divan,  
A hamper,  
A sampler,  
Some books,  
And a wee little doggy named Snooks.

At the station in Red Banner Street  
She was handed a yellow receipt  
That listed the things for the van:  
A bag,  
A box,  
A divan,  
A hamper,  
A sampler,  
Some books,  
And a wee little doggy named Snooks.

When the luggage was brought to the train,  
It was counted all over again,  
And packed away in the van:  
The bag,  
The box,  
The divan,  
The hamper,  
The sampler,  
The books,  
And the wee little doggy named Snooks.

But off the wee doggy ran  
As soon as the journey began.





# THE MILLER, THE BOY, AND THE ASS

And only on reaching the Don  
Was it found that the doggy was gone.  
All the luggage was safe in the van:  
The bag,  
The box,  
The divan,  
The hamper,  
The sampler,  
The books,  
But—where was the doggy named Snooks?

Just then an enormous black hound  
Came over the rails at a bound.  
It was caught and put in the van  
Along with the bag and the box,  
The hamper,  
The sampler,  
The books,  
Instead of the doggy named Snooks.

The lady got out of the train  
At a station in southern Ukraine.  
She called to a porter, who ran  
To bring her the things in the van:  
The bag,  
The box,  
The divan,  
The hamper,  
The sampler,  
The books,  
And the dog—that was *not* named Snooks.

The hound gave a terrible growl,  
The lady emitted a howl.  
"You robbers, you rascals!" cried she,  
"This isn't my dog, can't you see?"

She tore at the handles and locks,  
She kicked at the bag and the box,  
The hamper,  
The sampler,  
The books:  
"I *will* have my doggy named Snooks!"

"Just a minute, dear madam, don't shout,  
And don't throw your luggage about.  
It seems that you sent in the van:  
A bag,  
A box,  
A divan,  
A hamper,  
A sampler,  
Some books,  
And a wee little doggy named Snooks.  
"But the smallest of dogs, as you know,  
In the course of a journey may grow."

I  
An old man,  
A miller,  
Was riding  
An ass.  
His grandson  
Was walking  
Behind  
On the grass.

"Look!  
A disgrace!"  
Was the villagers'  
Talk.  
"Granddad  
Is riding,  
But grandson  
Must walk!"



II  
"Who ever  
Heard of it?  
There is no  
Word for it!  
Granddad  
Is riding,  
But grandson  
Must walk!"

Quickly  
The miller  
Dismounted,  
And put —  
The boy  
In the saddle,  
While he  
Went on foot.

III  
"Goodness,  
No manners!"  
An old woman  
Said.  
"Age  
Walks behind,  
While Youth  
Rides ahead!"

"Who ever  
Heard of it?  
There is no  
Word for it!  
Age  
Walks behind,  
While Youth  
Rides ahead!"



IV  
Granddad  
And grandson  
Both mounted  
And rode.  
They came  
To a man  
Who was hauling  
A load.

"Ugh!"  
Said the man,  
"No shame,  
Not the least!  
Two men  
On the back  
Of that poor  
Little beast!"

V  
"Who ever  
Heard of it?  
There is no  
Word for it!  
Two men  
On the back  
Of that poor  
Little beast!"

Granddad  
And grandson  
Both went  
On foot.  
On grandfather's  
Shoulders  
The donkey  
Was put.



VI  
"Ha, ha, ha!  
Ho, he, ho!"  
Roared a man  
With a sack.  
"An old ass  
Has put  
A young ass  
On his back!"

"Who ever  
Heard of it?  
There is no  
Word for it!  
An old ass  
Has put  
A young ass  
On his back!"



THE BEST PLAYERS FROM ARGENTINA FACE THE SOVIET CHESS TEAM.

# CHESS MARATHON

By Grandmaster Alexander Kotov

The chess teams of thirty-four nations—a record number—assembled in Moscow in September 1956 for the Twelfth Chess Olympics. More than 1,000 battles took place on the chessboard between 220 world masters of the game.

Held bi-annually, these competitions are the most exciting of all international chess meets. The first tournament took place in London in 1927. Since then the world's best chess players have met eleven times to match their skill. These competitions ended with the U. S. players winning the Challenge Cup four times, the Hungarians twice, the Polish, Germans and Yugoslavs once each, and the last two championship meets were won by the Soviet players.

The intricate problem of dividing the thirty-four teams into four semi-final groups of approximately equal strength was solved by having the team captains hand in lists of their teams in the order of strength they considered proper.

Each of the thirty-four lists was then added up, and the team with the lowest number was first in the general list, the next one was second, and so on. Then the general list was divided into four groups approximately equal in strength.

The results of the preliminary division and the results of the Olympics coincided to a remarkable degree. In the general ballot the first four teams were from the USSR, Yugoslavia, Hungary and Argentina. These teams were actually the winners in all the four semi-final divisions, and they finished in that order in the finals.

The semi-finals were only the prelude to the real struggle, only the means for distributing the participating teams into three succeeding tournaments: the winners, who were to continue their battle for the championship crown, and two classification groups. And only after that did the real battle begin, since each of these groups consisted of teams more or less of the same class, of equal strength. In the classification tournaments the frays were no less fierce than in the final tussle of the winning teams.

"What kind of world tournament is yours?" joked the representative of Scotland, whose team was playing in the second classification division with the twenty-fifth to thirty-fourth places in the Olympics at their disposal. "Well, take a look at the teams playing in the finals: the USSR, Yugoslavia, Denmark, Switzerland. These are all European countries, located near each other. But what do we have? The Philippines, India, Mongolia and, besides, Scotland, Puerto Rico and Luxem-

bourg. Different continents, all the mainlands. This is indeed a real world tournament!"

He was joking, of course. The attention of the whole chess world was held by the main tournament—the contest of the twelve winning teams. They were contending for gold medals and the Golden Challenge Cup of the world champion team.

The Soviet Union immediately forged into the lead. It beat the English team to the tune of 4:0 in the first round, and by the third encounter had a two-point margin over its chief rival, Yugoslavia. In the fourth round the Soviet grandmasters lost to the Hungarians. This loss, however, roused the Soviet grandmasters, and they won all the six following encounters. By the next to the last round they had already ensured themselves first place. In the end they gained a wide margin of 4½ points over the Yugoslav team, which was next in line.

The struggle for second place, which the experts had forecast for either Yugoslavia or Argentina, developed into a keen battle. But these forecasts were not fully realized. The Hungarian chess players displayed sound tactics and good team work. At one time they even contended for top place. But in the end they took the third rung, conceding the leadership to the USSR and Yugoslav teams. The Argentinians, this time playing less assuredly, were compelled to be satisfied with fourth.

The results of the Olympics proved very interesting. The audience applauded enthusiastically when the title of International Grandmaster was conferred on the 21-year-old Danish master Bent Larsen. His results in the Olympics really deserve special mention.

Playing on the first board and competing against the world's leading grandmasters, Larsen chalked up the best total: 14 points out of 18. This result was better than that of World Champion Mikhail Botvinnik, who scored 9½ points out of 13.

Several of the games played by Larsen in Moscow are noteworthy. Here is the ending of one of them. (See Diagram No. 1)

This position arose in the Balanel-Larsen encounter (the Denmark-Rumania match) in the finals. In this trenchant and intricate situation the young grandmaster discovers a correct path to victory:

60. . . . P-R7! 61. P-Q7 RxKtch!

A beautiful sacrifice as a result of which Black's two Queens set up an irresistible attack against White's King.

62. KxR

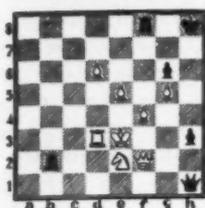
No better is 62. QxR Q-Kt8ch and 63. . . . P-R8=Q.

62. . . . Q-K5ch 63. K-Q2 Q-Kt5ch 64. K-K2 P-R8=Q. 65. P-Q8=Q Q(R)-K5ch 66. K-Q1 Q-Kt8ch 67. K-Q2 Q-Kt7ch 68. K-Q1 Q-KR8ch!

White resigns for on 69. Q-K1 the simplest is 69. . . . Q-R4ch with inevitable mate.

Diagram No. 1

B. Larsen



I. Balanel

Diagram No. 2

D. Bronstein



I. Aloni

Another surprise at the tournament was the excellent play of the Philippine chess player R. Cardoso. His result of 13 points out of 17 is very good. Only Soviet grandmaster David Bronstein was able to surpass this rival of his. Bronstein gathered 11 points out of 13 and established an absolute record for the Twelfth Chess Olympics.

I would say that the most interesting game played by Bronstein was his encounter with Aloni in the USSR-Israeli match. The Soviet grandmaster sacrificed three pawns in a row for the sake of obtaining an attack. Here is how it happened. (See Diagram No. 2)

In the position shown on the diagram Bronstein unexpectedly played:  
14. . . . P-QKt4! 15. PxP PxP 16. Kt(B)xP P-B5!

Black doesn't worry about the Pawns. The main thing here is to attack the King!

17. QxP Q-R4 18. B-Q4

Somewhat better is 18. B-Q2, after which it is more difficult for Black to develop his attack.

18. . . . KR-B1 19. B-B3 Kt-Q6ch 20. BxKt BxB 21. KtxB PxB 22. RxP Kt-K4

White has three extra Pawns. Black's offensive, however, is very formidable: all his pieces are taking part in the attack against White's King. No wonder that after another several moves Master I. Aloni is compelled to capitulate.

23. R-K3 R-Q1 24. Q-K7 R-Q2 25. Q-B6 Q-B4. 26. Kt-B2

The only defense against the threats of capturing the Rook or the Knight on R3, as also against the check from his Q3-square.

26. . . . Kt-Q6ch 27. RxKt

A forced return of material. On 27. K-Kt1 there at least follows 27. . . . Q-Kt3 with unavoidable threats.

27. . . . RxR 28. P-QR3 Q-B7 29. R-K1 R-Q7

White resigns for he loses a piece.

The Moscow chess festival was an outstanding one in many respects. This gala event of the world's strongest men players was enhanced by the competitions held among the women and the appearance of a new world champion—Olga Rubtsova, who emerged victorious from a three-cornered match with her compatriots Yelizaveta Bykova and Ludmila Rudenko.

Teams from India, Iran and the Mongolian People's Republic took part in the Olympics for the first time, making it a real tournament of nations.

An interesting commentary on the caliber of their game was supplied



A SECTION OF THE HALL DURING THE TOURNAMENT

by Miguel Najdorf, the expansive Argentine grandmaster, during one of the semi-final rounds. "It's getting more and more difficult to play," he complained good-naturedly. "New chess players have come from India and Mongolia. They are participating in an international meet for the first time, and yet they know the theory of openings up to the twenty-fifth move!"

The pleasure of meeting the new chess players partly made up for the absence of some of the old ones. It was especially disappointing that the United States team didn't attend. It might well have finished among the prize winners in the Olympics.

The contending teams left Moscow hoping to meet over the chessboard more often in the future. ■

HONORING OLGA RUBTSOVA, NEW WOMEN'S CHESS CHAMPION.



## EXCURSION INTO THE FUTURE

*Continued from page 33*

to build huge heat-driven power plants near the future dam?

No, because the electricity supplied by atomic power plants would obviate the need for all that!

Some day, not too far in the future, this daring project will become an actuality. When Japanese scientists learned of these dreams of Soviet scientists, they acclaimed them enthusiastically. And a group of German engineers proposed to arrange international cooperation to prepare the groundwork.

### The Man Who Slept a Thousand Years

But what has the science of the future in store for man himself, for that complex and often unfathomable machine—his body?

The man is lying on a glittering white table surrounded by corrugated tubes and wire. Instruments record the last beat of his dying heart, the last twitch of his collapsing lungs.

The man is dying, but it is a different kind of death. He has taken antibiotics into his blood stream, has felt drugs seeping into his body. Now as he lies, barely alive, the men in white smocks bending over the table inject a compound into his veins which spreads into the finest blood vessels covering the cerebral

cortex, to protect it against disintegration.

He is asleep, for a hundred years, or a thousand.

When the instruments have recorded that prescribed measure of time, the tubes surrounding him will once again pulse, the current will once again run through the wire. A blanket of electric current will warm his frigid body, an artificial heart will drive the first stream of warm blood through his blood vessels and the first thought will originate somewhere deep in the recesses of his awakened consciousness.

The man asleep—or dead—for a thousand years will open his eyes on a world of the future, bright and shining, and certainly, we should like to believe, happier than the world in which he fell asleep.

### The Dream and the Reality

A physiologist's dream? Not altogether. Here is the reality.

In Professor Sergei Bryukhonenko's laboratory I was shown a small piece of apparatus built of glass, stainless steel, and rubber tubing. A commonplace looking instrument with an incredible function. An artificial heart.

Oxygen permeates the very fine hematoid foam warmed to body temperature. Tiny electric pumps, imitating the beat of the human heart with remarkable accuracy, drive the blood through the living organism.

I watched the physiologists join the artificial heart to the circulatory system of a dog who had been dead for fifteen minutes. The dog came back to life.

I looked on unbelieving. "And a man," I

asked Professor Bryukhonenko when I had recovered my breath, "could a man be restored to life?"

"Yes," he answered simply, "but no later than six or eight minutes after death takes place. Once the irreparable process of disintegration begins in the human cerebrum, it is impossible to revive a man with all his normal functions. That is, impossible today. But in the future . . ."

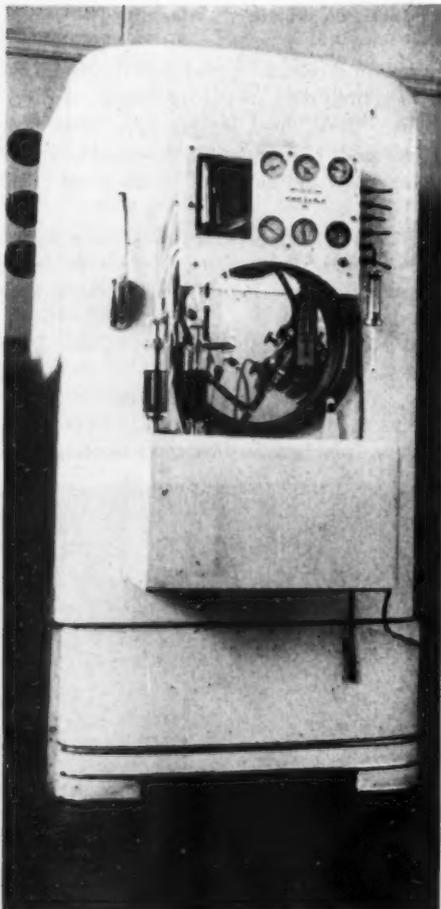
The Professor did not complete this last sentence. Instead he told me about an experiment he had recently performed.

The body of a girl dead eighteen hours was brought to his laboratory. It was cold and rigid. The artificial heart was joined to the still warm arteries of the corpse. It was set beating. As the scientists watched, color began to appear in the cheeks, the body warmed and began to relax. Then the arm of the corpse moved. It moved slowly up, and the girl placed it under her head.

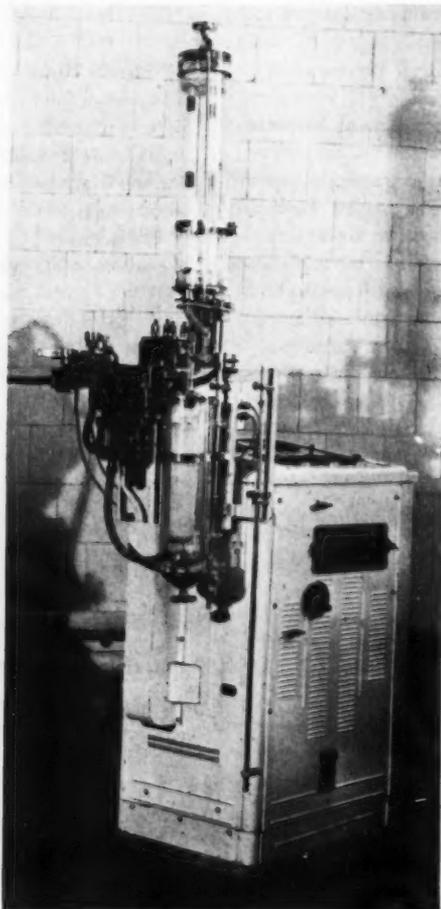
"That was as close to a miracle of science as anything any of us had ever seen," the Professor said, his voice still excited at the recollection. "But it was still not life. The cerebrum injured by death was passive, but all its cells eighteen hours after death had not yet died. Some tiny center must still have been alive with enough force to raise the girl's arm, although she could no longer be revived."

Science, the Professor told me, has had to pause before one of its great problems, safeguarding the brain from disintegration. When this is solved, it will be possible to revive a man long after he has died.

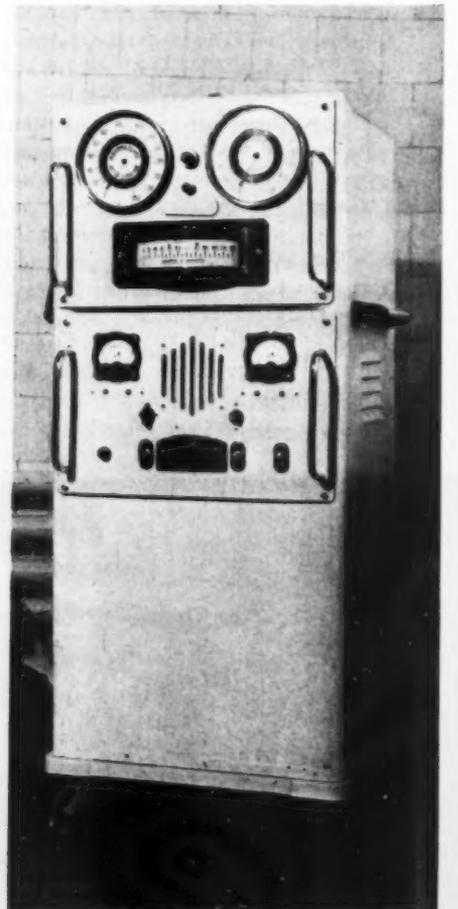
Here is a fantastic reality indeed. ■



DEVICE PRESERVES ORGANS FOR TRANSPLANTATION



AN ELECTRONIC HEART-AND-LUNG MACHINE



ELECTROCARDIOGRAPH TELLS THE HEART'S STORY

# THE OLYMPICS IN RETROSPECT

By Victor Kuprianov



OLYMPIC CHAMPION VLADIMIR KUTZ AND HIS WIFE RAISA

Through the passing weeks since the Olympic flame was extinguished in Melbourne sportsmen around the globe have continued to comment on the contests there. And they will continue to make barbershop conversation probably until the next Olympics in 1960. So I take the opportunity to add my own comments, like a Monday morning quarterback or Hot Stove Leaguer.

I remember how much crystal gazing there had been before the Olympic games started. And I also remember that not many forecasters were able to predict the final medal tally—Gold: USSR 37, USA 32; Silver: 29 to 25; and Bronze: 32 to 17.

Soviet fans were naturally jubilant. But there is something that will keep us up burning the midnight oil. For me the reason is that the Soviet performance ranged from surprisingly good to disappointingly bad. That must make the coaches think when preparing another squad for the 1960 games.

The track and field events came as a hard jolt to our fans. To begin with there was the clean sweep made by Australia in the women's track events and the comparatively poor showing made by Soviet sprinters. And our stars in other events did not come up to expectations—in fact, showings were often lower than those in our Olympic tryouts.

Much speculation has been raised as to this point. Some observers seemed to feel that the Soviet athletes were not in peak form at Olympic time.

There are other reasons that should be taken into consideration, and the most important is competition. The best training without competition won't get an athlete very far. And the Soviet squad had very few meets on the international level before the Olympics.

Another point often discussed is the question of age. On the whole the Soviet team had perhaps the widest range of age groups. Its track and field stars are older than their American opposite numbers. It's true the Soviet team had a good sprinkling of youngsters, but it seems to me that the lower our age average—the better.

While our women athletes have not brought home too many turkeys (or is it medals they offer at the Olympic games?), they have certainly proved one interesting point: husbands and babies do not interfere with a woman's career in sports. About half the track and field squad are married, and approximately every third star has a baby.

The Olympic games were a test not only of individual skill and techniques but of tactics and schools of training. Distance runner

Vladimir Kutz is an excellent case in point. He not only won two gold medals (for the 5,000- and 10,000-meter races), but he suggested that the conventional system of racing tactics might have to be revamped.

Ordinarily in distance running the idea is to let the other man take the lead and pace you until you dash out from behind and win. The man in the lead at the start was always considered to be at a disadvantage psychologically, since he could not see what was going on behind him and had no way of knowing whether he was going too slow or too fast.

In the 10,000-meter race Vladimir Kutz ran ahead to the lead with the starter's gun. Britain's Gordon Pirie kept on his heels all the way—until the last 1,600 meters anyway. Under ordinary circumstances Pirie's tactics were correct, in fact winning tactics. But these were no ordinary circumstances.

First of all, Kutz learned to race all by himself—he needed no one to pace him. Kutz also learned to rest while he runs. He changes his pace all along and runs according to a strict schedule that any railroad superintendent would be proud of.

At the Olympic games Kutz wore his opponents down by his fatiguing pace. With 1,600 meters to go the pace proved too much for Gordon Pirie and he began dropping back. Kutz continued to lead and broke the tape 27 seconds ahead of the Olympic record belonging to Emil Zatopek.

Kutz repeated his tactics to win the 5,000-meter gold medal as well. And when it was all over, he said he felt fresh enough to run the marathon.

I will admit—Kutz is a phenomenal runner, one that isn't born every day. But the point I want to make is: the Kutz way of running will make coaches sit up and wonder "isn't it time to change running tactics?"

There are some who profess surprise at the outcome in boxing which saw us put four men into the finals and take three gold medals, but I think there is no justification for surprise. Our school of boxing now is closer to the amateur ideal. We emphasize ring tactics, defensive skill and boxing know-how rather than the slow slugger with dynamite in his fists. We had been criticized sharply in previous contests, and it appears now that we are on the right track.

But I believe there was a genuine surprise in the rowing lineup of our squad. Young Vyacheslav Ivanov, who made his debut in singles sculling just over a year ago, outstroked Olympic Champion Yuri Tyukalov in our trials. Tyukalov, however, was determined to go to the Olympics, so he teamed up with our number three singles rower, Alexander Berkutov, to form a double sculls team that went on to take the gold medal at Melbourne.

That brings us to gymnastics and wrestling and a point that I feel needs making. The Olympic games have a long and honorable history in international amateur athletics. There has been some criticism of the retention of gymnastics and Greco-Roman wrestling in the games from some countries that have limited interest in these events. Gymnastics are scored on form and grace just as are the more popular or "accepted" events, such as diving or figure skating. The true Olympic spirit does not divide sports into first and second classes. The goal is to try one's best in all the events. ■

GOLD MEDALISTS YURI TYUKALOV (RIGHT) AND ALEXANDER BERKUTOV



*the year ahead...*

... THE YEAR BEHIND

AS LYDIA BELOUSOVA  
SEES IT



LYDIA BELOUSOVA, SAVINGS BANK MANAGER.

"I know, I look very young for the job, and so on and so forth. I'm beginning to feel like a phonograph record, the number of times I've had to recite my biography. I'm 22 and I came to work straight from business school. I worked as control clerk for a year and a half, another eighteen months as head clerk and then early last year I was appointed manager."

"That must have made the year very special for you. And how do you find business?"

"Fine. Total deposits at our bank increased by fifty per cent during the year."

"Can you think of any interesting incident that happened to you or the bank last year?"

"Well, let me tell you about one of our oldest depositors. I'm sorry I can't cite his name, because this is against our banking regulations. In the last eleven years he has made a deposit of 350 rubles every month like clockwork. He has never missed a month, and didn't make even one withdrawal during these years."

"One day last fall he came in and made out a withdrawal slip for 6,000 rubles. We were all very curious, naturally, and we asked him what had happened."

"Nothing," he said. "I just decided to take a trip."

"Six thousand rubles' worth?" we asked.

"And why not?" he said.

"With the new pension law, adopted last year, his old age pension had jumped up, so he didn't have to save so much for his retirement. And he's not the only one among our depositors."

"It's not a very exciting incident, is it? But then bankers make it a rule to have their accidents and exciting incidents only after banking hours. It's safer for depositors." ■

AN IMPORTANT YEAR  
FOR A FORMER ACTOR

By Ilya Lavrov, Writer

For me, 1956 was what I might call a decisive year. For the last few years I have been an actor, I flatter myself, a moderately good one. I toured most of the country, met all sorts of interesting people and thought that so far as my work was concerned I was set for life.

But for a long time I must have been feeling dissatisfied with the stage and its natural limitations. I suppose half-consciously I was groping for a wider medium of expression. So about a year and a half ago I tried my hand at writing.

I was playing in Chita then, set in the beautiful Siberian region beyond Lake Baikal. It is a sizable city with a good theater, schools and publishing houses, and more important for me, a good many writers live in the area, so that Chita has a local organization of the Writers' Union.

I submitted my first story with the usual qualms of an amateur. It was accepted for publication. Any budding writer will understand how I felt—as close to heaven as I suppose I'll ever get. Then I wrote two more and they were also published. No more acting.

Last year I was invited to the nation-wide Conference of Young Authors held in Moscow. We met with many of the older writers for discussion and criticism of technique. Much of it was helpful and encouraging.

Shortly after the conference my first book, *Undying Song*, a collection of short stories, was published in Moscow. So far it has brought me royalties of 90,000 rubles. That means I can spend the next three or four years doing full-time writing.

I was also admitted to membership in the Writers' Union, a voluntary association of professional writers. Membership in the union offers many advantages. The union helps writers with grants and loans; it finances trips for research; it maintains hostels and resorts where writers can work undisturbed. Funds for these activities come from the publishing houses.

For this year I have my work pretty well lined up. I am doing a novel about the theater and translating into Russian some of the Buryat writers.

The Buryats are a small nationality in the trans-Baikal region. Within the last few decades Buryat doctors, teachers, engineers and writers have developed. Baldanzhabon is the best-known of the Buryat writers. I am translating two of his novels.

All in all, looking back on it, 1956 was certainly a busy year for me. I have an idea, from the way things are shaping up, that this year is likely to be even busier. Did I tell you that I'm also working on a play I hope to finish before the end of 1957? ■

ILYA LAVROV, WRITER AND FORMER ACTOR.



ok,  
es,  
has  
hat  
our

the  
of  
ion  
lps  
ips  
rts  
nds  
ing

well  
ter  
the

the  
ec-  
nd  
the  
ns-

er-  
ea,  
his  
rou  
to  
■









