

SCIENCE

USSR

ZHUKOV—
THE SOLDIER
THE MAN

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USSR

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MARSHAL GEORGI ZHUKOV

— A Profile —

He knows what war means as do very few other people. That is why he opposes it and strives for world peace.



In November, 1941, the Nazi advance was on. Nikolai Bulganin (center), Georgi Zhukov (right) and Vasili Sokolovsky planned the rout of the Nazis from the Moscow sector.

The surest and best way of getting to know a country is to know its people. In keeping with this idea, the magazine *USSR* will feature a story in each issue about a Soviet citizen, famous as well as relatively unknown. This month Marshal of the Soviet Union Georgi Zhukov is introduced.

Desiring to give their readers extensive information, the editors requested permission to see the Zhukov family albums and to publish some of their photographs. The Marshal kindly granted this request.

The editors regret, however, that they were unable to obtain photographs covering a longer span of time. Zhukov's prewar life is represented in very few pictures in the family album, and his youth was completely missed by the camera.

There are reasons for that, of course.

At the time of Zhukov's youth, the dawn of this century, a visit to a photographer would have been an impossible luxury for the son of a poor peasant who had earned his way from the age of 13 and who had left home in order to seek a livelihood in the city.

And in 1915, when Zhukov became a private soldier at 20 and was marched to the trenches to battle in World War I, he hardly thought of photographs.

This war was barely over when another began. Private Zhukov joined the Red Army to defend his right to the life he desired, to defend the freedom and independence of his country, his own people. And again he had no occasion to pose for cameramen.

Later he attended a few military schools and was always busy. He was eager to make up for lost time, to get the education that was too costly in his youth of limited means. He wanted to gain all the knowledge acquired by the learned members of his generation, and even a little more. He achieved all of that, but he had no time for recording his life story in photographs.

Since that time he has occupied various high posts in the army, and, like every professional officer, has led a roving life, moving from one part of the country to another. Accustomed as she became to quick packing and to making endless trips with her children, Mrs. Zhukov, nevertheless, would always forget to pack one or another family memento, photographs among them.

That is why this illustrated story about Marshal Georgi Zhukov begins at the time when he had become an international figure.

Those were the grim yet heroic Second World War days.

A REAL FRONT-LINE GENERAL, ZHUKOV OFTEN VISITED TROOPS UNDER HIS COMMAND TO MAKE ON-THE-SPOT DECISIONS, PLAN FURTHER MOVES.





Victory for the anti-Hitlerite coalition! Marshal Zhukov watches the Nazi generals enter the Potsdam hall to sign the unconditional surrender.

Marshal Zhukov put a great deal of emphasis on the fighting alliance of Soviet and American troops in their joint struggle against the Nazis during World

War II. It was a great pleasure for him to present General Dwight D. Eisenhower with the order of Victory, the highest military award of the Soviet Union.



Marshal
after the
surrender.



MARSHAL GEORGI ZHUKOV, ABSORBED IN WORK AT HIS DESK IN THE INLAID WOOD-PANELED OFFICES OF THE MINISTRY OF DEFENSE OF THE U.S.S.R.

enhower
Union.



AT THE GENEVA CONFERENCE LAST SUMMER, ZHUKOV WAS A MEMBER OF THE SOVIET DELEGATION.

LIKE ANYONE ELSE, THE MARSHAL ENJOYS A JOKE WITH AN ASSISTANT AT LUNCH.



HE SELDOM MISSES A CHANCE TO CHAT WITH MEN IN THE RANKS.





Zhukov enjoys Sunday with his family at his country home near Moscow. The Zhukovs have two daughters. The elder, Era, sitting next to her mother, holds a master's degree in juridical sciences. Her husband, Yuri, is a flyer. Daughter Ella is a student, majoring in law. Her husband, Klim, is an undergraduate at Moscow State University. The little girl is Sashenka, Era's 6-year-old daughter.



SASHENKA LEADS HER GRANDFATHER BY THE HAND FOR A SWIM IN THE RIVER.

SASHENKA SPLASHES AROUND HAPPILY WHILE THE NEARBY MARSHAL WATCHES.



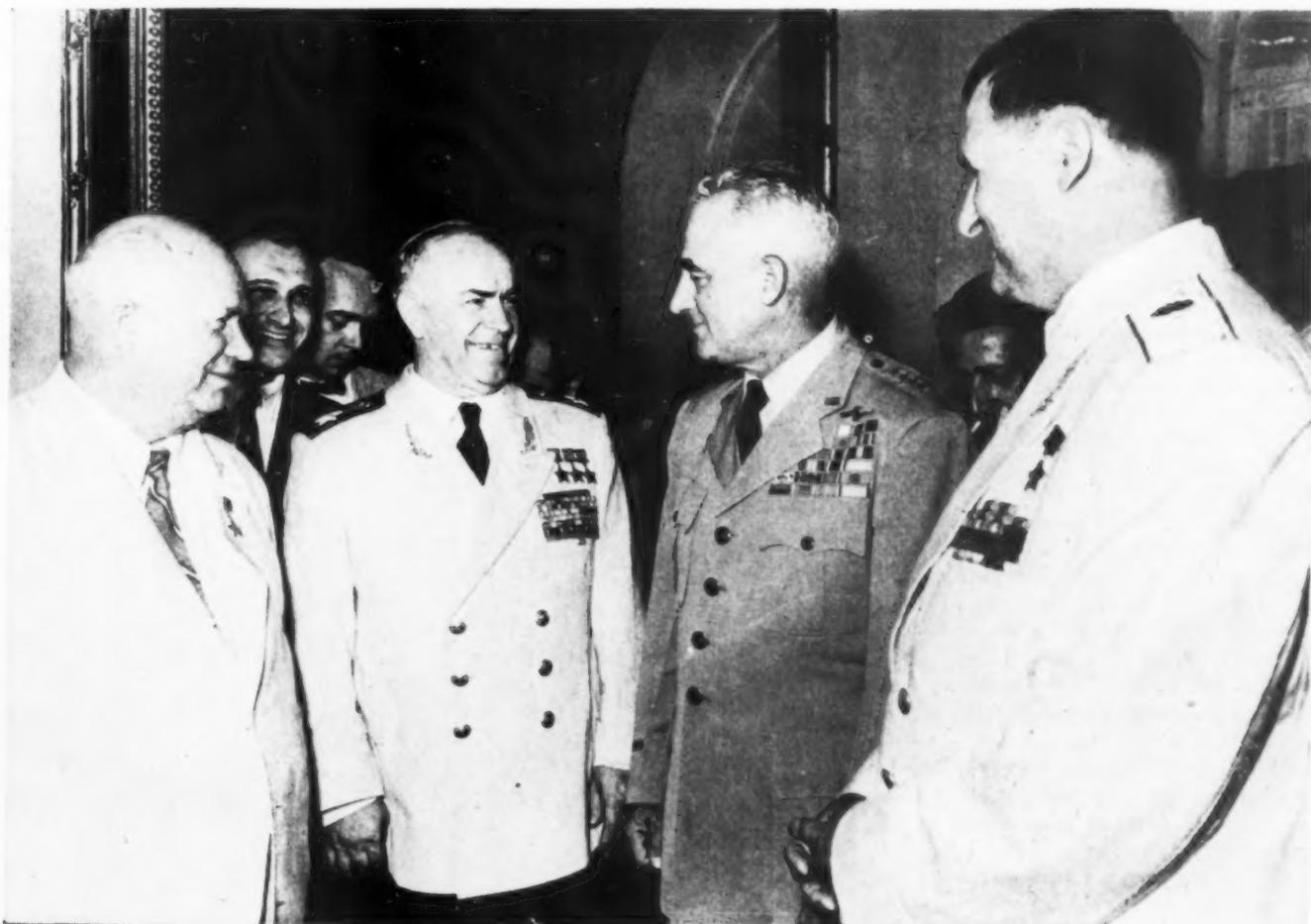
ZHUKOV WAVES TO HIS WIFE FROM THE STEPS AT THE RIVERSIDE.





While Zhukov is an excellent horseman, he is equally adept with oars and fishing rod. He finds it relaxing to be on the water

after the press of official duties and obtains a fisherman's thrill from a good catch. He likes hunting, too, and is a good shot.



At a reception held recently in Moscow on Aviation Day by Marshal Zhukov, one of the guests was General Nathan Twining, chief of staff of the United States Air Force. Zhukov inquired about President Eisenhower's

health, saying, "One can't forget an old friend. I wish Mr. Eisenhower many years of good health. I'd like you to convey to him the most hearty regards from an old soldier." Good humor prevailed throughout the reception.



HE KNEW IT WAS MORE THAN SOMETHING HE ATE. SURGEONS PERFORM ABDOMINAL OPERATION. HE'LL RECUPERATE IN THE LYING-IN SECTION OF PET HOSPITAL.

PET INSURANCE

A HOSPITAL FOR OUR SPEECHLESS FRIENDS *By Margarita Bagreyeva*

ARRIVING AT THE VET'S. SO MANY FRIENDS HERE.

Masha Golikova is an old friend of mine. Since she is very social and cheerful, I was very surprised when I found her unusually sad and reserved. Thinking that she was upset by some great sorrow, I took special care to keep from asking tactless questions. It developed that Masha was upset by her Pomeranian's condition. For two days the dog had refused to eat.

"My goodness, Masha," I scolded, "you shouldn't let yourself be so upset by trifles." No sooner had I said it than I realized that I was guilty of the very tactlessness I had sought to avoid. One could persuade Masha of many things, but to call the indisposition of her wonderful Pomeranian a trifle was an offense.

Frankly speaking, I have known many adults as well as children who were very fond of domestic animals. I myself, in fact, am not indifferent to them. I remember how bitterly I cried in my childhood when my pet bird broke its wing, and how great was my delight when our neighbor returned from a trip to the tropics with a parrot.

One of my friends takes great delight in his fish collection. His apartment is practically filled with aquariums in which one can see fish of many different shapes, sizes and colors.

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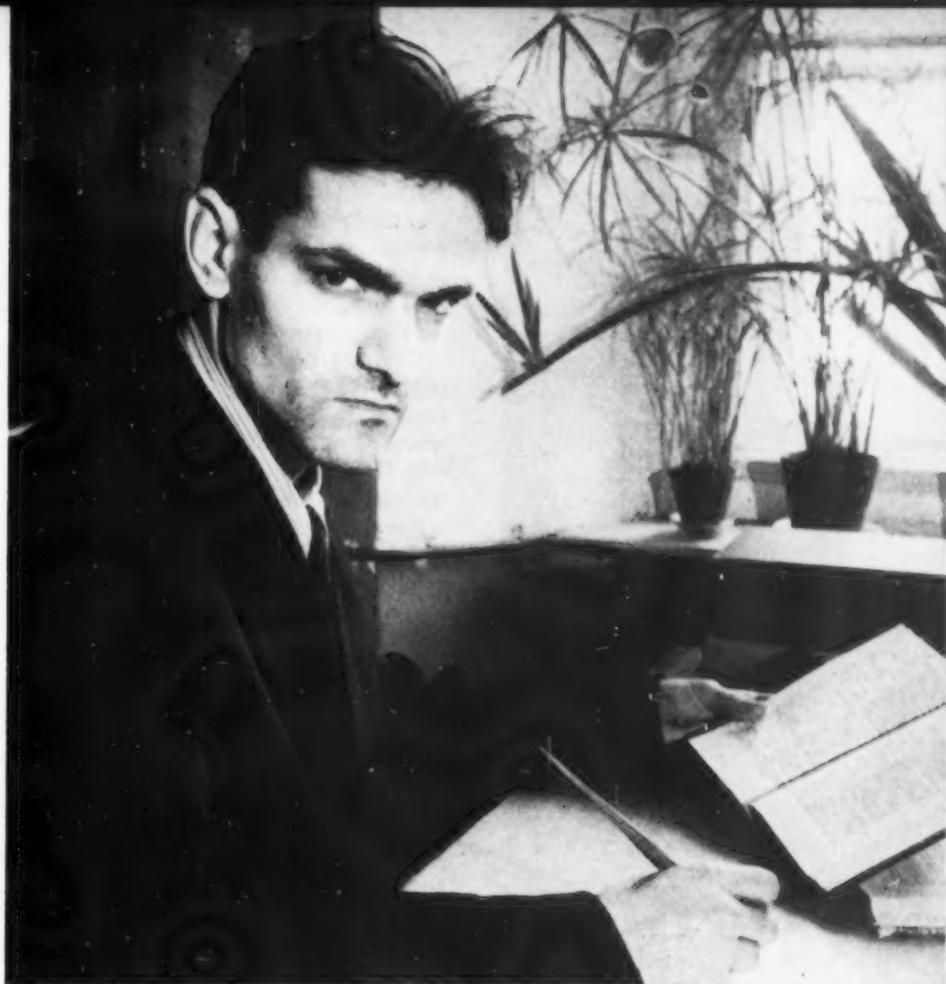


Rainy sky



Dew from the sky

Mayan hieroglyphic inscription found in Guatemala



YURI KNOROZOV THE YOUNG SCIENTIST WHO FOUND THE KEY TO AN ANCIENT MYSTERY.

By Anatoli Agranovsky

This is the story of an adventure in research, as fascinating in its way as any voyage of exploration into the unknown. The explorer is a young historian, Yuri Knorozov, and the little-known country he ventured into was the ancient empire the Mayas had built on the American continent.

We know the history of Greece, Rome, of the Slavic peoples, of ancient Byzantium. We are familiar with the great civilizations of Egypt, of the Tigris-Euphrates area and of China. But we have only the most fragmentary knowledge, half myth and half fine-drawn speculation, about the history of the ancient peoples of America. From archaeological excavations in Mexico and Guatemala, we have learned that the Maya Indians, at the dawn of our era, had built a flourishing civilization, with a drama, dance, fresco and sculpture that is counted among the great artistic endeavors of mankind. But while we have learned a good deal about their arts, we know very little of the Mayan history.

Archaeologists have been aware for a long time that the key to Mayan history was to be found in their inscriptions. Discovered in the ruins of their ancient cities, they were esti-

imated to cover a time span of 1500 years. It was history fossilized, frozen on the walls of once splendid palaces and temples, on altars where human captives were offered in sacrifice, on monuments erected to commemorate great kings and victories. But the Mayan inscriptions told nothing; no one could read them. Ever since the middle of the 19th century, literally hundreds of linguists, ethnographers and historians, both European and American, had labored in vain to decipher these mysterious symbols.

Yuri Knorozov found the key. He announced his discovery to an admiring world of scholars in his first published work, a dissertation written for the degree of Master of Science. It was hailed as important a discovery as that of the Egyptologist, Jean Francois Champollion, who had deciphered the cuneiform inscriptions in 1822.

Only one of the many honors showered on Knorozov was the doctor's degree in history, conferred by the Academy of Sciences of the USSR, an exceptional award for a master's thesis.

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AN ADVENTURE IN RESEARCH:

Deciphering The Ancient Mayan Inscriptions



"It's weight shows that the kind sentiments of the entire Soviet people have been baked into it," says Roy Stewart, correspondent for the *Daily Oklahoman*.

OKLAHOMA— THE UKRAINE

American tourists, Oklahoma farmers, were greeted in the Soviet Union as friends. They went everywhere they wanted to go, and saw whatever interested them.

By Lev Petrov

When the 29 Oklahoma farmers and cattlemen who were making a tour of the USSR in May decided to visit the Ukraine, I was assigned to cover the trip. So there I was traveling in the same car with the Oklahomans, bound for Kiev, the Ukrainian capital.

At first my American neighbors in the compartment, Clark Moore and George Vanpool, were noticeably cool. It was only after dinner that Clark, in a more expansive frame of mind, slapped me on the shoulder and said, "Come on now, tell us the truth. You aren't a reporter at all, are you?" with a broad wink at Vanpool.

It took a lot of talking to convince them that I was a reporter and nothing more formidable. They had speculated that I was too husky-looking to be a reporter. They thawed out quickly after that, and by the time we reached Kiev, we were getting along fine. They showed me and another Soviet correspondent, who was sharing the compartment, pictures of their families and farms, asked a lot of questions about the Soviet Union, and made it obvious from their remarks that they knew very little about our people. But they learned quickly enough.

Such Friendly Handshakes

Kiev's wide streets and beautiful parks won over the Oklahomans, and they walked around the town as though they would never get tired of sightseeing. They climbed the Vladimir Hills to admire the view, their cameras clicking like castanets.

Wherever they went, either in groups or singly, they were almost immediately surrounded by people who were eager to ask questions, to exchange impressions, or just to talk. In spite of language difficulties, lively conversations were struck up on every street corner.

One elderly Kieville insisted upon shaking hands with Harry Bathurst. With sign language, gesture, a word here and there, he managed to get the idea across that "Americans and Russians are friends."

"Sure, sure, friends," Bathurst smiled back, both of them pleased that they understood each other.

A very small girl wanted to pin a Young Pioneer badge on tall George Vanpool's lapel. She couldn't reach up half that high. So Vanpool picked her up and held her in his arms while she pinned the badge to his coat. He gave her a Lincoln medallion in exchange and her "Thank you" in English was as decorous as any grownup's.

Rangy Phil Ferguson, who served in Congress under the Roosevelt administration, was a special center of attention. He won the hearts of Kievvites by snapping their pictures with a Polaroid camera and then presenting them with the developed snapshot a few minutes later, inscribed, "To the good Soviet people from Phil Ferguson of the USA."

Later that evening, when we were all exchanging impressions and smoking a last cigarette before going to bed, Dr. Rene Gouldner said to the group, "People like that, with such smiles and friendly handshakes, don't look to me as if they want war."

A Smart Girl

The houses, barns and outbuildings of the Chervona Ukraina—Red Ukraine—Collective Farm near Kiev stretch along the wide asphalt road that runs to Kharkov, another large Ukrainian city. Its tall silos, big barns, pigsties and poultry houses can be seen from a long way off.

The farm's chairman, Mikhail Vinarsky, flatters himself that he is not an excitable person. And his stocky figure, his round face and his easy smile do give the impression of a man who takes things calmly. "Can't do otherwise," he explains with a smile, "or else my nerves wouldn't hold out with all the things I have to worry about." But when the time came to greet the American visitors, he suddenly lost his customary calm. "Look at this," he told me, "I can't remember the last time I was nervous, and now I've got myself all worked up. How am I going to explain things properly so they'll understand everything?"

But he did all right. Outside the administration building of the collective farm stands a large obelisk carved with the figure of a Soviet soldier. There he greeted the Americans.

"We bid our guests welcome and thank them

for visiting us. Our collective farm is not an ordinary one. It has a peculiar history all its own. It was not too long ago that prison barracks surrounded by barbed-wire fences stood on the very ground of our collective farm. In this concentration camp the fascists murdered nearly 40,000 of our people. This obelisk," he said, pointing to the white marble column, "stands over the mass grave in which our people are buried. It doesn't let us forget those war days."

The men from Oklahoma quietly took off their hats and stood a moment in silence.

But this was the one short, sad moment in an otherwise long and sunny day. The mood shifted quickly in the company of blue-eyed, blond-haired Nadya Balashova, the farm's agronomist and our charming guide.

She fired a barrage of questions at the visitors and noted each of their answers in the notebook she carried with her. She wanted to know how corn was sown in Oklahoma, in what states potatoes were grown, how the soil was worked, what grass they thought good for cattle, how American farmers lived, where their children went to school . . .

In the middle of another series of questions, Nadya caught herself up and laughed out loud, "I'm supposed to be your guide, and all I've been doing is ask you questions."

She led the group around the farm. "We have a big farm and a pretty good one, even if we say so ourselves. We have 400 Siemmental cows, and each one gives us 2,500 quarts of milk a year. Of course, this is not very much, but this year our Siemmenthals, as a token of appreciation to our milkmaids, promise us more than 3,000."

The pedigreed bulls, the hog farm with 1,500 hogs for fattening, the cows, the poultry yard all were closely examined by the visitors as Nadya showed them around.

"Our farm has 6,450 hectares. In your figures that would be . . ." she stopped, did some mental arithmetic, "16,000 acres. It is worked by 22 tractors, 8 combines and 300 draft horses."

Roy Schoeb put in a word: "Wouldn't it be better for you to sell the horses and buy more cows? Twenty-two tractors should be enough to do all your work."

Nadya thought a minute. "It's certainly worth considering," she said, and noted the suggestion.

One of the Oklahomans commented audibly, "That isn't up to her. She gets her instructions handed down to her."

Nadya didn't let the remark pass. "We pay attention to instructions, but that isn't the whole story by far. We are the owners here, we people who work the land, the members of the collective farm. And the highest body in the collective enterprise is the general meeting. Thus the farmers themselves have the final say in everything. But we aren't ashamed to learn, either from our own people or from visitors. Take one of the things I asked about before. You do a better job with fodder in Oklahoma than we do here. Why shouldn't we learn from you, follow your example? I've been noting down all your suggestions and I intend to try some of your methods."

Clarence Burch, who raises fodder crops on his Oklahoma farm, handed her one of his

notebooks. "Nadya," he said, "you're a smart girl. Write down everything you do with grass in that notebook and then send it on to me. And we'll figure out together where to go on from there."

Charles Holloper urged Nadya to pay a long visit to his farm. He showed her a picture of his eight daughters. "With all these women around," he said, "they won't let you be bored for a minute."

She was showered with a dozen other invitations to visit Oklahoma. All the men wanted to be photographed with the smart and pretty agronomist.

At noon, lunch was served in the big dining room of the farm. Jean Neustadt joked when he sat down to the borsch, "It would be nice if a couple of those 2,000 fryers we just saw came after the soup."

The cooks must have been mind readers. After the borsch, there was fried chicken on the table.

Lunch closed with a rendition of the Oklahoma State song and "Old McDonald Had a Farm" by the guests, and Russian and Ukrainian folk songs by the hosts.

On parting, farm chairman Mikhail Vinarsky said: "We liked your friendly attitude and we hope this is only the first of many visits by American farmers to this part of the country and to our farm. Such visits will help us become friends. We have a lot to learn from each other."

The Oklahomans agreed.

"Clarke Moore at the Mike"

"Would one of our guests like to talk with the tractor team via radio?" Filipp Yastreb asked. He is director of the Vasilkovskaya Machine and Tractor Station.

"I would." My neighbor in the compartment on the way to Kiev, the cattleman Clarke Moore, pushed his way through to the mike. Moore is a stocky man with a broad, pleasant face.

"Hold on, one of our American guests will now talk to you." The director gave Moore the mike.

Moore cleared his throat and winked at his laughing friends. "Hello," he said, "hello. Clarke Moore is at the mike."

"Hello. Glad to meet you," came the reply from the field.

"Whom am I talking to?" asked Moore.

"The checker, Kalenik Vlasenko."

"What are you doing now—plowing or sowing?"

"We're cultivating."

"How's it going?"

"Fine. Give our regards to all the American farmers."

"Spa-si-bo," Clarke Moore ventured to say "thank you" in Russian. Everybody laughed and applauded.

"From the dispatcher's desk here, we guide the work of all the 12 tractor teams," Filipp Yastreb, a tall hearty-looking man with powerful hands, explained.

The Americans bent over the big dispatcher's desk and looked at the field plan of the 12 collective farms which the Machine and Tractor Station serves.

Dwight Ferguson asked, "What's Machine

and Tractor Station? Is it a special type of collective farm?"

"No," the director explained, "it's a state enterprise. All the machinery you see here belongs to the state. By contract with the collective farms, the station works the fields and gathers the crops."

"Who runs the machines—the farmers?"

"No. The station has a regular staff of skilled workers, mechanics, tractor drivers, combine operators. And each team has its own checker."

"The checker must be the fellow I talked to over the radio," Clarke Moore said. "What's he—the head man?"

The director smiled. "Not exactly, but his isn't the least important job either. He keeps track of all work schedules and maintains contact with the dispatcher via radio. Besides farm workers, the station has its farm experts, agronomists, engineers, zootechnicians and veterinaries. All in all, we have 324 people working for the station."

"How do the farms pay the tractor station?"

"With farm produce and cash. How much will depend, of course, on the amount of work done, but the maximum is ten per cent of the harvest."

The guests spent a good deal of time looking over the self-propelled combines. They sat behind the wheel, photographed each other and made fun of the few members of the group who found it hard to believe that all this machinery was not a very recent innovation in the Soviet Union.

To make the picture complete, I should add that not every one of the Americans was interested in the new machines. Richard Longmire wandered off by himself to a distant corner of the station and took great pains to photograph two rusty combines and a broken-down tractor.

After we had gone through the central section of the farm, we heard Filipp Yastreb suggest that we all drive over to see one of the tractor teams at work. But just then a group of children came up, their arms loaded down with huge bouquets of lilacs for the guests. The Oklahomans were delighted with the children, stopped to play with them and filled their pockets with toys. Yastreb had a hard time getting attention back to combines and tractors.

It was almost dark when we got to the Ilyich Collective Farm field where Tractor Team 4 was working. Alexander Vasilchenko, the farm chairman, met us at the field camp of the tractor team. He seemed embarrassed and kept hiding his chin with his hand. When someone commented on it, he explained a little shamefacedly that he had been so busy, he hadn't had time to shave. But when he got started talking about the farm—it had been completely destroyed during the war but was doing very well now—he forgot all about the stubble on his chin. He became so absorbed in what he wanted to say that he hardly waited for the interpreter to translate. But the Americans seemed to understand what he was saying even without the interpreter. They were farmers like himself and for those who work at the same kind of job there seems to be a kinship that overcomes language barriers.

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A beautiful panorama comes into view when one looks at Kiev, the Ukrainian capital, from Vladimir Hills.



The farm's agronomist, Nadya, is interested in many things: how corn is planted in Oklahoma, how the soil is cultivated there and what grasses are considered superior for the dairy cattle by the American farmers.



Collective farm chairman, Mikhail Vinarsky speaks with ardor of the Siemmental breed of beef and dairy cattle.



The Oklahomans show keen interest in a hog farm.



LAKE SEVAN IN ARMENIA

THIS IS ARMENIA

By Gevorg Emin, Armenian Poet

DANCE OF FRIENDS FROM THE BALLET SEVAN

At first glance a national art and literature festival seems nothing more than a colorful, varied program of songs, dances, theatrical performances and speeches and readings by writers and poets. That is not so, of course, for an entire nation contributes to each festival an original culture rooted in the distant past but looking to the future. Moscow witnessed three such festivals last year, the Byelorussian, Latvian and Turkmenian. This year our festival, the Armenian, was the first.

For ten days Muscovites enjoyed Armenian songs and poems, the best Armenian operas and plays, and exhibits of Armenian architecture, painting, book displays and folk art.

The oldest architectural monument in my country is a temple that was built 20 centuries ago. Ancient Armenian architecture is famous. Armenia's modern architects developed the traditions of this architecture in building our capital, Yerevan, one of the most beautiful cities in the Soviet Union. It is a city without equal in all Armenia's long history.

The Armenian alphabet was invented in 396 A.D. Our libraries contain manuscripts dating back to the fifth and sixth centuries, books beginning from the year 1512, when the first book was printed in Armenia, and the first printed newspaper, which came out in 1794. Those are our pride. But they might have been our disgrace if the Armenian people had not learned to read them. As late as 1920 only ten per cent of the population could read and write.

We wiped out that disgrace when we gave

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CATHEDRAL IN ECHMIADZIN



CONCERT HALL OF THE ARMENIAN PHILHARMONIC IN YEREVAN



HANDICRAFTS MASTERS' FAMED SILVER CHASINGS





SPENDIAROV OPERA AND BALLET THEATER IN YEREVAN

ONE CORNER OF THE CENTRAL SQUARE IN YEREVAN



Continued from page 10

the entire population the opportunity to receive an education. Today we have three times more libraries than we have towns and villages. In the Myasnikyan Library in Yerevan alone there are five times more books than people in the country. Among these books are those written by our contemporaries, the wise poetry of Isaakyan, Derenik Demirchan's historical novel *Vardanaik*, the verse of the ardent revolutionary poet Charents, the remarkably delicate prose of Aksel Bakunts, and the poetry and stories of Armenia's young writers.

Armenia had a theater 2,000 years ago. Today we have 15 permanent theaters, including such first-class playhouses as the Sundukyan Drama Theater and the Spenđiarov Theater of Opera and Ballet, which stage works by Armenian, Russian and Western playwrights and composers. We speak with pride of the great 19th-century tragedian, Petros Adamyan, and of his successor, our contemporary Vagram Papazyan. Whether Papazyan made *Othello* famous in Armenia, or *Othello* made Papazyan famous is hard to say, for they cannot be separated. Papazyan in the title role has made triumphal tours of the Soviet Union, France, Britain, Italy, Austria, Spain and Belgium.

In a clubhouse in Voskevaz village, I heard Goar Gasparyan sing not long ago. A star in the Spenđiarov Theater of Opera and Ballet, she sang French, English and other foreign songs, and Armenian folk songs. In her singing I heard the voice of a people finally freed of the need to roam the world. She seemed to be telling us the story of her own life. It was only a few years ago that Goar Gasparyan was an unnoticed singer in Cairo. Her return to her native land brought her talent to full flower. Today she is a star at the Spenđiarov Theater of Opera and Ballet.

Our composers Aram Khachaturyan, Arno Babajakyan and Alexander Arutunyan have woven into their symphonies, cantatas and suites the rich beauty of Armenian folk melodies. For the first time the inconsolable sadness of the folk songs of the past is relieved by the optimistic intonations of a great theme, the theme of Armenia and its future. So many Armenian composers are coming to the fore that yesterday's young composers are relegated to the "older" generation to make room for the very young people graduating from our music schools.

In spite of their rich musical traditions, our people had no conception in the past of music training or professional music groups. Today we have 30 music schools, a conservatory of music, three symphony orchestras, a state choir, three quartets, and a large number of song and dance ensembles, folk instrument orchestras, variety orchestras, *gusan* (folk singer) choirs and children's choruses.

Our state choir sings Armenian folk songs, Russian songs, and classical compositions like the Bach *Mass* and Mozart's *Requiem*.

The Komitas Quartet, which has been in existence 30 years, is among the best in the Soviet Union and has played in Britain, Germany and Austria.

When Swedish Prime Minister Erlander visited Armenia not long ago he liked our ensemble of folk songs and dances so much that he invited it to come to Sweden to perform.

Our cultural contacts with other countries are steadily being extended. Many visitors and tourists from abroad now come to Armenia, where they are received with all the hospitality of the East. Many people I know have established personal contact with people abroad. Our children have pen pals in many countries.

Not long ago, while I was still taking graduate literature courses in Moscow, an Armenian friend of mine received a letter in English from his 12-year-old son. The letter was so typical of the interests of our children that I asked permission to copy it. This is how it ends:

"I want to write English letters to English children. What do you think about it, tell me please."

My friend advised his son to write to a school in London. It will be good for him to correspond with children abroad of his own age. Let the children come to know each other better, become friends, see each other more frequently, sing each other's songs. There is nothing finer on earth than friendship among peoples.

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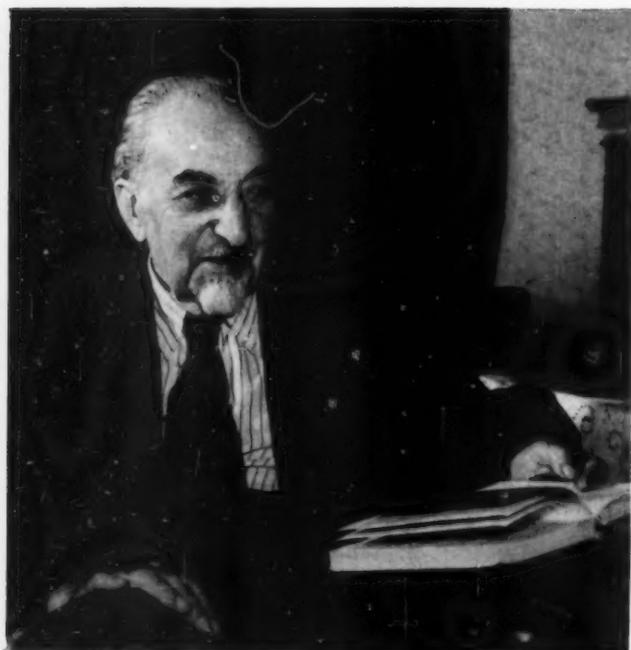






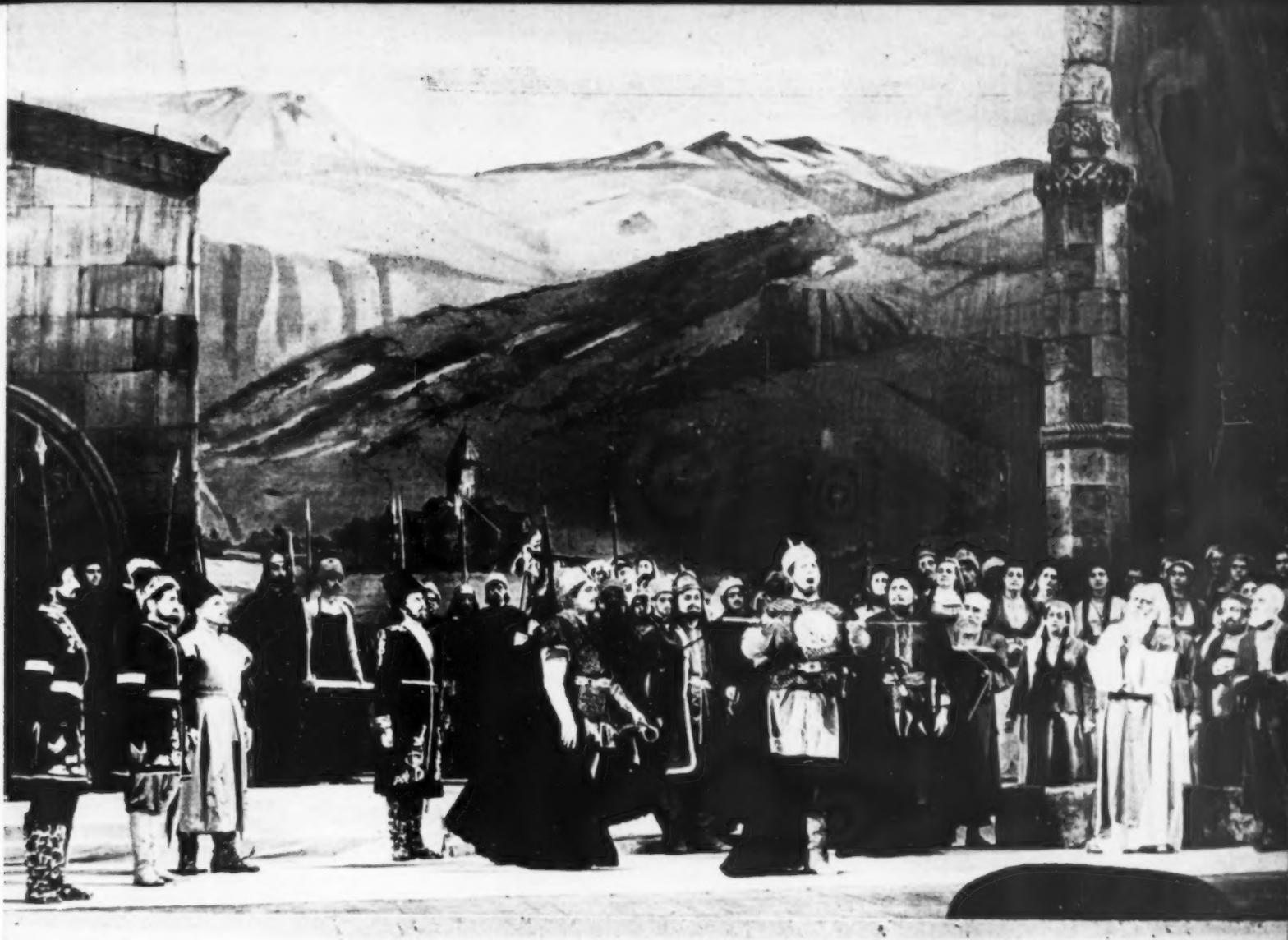
◀ COMPOSER ARAM KHACHATURYAN, BY MARTIROS SARYAN. See page 39.

METAKSIA SIMONYAN PLAYS SUSAN IN THE ARMENIAN DRAMA, NAMUS. ▼



POET AVETIK ISAAKYAN





SCENE FROM THE OPERA DAVID-BEK

PERFORMANCE OF THE ARMENIAN FOLK SONG AND DANCE ENSEMBLE





AT REGISTRATION DESK. "HE JUST FEELS SICK."



PATIENTS COMPARE SYMPTOMS WHILE WAITING. "NOBODY'S SICKER THAN I," SAYS THE PUG AT LEFT.

THESE TWO GIRLS ARE CHEERED BY THE VETERINARIAN'S REASSURING WORDS, "SHE'S GOING TO BE O.K."



PET INSURANCE

Continued from page 6

It's hard to find a family in Moscow that doesn't have a pet of some kind. Our racing, jumping, flying and swimming friends have a place of their own in our heart, and they give us much pleasure.

Like all living creatures they are susceptible to various diseases and accidents. However, when such a misfortune happens to a pet, it does not mean the situation is hopeless. There are 14 veterinary hospitals in Moscow. The medical services available for animals include lying-in sections, clinics and a home-call service.

I had the opportunity to observe the work in a pet hospital when I went to visit my sick terrier. The "wards" consist of small enclosures. The hospital has tiled floors and walls and an operating table for the patient. There is running hot and cold water.

Only the seriously ill patients are kept in the lying-in section. Other animals are brought to the clinic, which is open in the mornings. The home-call service is open around the clock. A car is dispatched to the patient's home when a call is received. The ambulance station is open every day.

Important, too, are the safeguards practiced by the veterinary hospital, since many animal diseases may be passed on to man.

And since there are hospitals for animals, there are also pharmacies which fill prescriptions for them.

It's interesting to note that all medical service at the pet hospitals of Moscow is free of charge.

FT.



IN FOR A CHECKUP. "THERE'S REALLY NOTHING WRONG."



PRESCRIPTIONS ARE PREPARED AT THE PET HOSPITAL'S PHARMACY, AND MEDICINES DISPENSED TO ANIMAL'S OWNER.



GETTING TO HEART OF THE MATTER. SOUND AS A CLOCK.



"GOT A BAD BRUISE THERE." SHE DOESN'T SEEM TO MIND IT MUCH, THOUGH. IT'LL HEAL SOON WITH GOOD CARE.

ONLY A SPLINTER. BUT HE JUST CAN'T STAND TO LOOK.

HOME CALL TAKES CARE OF THIS FELLOW. FELT JUST TOO BAD TO GO OUT. SERVICE IS AVAILABLE DAY AND NIGHT.





Soviet Parliament in session. Note that earphones are worn by some deputies. Since many languages are spoken in the USSR, it is necessary that interpreters translate what is being said.

THE SOVIET PARLIAMENT

By **Villis Lacis**
Chairman of the Soviet of Nationalities,
Supreme Soviet of the USSR



VILLIS LACIS

Villis Lacis is known in the Soviet Union both as statesman and author. He was born in 1904, not far from Riga, the Latvian capital. His parents were workers and he himself has been fisherman, stevedore, lumberjack, and fireman on merchant ships.

One of his early published short stories was on a science-fiction theme. His first novel, *Son of a Fisherman*, set in the Gulf of Riga, won him a large reading public and was made into a play and a movie.

In 1940, when Latvia became one of the equal and sovereign republics of the USSR, Lacis was appointed Minister of Home Affairs of the Latvian Republic and shortly afterward Chairman of the Council of Ministers.

When Latvia was invaded by the Nazis, he helped organize the guerrilla fighting. At the end of the war, he went back to his writing. In 1945 he published a collection of short stories; in 1948, his epic novel, *The Storm*, and in 1951, *The New Shore*.

Lacis holds an important place both in Soviet literature and in state affairs. He is Chairman of the Council of Ministers of the

Latvian Republic, and he presides over the Soviet of Nationalities one of the chambers of the USSR Supreme Soviet.

The Soviet Parliament is the highest law-making body in the Soviet Union. It legislates for the more than 200 million people who live in the 15 sovereign republics that make up the USSR, the Union of Soviet Socialist Republics.

Representatives to the Parliament, called officially the Supreme Soviet, are elected every four years on the basis of universal, equal and direct suffrage by secret ballot.

The Soviet Union is a big country that stretches across two continents, Europe and Asia. It varies not only in climate but in national composition. Although Soviet people are usually called Russians, that word, strictly speaking, applies only to half the people living on the huge territory of the Soviet Union. The other half of the population is made up of some 60 other nations, nationalities and ethnic groups. Fifteen of the nations have their own Union Republics—the Russians, Ukrainians, Byelorussians, Uzbeks, Kazakhs, Georgians, Azerbaijanians, Armenians, Kirghiz, Tajiks, Turkmen, Estonians, Latvians, Lithuanians and Moldavians. Many nationalities, such as the Tatars, Bashkirs, Ossetians, Adjars, Yakuts and Nenets, have their Autonomous Republics, Autonomous Regions or National

Areas. These are constituent parts of the Union Republics.

In addition to the interests which all nationalities have, each one has its own special interests and needs. That is why the Parliament is made up of two chambers with equal rights, the Soviet of the Union and the Soviet of Nationalities.

The Soviet of the Union represents the common interests of all the country's citizens, irrespective of their national origin, while the function of the Soviet of Nationalities is to express the specific interests and needs of nationalities.

Complete equality of the two chambers is a guarantee that neither the common interests of the Soviet people nor the specific interests of the different nationalities will suffer.

The question may be asked whether the second chamber of the Parliament does actually insure real equality of the nationalities. Will not the large nations, such as the Russians and Ukrainians, tend to dominate such small nations as the Armenians and Estonians?

The system of representation is designed to guarantee equality. The size of the population in the Union and Autonomous Republics, Autonomous Regions and National Areas has no bearing on the elections to the Soviet of Nationalities. All of them elect a fixed number of deputies.

The Soviet of Nationalities is made up of deputies from the Union Republics, Autonomous Republics, Autonomous Regions and National Areas. The representation is as follows:

Each Union Republic sends 25 deputies. Thus the large Union Republic of the Ukraine and the small Union Republic of Armenia each has 25. Each Autonomous Republic sends 11. Each Autonomous Region sends 5. And each National Area sends one.

Every citizen who has reached the age of 18 has the right to vote in elections to the Soviet Parliament, except the insane and persons convicted by a court of law whose sentences include deprivation of electoral rights. Any citizen who has reached the age of 23, irrespective of sex, race, nationality or religious faith, is eligible for election to either chamber.

In the last elections, held in March 1954, 708 deputies were elected to the Soviet of the Union and 639 to the Soviet of Nationalities. So that the USSR Supreme Soviet today has 1,347 deputies, 999 men and 348 women.

Continued on page 20

DEPUTIES OF SOVIET PARLIAMENT ATTENTIVE TO THE MATTERS AT HAND. THE LAW-MAKING BODY IS OFFICIALLY CALLED THE SUPREME SOVIET.



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GRAND KREMLIN PALACE WHERE THE SUPREME SOVIET OF THE USSR MEETS.

Continued from page 18

Sessions of the Supreme Soviet are convened by the Presidium of the Supreme Soviet twice a year, and at the sessions the more important problems of home and foreign policy of the Soviet Government are taken up, and laws are passed. The Soviet of the Union and the Soviet of Nationalities have equal power to initiate legislation. A law is considered adopted when passed by each chamber by simple majority vote. The Supreme Soviet at a joint sitting of the two chambers, appoints the Council of Ministers of the USSR.

Many functions of the highest state power, however, such as control over administrative bodies, representation of the state in foreign relations, appointment or removal of high officials, have to be exercised all the time, during sessions as well as between. To exercise these functions, the Supreme Soviet elects its Presidium, as provided by the Constitution. The Presidium is a standing body, uniting and directing the work of both chambers of the Supreme Soviet.

Each chamber also elects a standing commission on foreign affairs and another on the budget. On the instructions of the chambers or on their own initiative the commissions examine and prepare questions for submission to the respective chambers of the Supreme Soviet.

The standing commissions of both chambers and the USSR parliamentary group committee also continue to function between parliamentary sessions, as do the deputies in their election districts.

Besides considering questions relating to home affairs, the Supreme Soviet is responsible for international policy.

The Soviet Union became a member of the Interparliamentary Union at the 44th conference of the organization, held in Helsinki last fall, and today it takes an active part in the work of this international parliamentary body.

On February 9, 1955, the USSR Supreme Soviet unanimously adopted a declaration, addressed to the parliaments of all countries, calling for the promotion and extension of contacts between the parliaments of different countries. On the parliaments rests the great responsibility for maintaining and consolidating peace, since they legislate on questions of international relations. The Supreme Soviet has, therefore, underscored in its declaration that the establishment of direct relations between parliaments, exchange of parliamentary delegations and speeches by parliamentary delegations of one country in the parliament of another will help develop friendly relations and cooperation.

The declaration has met with a wide re-

A constituent (right) talks to Mikhail Tarasov, Vice President of the Presidium of the USSR Supreme Soviet, about her old-age pension. At its July session the Supreme Soviet passed legislation which increases pension appropriations by more than 50 per cent.



sponse in the parliaments of many countries. Many exchanges of parliamentary delegations have taken place since its publication. The Soviet Union has been visited by members of parliaments of twenty-odd countries, among them Britain, France, Belgium, India, Japan, Syria, Iran, Sweden, Finland, Denmark, Poland, Hungary and Czechoslovakia. And delegations of the Supreme Soviet of the USSR have visited Finland, Sweden, Belgium, the German Democratic Republic, Poland, Czechoslovakia and Hungary, among other countries. The exchange of delegations and the establishment of personal contacts between members of parliaments of different countries have helped to strengthen the friendly relations between nations and to decrease international tension. We believe that this form of interparliamentary relations has proved worthwhile and we shall continue to exchange delegations with any country that desires it.

The Soviet people want to live in peace and friendship with all peoples everywhere, and this wish is reflected in all of the activity of the Soviet parliament.

I am happy to avail myself of this opportunity to convey, on behalf of the USSR Supreme Soviet, cordial greetings and sincere wishes for the peace, well-being and prosperity of the people of the United States.

A joint session of the legislative proposals' commissions of the Soviet of the Union and the Soviet of Nationalities. These commissions function for the full term of office of the particular Supreme Soviet.



The Central Pavilion of the USSR Industrial Exhibition dealing with geology, oil, chemistry, machine manufacture and machine-tool building.



AT THE USSR INDUSTRIAL EXHIBITION Technology for Today and Tomorrow

By Alexander Morozov

Thousands of spectators crowd the newly opened USSR Industrial Exhibition in Moscow every day. They come from all sections of the country and from many parts of the world.

Grouped in 20 pavilions and open-air displays are 1,000 machines, 640 models, 3,000 instruments and an endless number of charts, blueprints, mineral and plant collections and finished products of all kinds and varieties.

Someone with a mathematical turn of mind has calculated that if a visitor spent no more than one minute at each of the more important exhibits, it would take ten days to make the tour.

Automation at the Service of Man

The people in charge of the big Machine-Tool Industry Pavilion like to tell this story. It happened a few days before the Exhibition was opened to the public. A mechanic was putting the finishing touches on an automatic machine which had just been installed. Another mechanic working on a half-assembled machine nearby came up to him and said, "I'm missing a couple of parts for bracing. I don't want to lose time sending for them. Can you help me out?"

"Let me see what I can do." The automatic machine man turned to his control board, manipulated the switches; the signal lights flashed on and the brand-new parts fell into the bin. This is to illustrate the fact that more than 500 of the machines on display are full working models.

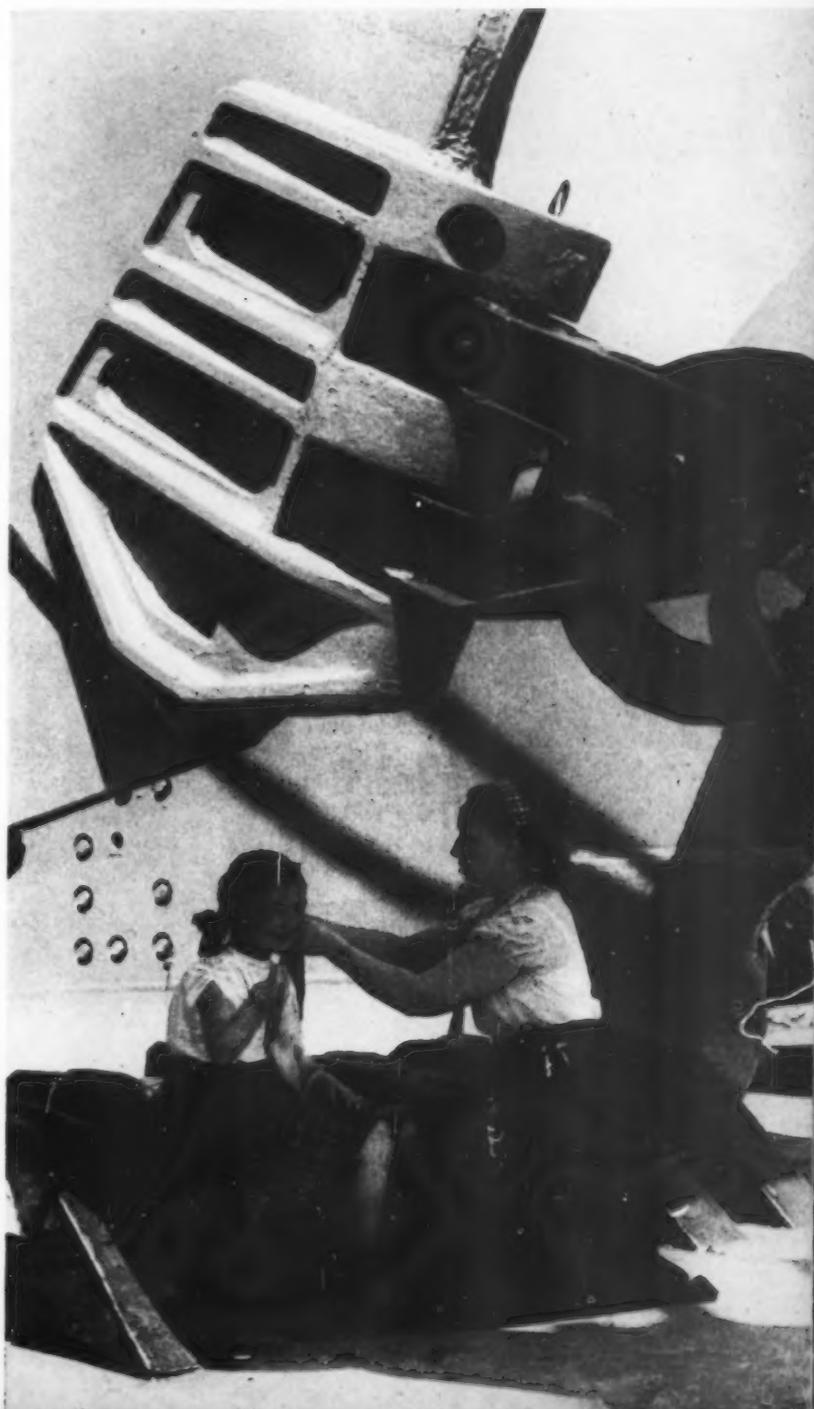
Automation is moving ahead with giant strides in the Soviet Union. Almost 100 automatic and semi-automatic machine assembly lines are now in operation in the auto and farm equipment industries. Plans are to install another 250 lines in these two industries in the next four to five years, about 50 every year.

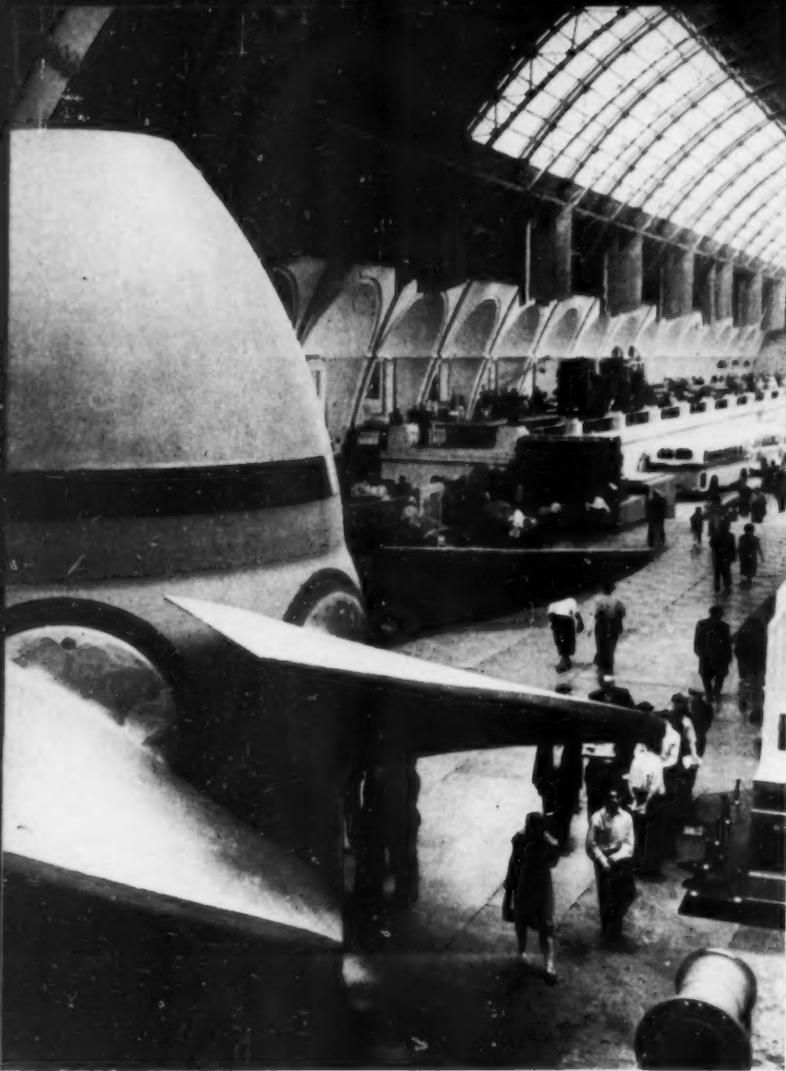
What do workers think of automation? By way of beginning an answer, it's interesting to recall the fact that the man who first introduced automatic machine lines in the USSR was Inochkin, a worker in the Stalingrad Tractor Plant. He subsequently became an engineer.

Automation is no threat to Soviet workers. It does not mean unemployment. Both young apprentices and veteran machinists attend free courses to study the new automatic techniques because it means better jobs and more pay. The development of automation has introduced so many new skills that the supply of skilled workers is behind the demand. And this is in spite of the fact that automation means that fewer workers are needed than before. Those workers who are released when automatic machines are installed have no difficulty getting placed elsewhere. Soviet industry has been steadily expanding and as a result there is a need for workers in every field.

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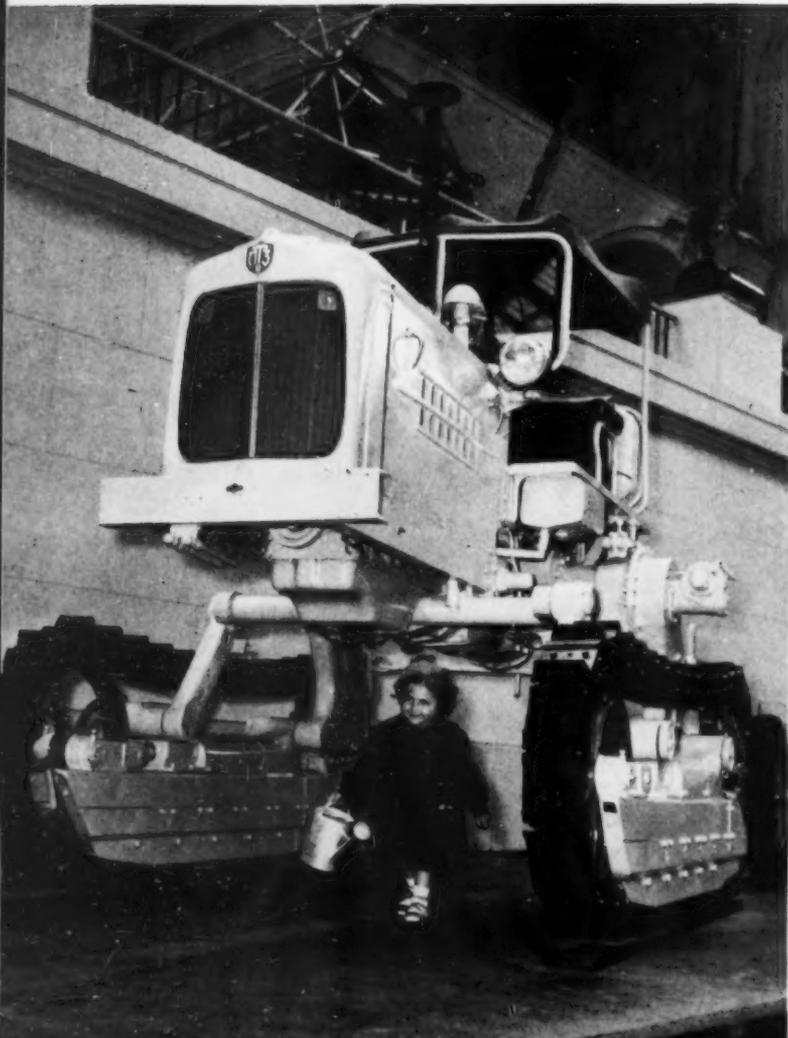
BUCKET OF THE GIGANTIC DRAGLINE-EXCAVATOR.





THE 426-TON WHEEL OF THE KUIBYSHEV HYDRO-TURBINE.

THE 40-HP DT-40 TRACTOR CULTIVATOR.



Continued from preceding page

Breaking New Trails

Visitors making the rounds of the exhibits see at almost every step new machines and new methods and processes to replace the old and wasteful ones.

The gigantic turbine wheel for the Kuibyshev Hydroelectric Station, largest in the Soviet Union, draws everyone's attention. Very few people looking at the 426 tons of glistening metal are aware that the surface is a veneer, to use a woodworker's term. A "skin" of very durable waterproof metal has been welded on to cover a much less expensive metal, to save thousands of tons of valuable steel.

There is a whole array of presses of the most varied types and capacities. These mammoth "blacksmiths" forge, stamp and groove metal. They shape an article in one motion.

There is a rolling machine, which turns out ball bearings with a diameter of 40 to 80 mm. Another shapes strip steel into pipe with a diameter of 150 to 180 mm. Still another machine, which could be called a jewelers' rolling mill, fashions unbelievably tiny pipe. A thin sheet of metal that looks as though it would disintegrate when touched is shaped by the machine with incredible speed and delicacy.

A special section is devoted to new processes in the machine industry. Among the exhibits is the new electro-impulse unit for metals which uses an electric spark instead of a cutting tool to machine the most varied parts at high speed and with great precision.

The Iron and Steel Industry Pavilion displays a model of a shop for the continuous pouring of steel. This new process cuts waste, lowers production time and reduces capital investment. It is an important development in the complete automation of steel production.

Many industries require high quality metals. Methods of producing metals in which the proportion of admixtures is a few parts to hundreds of millions are demonstrated at the Non-Ferrous Metals Section. Since operations to obtain metals of super-high purity must be conducted in a vacuum, new, greatly improved vacuum installations had to be designed.

Industry needs mountains of coal. At the Exhibition visitors see a full-scale reproduction of a mine drift, its roof supported by automatically moving metal props. This, together with the operating cutting and loading coal combine and other machines, demonstrates most dramatically automation in coal mining. All of it is reproduced in such authentic detail that you not only see the overhanging mass of anthracite, sparkling in the light of specially designed mine lamps, but you almost feel the threatening weight and pressure of the coal and rock all around you. You hear the powerful rumble of the coal combine and the monotone rattle of the coal-loading conveyor, and the mechanical roof props move before your eyes.

The oil industry also displays its advanced methods. Even deep underground oil "breathes" through the thick layers of rock strata which cover it. Petrologists look for signs of this "breathing" to discover oil.

Radiometric methods in prospecting for oil are being used more and more. Soviet scientists have not only found new oil fields with this new kind of prospecting, but they have also been able to restore old wells which were written off as useless long ago.

Turbine drilling is widely used in the Soviet Union and the exhibit shows the latest models of turbodrills.

Roving Machines

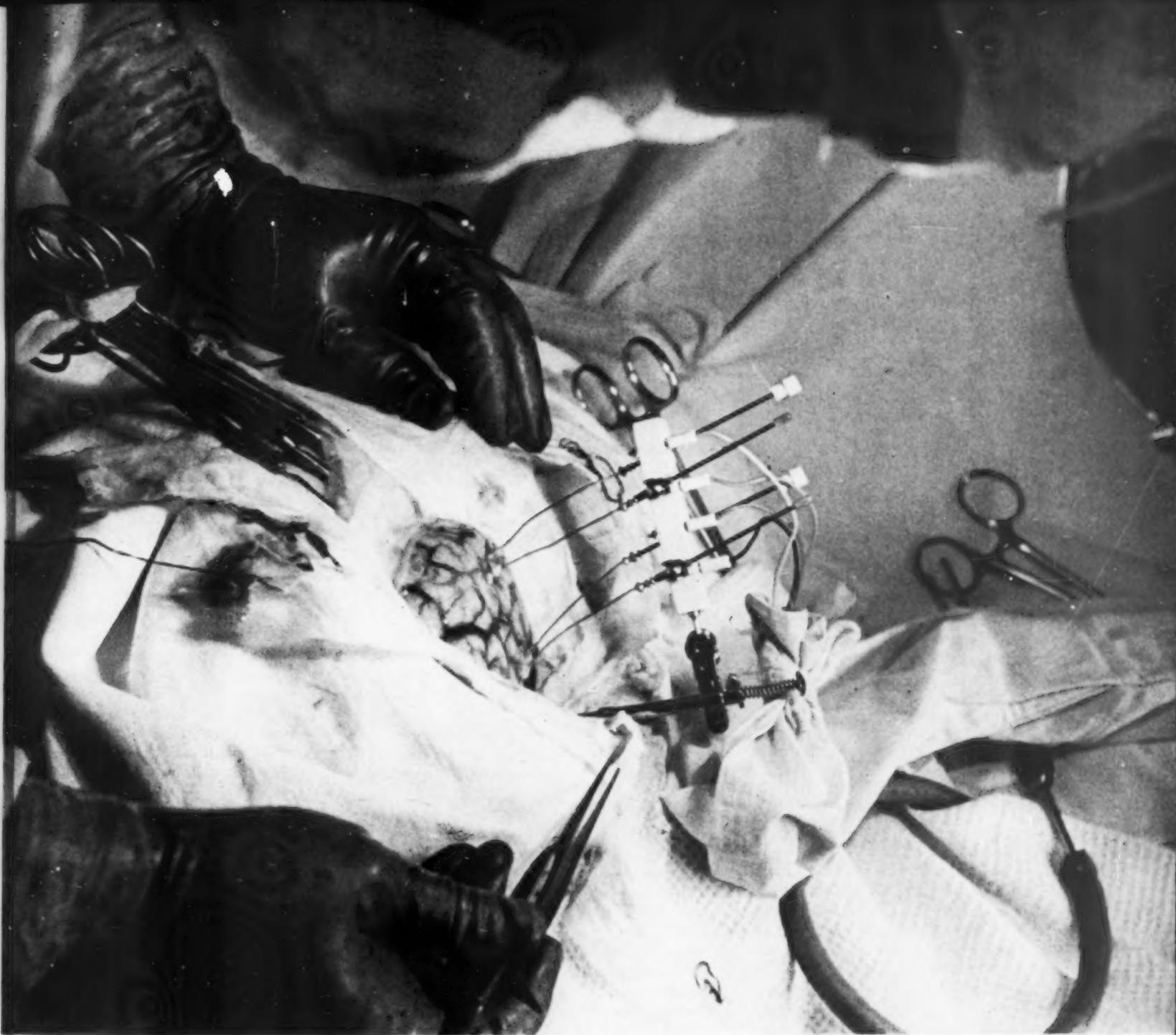
Many of the machines are displayed outside the pavilions. Some, like the gantry crane and the 25-ton dump truck are just too big to fit inside. And these roving machines do seem to belong to the open air.

The trucks are also shown outside. Equipped with powerful motors, many of them are fitted with specially built attachments for work under varying conditions.

Farm machinery is well represented also—the huge 250-horsepower Chelyabinsk Tractor, new plows, improved combines.

One of the major problems in plowing with electric tractors has been solved with an ingenious device. An electric tractor can only move forward and backward; the cable prevents it from turning around. A special five-bottom plow with two sets of shares was designed for shuttle plowing. One set operates when the tractor moves ahead. Then when the tractor reverses, the first set is elevated and the second set, with the shares facing in the opposite direction, is lowered. The plow is operated hydraulically.

Continued on page 53



MIRACLES WITH NEUROSURGERY

By Evinka Svetlanova

"There is nothing miraculous about neurosurgery. Our results depend on about the same proportion of hard work, painfully acquired knowledge and patient skill as any other branch of medicine. Sometimes we perform miracles, but that's only another way of saying we don't know enough to know why certain things happen."

Professor Boris Yegorov was taking me around the Burdenko Neurological Institute which he heads. "There's this difference that neurosurgery has, compared with other medical specialties. We have practically no margin for error. We're dealing with the most delicate part of the human body and a mistake may mean a human life. In the 25 years since the Institute was founded we have performed more than 20,000 brain and spinal cord operations."

He stopped at one of the windows and pointed toward the park outside to show me the bronze bust of Nikolai Burdenko, eminent Soviet neurosurgeon, the founder and first director of the Institute. "He was my teacher, and one of his statements I'll never forget is, "You're not

dealing with sick organs. You're dealing with sick human beings."

"That was a principle Professor Burdenko laid down for the Institute. Every patient who comes in for treatment is examined by nerve specialists, eye specialists, psychiatrists, physiologists, X-ray men, surgeons and others. He's put through a whole series of physiological and biochemical tests before we diagnose and apply treatment. What we try to do is to bring to each case all the related knowledge we have to give us a comprehensive picture. We call it the 'overall' principle.

"I'm operating tomorrow morning at 9. Would you like to watch?" he asked. "It will give you a better idea of the work we do than any amount of talking."

"Yes," I said, without stopping to think. "I'd like to very much."

"Fine," he said. "By the way, have you ever watched an operation?"

I gulped. I hadn't thought of that side of it.

He smiled, "Perhaps . . ."

"No," I said hastily, "I'll be all right."

Continued on page 60

Continued from Page 9

"Do you get enough rain here?" Ted Warkentin asked Vasilchenko.

"That's our big headache," the farm chairman answered. "We had no rain at all to speak of this year."

"It's been bad at home too," Warkentin said. "The last rain we had was in October. We were hoping for spring rains when I left."

They walked across the field, arm in arm, talking. Warkentin pulled up a couple of the green stalks of winter wheat that stuck up isolated out of the plowed field.

"No luck with this?" he asked sympathetically.

"No," Vasilchenko said, and told him that the winter wheat hadn't come up. It had been choked by the icy crust.

"Then you should have planted other crops in this field," Warkentin suggested.

"That's what we did. We put in corn, sugar beets, green peas and buckwheat."

They walked back to the group clustered around the tractor drivers. Clarke Moore had met the checker he had talked to over the radio, a young fellow, Kalenik Vlasenko. They seemed to have hit it off well, judging from the noise and laughter. Moore gave Vlasenko a mechanical pencil to remember him by.

By then it was time to leave, and after hearty good-bys, the Americans climbed into the bus. "I really hate to go," George Vanpool told me.

Cowboys Prefer Automobiles

For the last day of their stay in Kharkov, a visit to the Ukrainka Experimental Cattle-Breeding Station had been scheduled. A number of the Americans, worn out by sightseeing in Kharkov, the industrial and cultural center of the Ukraine, decided to take it easy at their hotel. Later on, they were sorry they had stayed behind. The trip turned out to be especially interesting, particularly for the cattlemen.

The Ukrainka station combines the features of a large scientific research station and a solid commercial enterprise. It covers an area of some 30,000 acres and originates its own breed of highly productive cattle.

This is in addition to raising and improving existing breeds. The station sells pedigreed cattle to collective and state farms throughout the country.

Fred Drummond, a big cattle owner, asked, "How many breeds of cattle does the Soviet Union produce?"

Mikhail Eisner, assistant director of the station, an older but still very energetic-looking man, pointed to a map, "The Soviet Union is a big country. We turn out a good many breeds, some 52. I'll tell you about a few of the more important ones. By crossbreeding local types with Siemmenthals, one of the Swiss breeds, we get a motley, straw-colored stock used all over the country. South of the Central Belt we get the Red Steppe cattle. The more northerly zones get stock from crossbreeding local cattle with various Dutch breeds. And then, we have a large number of regional stocks."

"You might say you have multi-national



"UKRAINIAN BORSHCH IS GOOD EVEN FOR AILING STOMACHS," SAYS PHIL FERGUSON.

cattle," Drummond laughed.

"Yes, we might say that," Eisner laughed with him. "Working with all these different breeds, we've produced our own stocks which are better suited to local conditions. Of course, from the point of view of the strict geneticist, they can't be called pure. First we crossbreed local with pedigreed cattle. Then we crossbreed these types with each other. In this way, we've already produced several new breeds."

"How about the productivity of your cattle?"

"We get about 5,800 quarts of milk a year per cow. The fat content varies from 3.98 to 4.20 per cent. We hope to get a higher fat content by selection from our breeds and by crossbreeding with other highly productive stocks. It's for this reason that we're interested in the Jersey cows used so widely in your country. We recently bought one."

Phil Ferguson said, "You would have done better to get one of my Anguses or Herefords. You'll like them better than Jerseys."

I learned later, when I got back to Moscow, that Ferguson had talked to officials in the Ministry of Agriculture after the Ukraine trip and had offered his pedigreed producers for sale. The farm officials had assured him they were interested in his offer.

The Americans looked at practically everything there was to see at the station, foddors and grasses, calves, pigs and bulls. They were especially interested in the pedigreed race horses.

A little while before, one of the Oklahoma cowboys had said to us, "If you had horses we'd show you some real American riding."

Here were horses—and good ones—but curiously enough, when the cowboys were invited to ride, their interest in demonstrating real American riding quickly diminished.

Harry Bathurst, to change the ticklish subject, asked a question about hog-raising methods, and Phil Ferguson added with a broad smile, "Our cowboys today go in for late-model 150-horsepower cars. They admire horses from a distance."

But finally, even the tireless Oklahomans ran out of questions. We went in to supper, continued our talk over wine, and ended the

eventful day with song and dance. The young Ukrainian boys and girls danced the national *hopak* and Fred Drummond stole the honors with a fast waltz with one of the girls.

It is impossible in this one article to sketch more than the highlights of this crowded trip. Certain impressions stand out for me most vividly. The quiet but deeply felt reaction of the Americans to the first sight of the Kharkov Tractor Plant, rebuilt out of the ruins of the war. The animated conversation they held with the plant's chief engineer, Ivan Serikov, who had visited the United States back in 1934. Then there was that very moving scene when the school children of the Bolshevik Collective Farm presented their guests with a huge loaf of bread laid out on a hand-embroidered Ukrainian towel.

Roy Stewart, correspondent for the *Daily Oklahoman*, when he accepted the gift on behalf of the group, put into a few simple words the warm feeling and mutual understanding that developed out of the trip.

"Thanks a lot, my young friend," he said to the schoolboy who presented the bread, "for this wonderful present. Its weight—and it's quite heavy—shows that the kind sentiments of the entire Soviet people have been baked into it. And although we here are the representatives of only one state, Oklahoma, we bring you the best wishes of all the American people for good, friendly relations."

I would not want to leave the impression that our American visitors liked everything they saw. In some places they saw people who were poorly dressed. They saw huts with thatched roofs, machines of obsolete design, and occasionally met people who looked at them with suspicion. But evidently these things did not appreciably color the total impression they brought away with them.

When they bade us farewell before boarding the plane for home, they thanked us warmly for the interesting tour and invited us again to visit with them in Oklahoma.

Our parting handshakes with Clarke Moore and George Vanpool were particularly hearty. We had grown very fond of them. I hope when they read this article, they will remember us and our countrymen.

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INDIAN SUMMER





EXPERTS OF THE PLANT PREFER TO TEST HUNTING RIFLES IN GAME HUNTING IN THE PICTURESQUE ENVIRONS OF TULA.

AN ARMS PLANT CONVERTS FOR PEACE



NINA PETROVA, A WORKER OF THE PLANT, IS PLEASED WITH ITS PRODUCTION. THE MACHINE CAN STITCH, EMBROIDER AND PERFORM MORE THAN 20 OTHER OPERATIONS THAT ARE ESSENTIAL IN THE HOUSEHOLD.

Tula has been known for centuries as "the armament city of Russia." The first arms factory was founded here in 1595. It was enlarged in 1712. Ever since that time, the city has turned out the finest arms in the country.

The Mosin rifle, named for a famous Tula designer, was officially adopted by the Russian army in 1891. Only slightly modified in 1930, it was carried by many Soviet riflemen all the way from Moscow to Berlin during the last war, together with Tula machine guns, trench mortars and other weapons. It would not be farfetched to say that every Soviet soldier was equipped with one or another type of Tula gun.

This historic arms plant no longer turns out armaments. Converted this year, its assembly lines are now producing sewing machines, furniture, bicycles, washing machines for consumer needs, milling machines, hosiery looms, twisters for textile mills and machinery for industrial production.

Tula still makes guns, but of a different sort—fine precision rifles for hunting and target shooting, guns for peacetime leisure. It is not too improbable that in a few generations the old description of Tula as the armament city of Russia will be familiar only to historians and antiquarians.

The conversion of the Tula plant is not an isolated exception. Many other defense plants in the Soviet Union have been retooled for peacetime production and their workers retrained to turn out consumer goods. And reasonably so. Since the Soviet armed forces are to be reduced by another 1,200,000 men by May 1, 1957, there is that much less need for arms and equipment. Sixty-three divisions and brigades disbanded, a number of military schools closed, 375 warships decommissioned mean many additional machines and workers to produce more of our modern plowshares, washing machines and children's bicycles.



IN THE STREETS OF TULA

THIS CERTIFICATE IS ON DISPLAY AT THE TULA PLANT'S MUSEUM



This revolver can shoot. It holds six cartridges. Made at the Tula armaments plant, it was awarded a gold medal at the international exhibition in Paris in 1900, one of several awards won by the plant.



A. Ivanov, veteran foreman, acquaints his pupils with the plant's history. The document he holds bears the signature of Peter I. Received in the 18th century, it is kept at the museum. Ivanov's pupils were demobilized from the Soviet Army recently. They are learning various trades. Altogether there are about 300 ex-soldiers among the workers and apprentices at the plant.

Instead of rifles and tommy guns, sewing machines are now assembled on this conveyor. Sewing machine output will be increased to about 4 million by 1960.





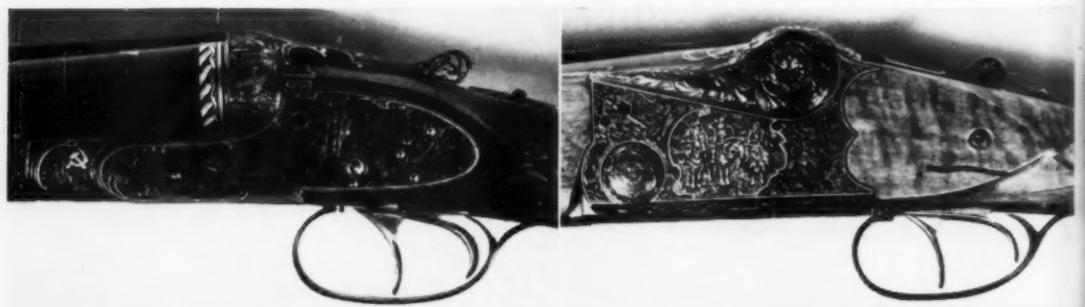
Dr. Fyodor Tokarev, the eminent engineer who has been with the plant for many years and is responsible for the design of numerous war weapons, has, at 85, changed over to peace production along with the plant. Tokarev has recently designed an original camera with a moving lens. With the Tokarev camera it is possible to photograph panoramas from a sighting angle of 140 degrees.



Ivan Fedoseyev is another Tula expert whose carvings, chasings and engravings ornament many hunting rifles. The old man readily shares his "secrets" with the young workers, hoping they will carry on the art.



"TESTING" ANOTHER NEW PLANT ITEM



HUNTING RIFLES DECORATED WITH CARVINGS AND ENGRAVINGS MADE AT THE TULA PLANT THIS YEAR

A PHOTOGRAPH OF THE MOSCOW KREMLIN TAKEN BY TOKAREV WITH HIS NEW CAMERA.



IT SHALL BE SO!

By Semyon Kirsanov

I met Europe, its face all aglow,
Europe wearing a shawl of white snow.
I saw walls, deaf with cannonades,
In the Alps saw a graveyard where high
Overhead, the lone wind softly moans
Where two wars left their crosses and stones,
Gravestones bearing the names of the dead,
Helmets riddled with pitiless lead.
And I gazed, filled with wonder, upon
Icy carpets that sparkled and shone,
Scenes of conflict, of combat, of storm,
Bloodless conflict though heated and warm,
Where the racket and bandy held sway,
Where the ice skates determined the day,
And all countries took part in the bout,
Clearly ruling neutrality out!
Such a one, may World War Number Three
Without death, without suffering be.
In a ring may it pass, in a pool,
Where the water is sparkling and cool;
On the chessboard, the tennis court, or
On an open arena and floor;
On a racecourse where spirits run high,
'Neath a clear and unthreatening sky!
May it be one of numberless feats,
One of contests, of races and meets.
May its banner of bright, radiant hue
Soar, a symbol of peace, to the blue!
Such a war, without bloodshed or greed,
Without dugout or trench do we need;
One whose soldier is brown with the sun,
And who carries a ball, not a gun;
One whose prize is the badge and the cup,
One whose shares go decidedly up;
One that starts with a handshake and ends
Not with conquest of lands, but of friends!

Translated by Irina Zheleznova



FISH KINGDOM

By Elena Doroshinskaya

"Fish!" exclaims Leonti Kaminsky's wife disdainfully. "There are just too many of them in this house! It's impossible to spend the summer in the country on account of them."

"Fish!" says her husband in a voice that is almost tender. "Don't forget, my love, that they got me out of bed and put me on my feet."

It all started after Leonti Kaminsky had a heart attack and the doctors prescribed complete bed rest. That was hard on a man used to doing a full day's work, and who went in for cycling and motoring in his spare time.

One day his nephew brought him a small aquarium of red fish.

"These may cheer you up, Uncle," he said.

The patient made a gesture of impatience and despair. But as the days passed he grew interested in the tiny creatures that glided so gracefully through the water. He witnessed the exciting moment when a female gave birth to her young. Gradually his interest increased. One day, when his wife was out, he disobeyed the doctor's orders and turned on his side so that he could feed the occupants of the aquarium. Since that had been successful there seemed no reason not to try sitting up. And from there the next step was getting out of bed in order to be able to look after the fish properly.

When his doctor from the polyclinic came one day to see her patient, she was horrified to find him standing beside the aquarium, sleeves rolled up. Half jokingly, she admitted that the fish had proved much better medicine than any she could provide.

When Kaminsky recovered he decided to give up work and go on pension. Today he is about 60. For the past six years he has been breeding tropical fish. It is a hobby to which he devotes himself wholeheartedly, sometimes forgetting meals and sleep, such as the time a strange epidemic broke out in the aquarium. Now he knows how to fight such epidemics, but still, a constant watch has to be kept over the health of his fish.

Drama in the Fish Bowl

Kaminsky has 40 aquariums. They stand on tables and shelves in a room open to plenty of sunshine. One is even attached to the wall. Each is equipped with an electric heater, a thermometer, and a tiny hose that passes compressed air into the aquarium to aerate the

water. Light from luminescent lamps turns into a fairyland the green underwater plants, the grottoes made of sea shells and the bubbles of air continuously rising to the surface. But, of course, the greatest attraction are the fish themselves.

There are goldfish, red and blue striped fish, and some covered with tiny blue dots, velvet-black beauties, black and gold sea horses with bulging eyes, and bright-colored fish that have a black triangle near their tails.

Everything in the bowls looks peaceful, but Leonti Kaminsky can tell of highly dramatic moments.

"Do you see that bit of foam in the corner of the aquarium?" he asks. "The fish made that. It is a sign they are going to spawn underneath it. See that guppy chasing the baby fish. There! It's gone. Do you know who's to blame for the catastrophe? The female herself. She's eaten her own child. But don't think the parents will eat all their offspring. They attack only the weakest. The strong ones will survive. I have parents of another type, the cichlidae. All the books on that table over there say they are pugnacious and quarrelsome. But you should see them scooping out a hollow in the sand in the evening for their offspring to sleep in. Not only the females but the males, too. And if they think danger threatens, you should see the fountain of sand they make while they drive their babies to a hollow which they have prepared beforehand!

"Would you like me to call the fish together?" Kaminsky asks. He taps lightly on the sheet of glass covering the top. As though drawn by a magnet, the fish all gather in a corner.

"To them that means food," Kaminsky explains. "Since I've given the signal, I won't deceive them." He picks up a bit of ground meat with a pair of pincers and holds it above the water. The fish leap up to snap at it.

From All Over the World

Kaminsky keeps about 40 species of fish, including those native to America, Africa and Australia. He particularly treasures his species commonly known as neon tetra fish because of the bluish-green neon light they seem to give off. They are native to the Amazon and were brought to Leningrad by a sailor. Kaminsky tried for a long time to persuade the sailor to part with his beauties. The sailor finally agreed because he was planning to move

to another city. Kaminsky discovered that his new pets were very capricious. They did not like tap water and were very sensitive to changes in temperature. He had a lot of trouble and worry before he finally got them acclimated to this aquariums.

The tiny fish, which a friend of Kaminsky's brought him from the Amur, also caused him a great deal of trouble. They made the trip of more than 8,000 miles successfully in a big tank, but the friend failed to tell Kaminsky what they should be fed, and Kaminsky had to find out for himself. These fish, which belong to the sheatfish family, are the envy of all the other fish fanciers in Leningrad, and there are a good many. They see one another at the pet shops, and at meetings of the Nature Lovers' Club. Kaminsky has spoken before gatherings at the Club several times. Among fish fanciers as enthusiastic as he are Vladimir Manuilov, a mechanic, Professor Sergei Bonch-Bogdanovsky of the Mining Institute, Dr. Peter Perfiliev and the ballet dancer Lydia Tuntina.

At the show of house plants and aquarium fishes which the Nature Lovers' Club arranged in Leningrad last autumn, Leonti Kaminsky exhibited 13 aquariums and was awarded a certificate of honor.

His Young Friends

In summer the Kaminskys usually set several of their aquariums on the window sills of their apartment. Since the apartment is on the first floor, crowds of neighborhood youngsters gather in the quiet street to watch the fish.

One day Kaminsky received a phone call from the neighborhood school. "Please forgive my bothering you," said a woman's voice. "I am the biology teacher at the school near your house. The children do nothing but talk of your wonderful fish. I wonder if you would mind my bringing my other pupils to see them?"

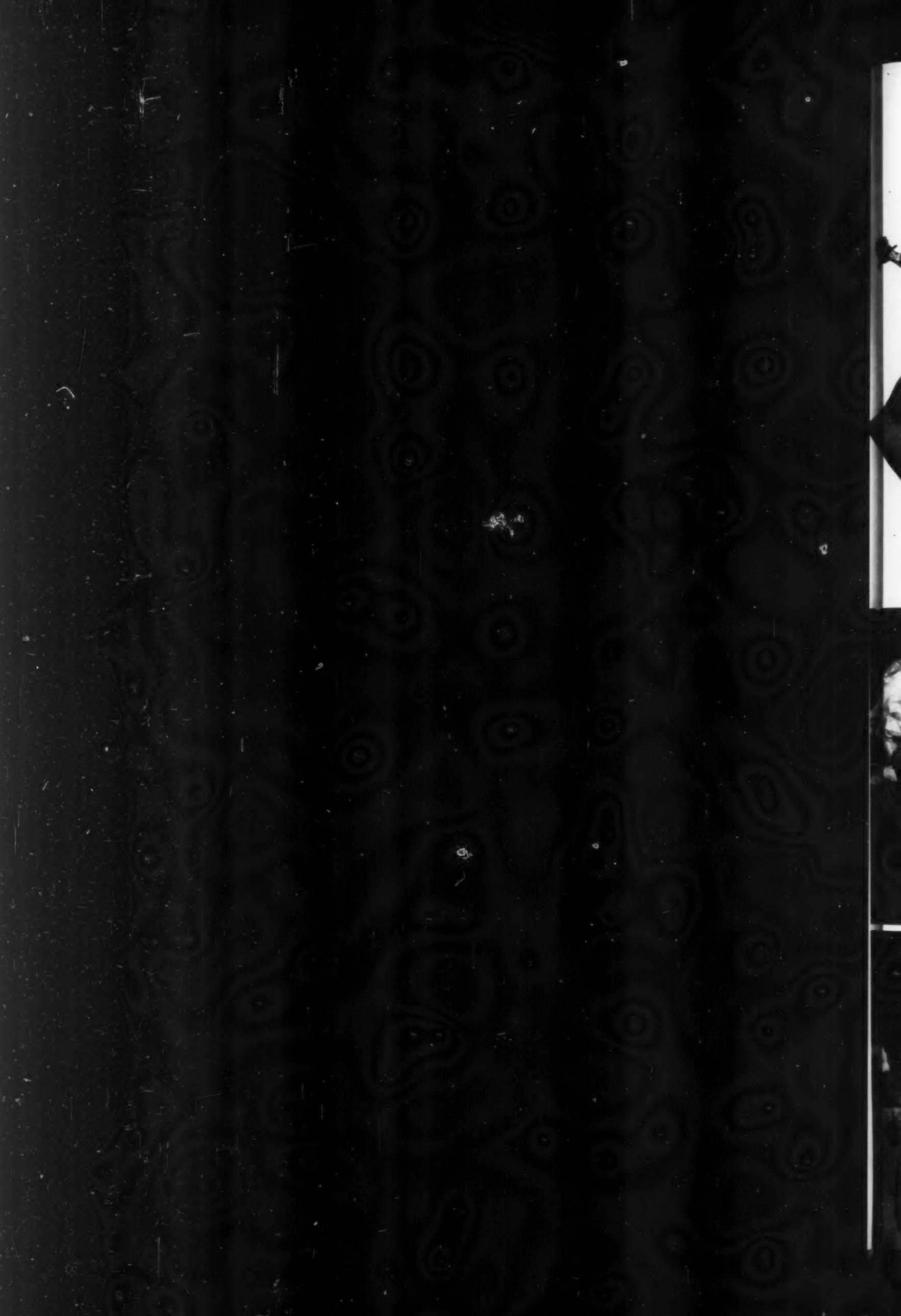
Since that time the quiet of the apartment where the elderly Kaminsky couple lives has been broken frequently by children's voices. Some of the boys and girls come simply to admire the rare fish, but others want to learn fish breeding themselves. They give Kaminsky their enthusiastic assistance in keeping the outside of the aquariums clean, changing the water and preparing food, and listen with bated breath to Kaminsky's stories about fish, of which there is an endless number.

The real fish breeder never buys fish food from the shops, but hunts his own. It takes some doing, too.

TEENAGERS FIND IT GREAT FUN TO WATCH THE FISH, AS THE EXPERT TELLS ABOUT THEM.









SERGEI OBRAZTSOV AND FRIEND

SERGEI OBRAZTSOV and His Puppets

By Inna Soloviova
Theater Critic

His thin hand holding onto the tip, a foppish little devil sits swaying on the half-moon.

A broad-brimmed hat with a feather in it, high boots, and luxuriant whiskers—of course, it's Puss in Boots!

The little wooden boy with the pointed nose hurries about his business, a magic key clutched in his hand.

A gold carriage floats across the dark sky. It is taking Cinderella to the ball.

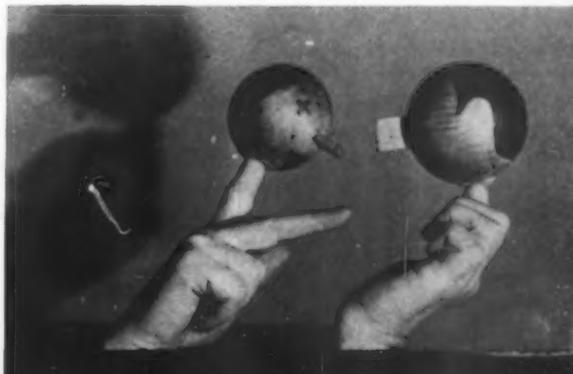
Every Muscovite knows that these posters are an invitation from Obraztsov or, to be more exact, the Central Puppet Theater, which Sergei Obraztsov heads.

Puppet theaters are very old. Puppets were found in excavations of the pyramids; their amusing antics called forth laughter in ancient Rome; the English Punch, the German Kasperle, the French Polichinelle and the Russian

Petrushka all stuck their long noses into the affairs of our great-grandfathers. Obraztsov's puppet theater is very young because, although he has gratefully accepted the legacy left him by his gay, estimable predecessors, he has, in actuality, created a new and interesting art.

His is not a revival of the old Russian puppet performances. Obraztsov has a prejudice against any sort of stylization. Nor is it an imitation of the real theater. Obraztsov insists that there is no point in puppets' attempting plays which ordinary actors can do with success. Obraztsov's art and his theater are very independent. They copy no one, and are full of surprises.

Continued



Continued from page 31

The element of surprise is not only an integral part of Obraztsov's talent, it is also a feature of his biography. Could one have expected that the son of a famous scientist, an academician who headed the Soviet school of transport engineers, would choose such a light-hearted occupation and devote his life to "playing with puppets"? Or could one have expected that puppets would bring Obraztsov the Younger world fame?

Least of all did Sergei Obraztsov himself expect that. True, he chose art as his field early in life, when he took up painting. It was in his student years that he and his friends thought up the idea of making some hand puppets for sale like those which he had once had in his childhood. Obraztsov's first puppet was a little Negro boy made out of a black stocking. The remains of a karakul collar went for the hair, and shoe buttons for eyes. Obraztsov never dreamed of the role that Negro boy would play in his life.

The friends did not sell their puppets, perhaps because they could find no buyers, but more likely because it seemed a pity to part with those "amusing kids," with whom one could have so much fun.

The Negro boy settled down in the pocket of Obraztsov's jacket. From time to time he would climb out, on the street, and beguile passersby asking the way to Krivokolenny Lane. He acquired quite a repertory. He could sing Tchaikovsky's *Amidst the Noisy Ball* in a sentimental manner that was excruciatingly funny. With his partner, an old peasant woman in a kerchief, he sang *When You and I Sat by the Murmuring Stream*. Then the old woman would turn her back on him, dress up in a silk gown and fancy headdress, and sing a duet with a melancholy, long-haired professor who wore starched cuffs that creaked. They sang a song that was extremely popular at the time, *I Remember the Day*, in such an amusing manner that those who might have sighed over it before now laughed at its sentimentality.

That was the first evidence of Obraztsov's penchant for parody, something that would later become an innate part of his art.

Obraztsov's crowd of art student friends loved his puppets. Home puppet performances grew more and more frequent, with both actors and audiences enjoying themselves tremendously.

Still and all, puppets were merely a hobby. Life had its more serious side. Obraztsov dropped painting and took up acting, first at the Music Theater under Nemirovich-Danchenko (Obraztsov has a very pleasant tenor), and then at the studio of the Art Theater. He was fairly successful, and one would have thought there would be no room for puppets in his new life. But, again surprisingly, his enthusiasm for puppets did not wane.

"My love affair with my puppets began without my realizing it," says Obraztsov. "Just like many love affairs in real life, first two people meet and find it is very pleasant to talk together. Then comes the desire to meet more frequently. The meetings become a necessity, and the separations

Continued on page 34











Continued from page 32

seem endless. That is love. Then the periods of separation stop altogether, and the meetings merge into the stream of life. That is marriage.

"That is what happened to me. First I enjoyed 'chattering' with my puppets. Then the subjects of our 'talks' grew broader, and our separations less frequent, until we found it was love. After that the separations ceased, marriage began; that is, a profession arose."

Obraztsov has created a new type of variety show: songs by puppets. Most of his singers are satirical personages. You laugh at the lack of taste contained either in the song that is parodied or in the vulgar manner in which it is sung. Among Obraztsov's singers there is Carmen, exaggerating her impossible "Gypsy" passion; the "public idol," a baritone with diamond cuff-links who stretches out his neck all of a foot when he takes his high notes; and the lady singer who rolls her eyes and wrings her hands in a paroxysm of lyrical agitation (this gesture is all the more amusing in that the hands are "real," they are Obraztsov's).

Songs by puppets proved a tremendous success. But the better Obraztsov got to know his puppets, the more he realized that his concert numbers allowed them to show only a fraction of what they were capable of doing.

Puppets are born to act. Their place is in the theater. That they can be more than bold parodists Obraztsov had already discovered. There was his number *The Tiger Tamer*, for one, where he pokes fun at the way the circus trades in danger.

Puppets can be moving, and they can be lyrical. Nor is there any need to conceal that they are puppets. In his lullaby with the puppet Tyapa, Obraztsov does not use a screen but sings before the public with the puppet on his right hand. Tyapa keeps turning his funny little head as he examines the audience. He wears a white vest buttoned at the top in back. Where the vest parts you can see the back of the operator's hand, representing the baby's bare back. Here there is no pretense that the puppet is a real baby. But when Obraztsov succeeds in putting to sleep that restless creature who rolls his eyes, sticks his finger in "papa's" mouth and prevents him from singing, sucks on his pacifier or on "papa's" finger, when at last Tyapa falls asleep, and Obraztsov carefully removes the puppet from his hand and takes it behind the screen, the audience does not break into applause. It might wake Tyapa.

Besides laughter, a puppet, it turned out, could also call forth tenderness.

It goes without saying that puppets have no parallel when it comes to the world of fantasy. Where can wonders be more natural than in a puppet theater?

Puppets, Obraztsov suspected, could also play in a biting satire, or a lyrical comedy, or even in a production in the heroic manner. He was filled with the desire to prove it.

The opportunity to do so came in 1932, when it was proposed that he head a puppet theater for children. Obraztsov accepted.

He found people for his company who were equally enthusiastic about tackling such a new and intriguing job. If you want to meet real enthusiasts, get acquainted with the members

of Obraztsov's troupe. They are wonderful people, a little bit mad, like all who are in love. And they really are in love with their remarkably jolly art.

The theater was established for children, but it soon exceeded age boundaries. Adults discovered the theater and adopted it for their own, and the puppets learned to stage satires with as much success as they did fairy tales. They learned to be both poetic and heroic. The fairy-tale love of Aladdin for Budur is presented with inimitable charm. Nor do the noble, generous characters in Gozzi's romantic fairy play, *Stag King*, lose anything for being played by wooden actors.

Here I should say something of the great contribution that the change in the technique of operating puppets has made. Puppets on sticks, whose movements are much more natural than the movements of marionettes and hand puppets, appeared at the Obraztsov theater. (Puppets on sticks have long been popular in the East, but were not used before in the European theater.)

Muscovites are not the only ones who have enjoyed the Obraztsov productions. Puppets are by nature wanderers. They are prepared at a moment's notice to set off to roam the world. The Obraztsov theater has not forgotten that tradition. It has been applauded in Teheran, Sofia, Warsaw, Prague, London and dozens of cities in China.

Puppet performances are almost as easy to understand as the ballet. One does not need to know the language. Thousands of people abroad who have seen Obraztsov's puppets realize that. The British, for example, who certainly cannot be accused of being effusive, were filled with praise for Moscow's puppeteers. "Sergei Obraztsov is undoubtedly a genius in his art," declared the *Morning Advertiser*, while *Time and Tide* added, "a genius down to his fingertips."

The surprises do not end here. They actually only begin. Obraztsov is experimenting. He may be accused of inconsistency, for sometimes he tries to make his puppets do today what he declared yesterday they should not do. He has long been interested in the problem of whether puppets can act in serious contemporary drama, in a modern play that does not ridicule but has a positive message. Before, he felt that puppets could not handle a modern plot, that with their inclination toward parody they could not play really heroic roles. Lately, however, he has been staging more and more productions in which puppets theoretically have no business. The characters in *Two to Nothing in Our Favor*, *He Loves Me, He Loves Me Not*, and *Divorce Case* are pleasant, ordinary people, the kind we all know, college students, researchers, athletes. Those are completely "human" plays. There is much in them that is successful and much that is poor.

Inconsistency? Probably the only consistent people are those who stand still. Obraztsov and his theater, however, are constantly on the move.

What the theater will be like in the future is hard to say. After all, Obraztsov is a man of art. And art is always full of surprises.

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THE CHUSOVAYA RIVER FLOWING THROUGH THE URAL MOUNTAINS, DELIGHTS THE EYE WITH ITS WILD RUSHING BEAUTY.

SOVIET VACATION SPOTS

EACH YEAR VACATIONERS ENJOY THE SERENITY OF THE COUNTRY'S LANDSCAPES.

THE BLACK SEA OFFERS MANY SUCH SCENES OF MARINE BEAUTY.





THE GOLDEN BEACH OF SOCHI, BIGGEST VACATION RESORT ON THE BLACK SEA COAST, ALWAYS ATTRACTS HOLIDAY CROWDS OF SWIMMERS AND SUN BATHERS TO ITS SHORE.

VISITORS FROM ALL PARTS OF THE COUNTRY VISIT THE SIBERIAN ALTAI AREA.



This is Batumi, well-known Black Sea health resort. Each year many visitors travel here by steamship. ▶

Soviet Vacation Spots

The Soviet Union has a great variety of vacation spots—the waterfalls and mountain streams of Western Ukraine for the fisherman, the snow capped peaks of the Caucasus for the mountain climber, the sun of the Black Sea coast or the beautiful Baltic resorts for the swimmer and sun bather. There is the Altai region of Siberia with its majestic mountains, alpine pastures and highland taiga, as close to the ideal in vacation country as anyone is ever likely to see. Even the forests and fields within reach of Moscow have a charm and serenity which many Russian painters and poets have tried to capture.

The vacationer has his choice of the country's many resorts, with full vacation pay provided by the state.

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THERE'S NOTHING LIKE BEING A GRANDFATHER

A STORY BY GRIGORI RYKLIN



"Do you know who Mark Twain was?" The question was put by an elderly man with a small, neatly-trimmed gray beard.

The watchmaker, also an elderly man with a small, neatly-trimmed gray beard, gave his excited customer a gentle glance.

"Yes," he replied unhesitatingly, "I know who Mark Twain was."

"Well, who was he?"

"The man whose watch was ruined by a watchmaker."

"I'm glad to see you're so well read. Very glad indeed! Then you must know that Mark Twain warns his reader not to let his watch be repaired if there is nothing much wrong with it, for the watchmaker will certainly ruin it."

"Yes, Mark Twain was a great humorist. But he did not know of our shop. We don't ruin watches."

"What was that you said? That you don't ruin watches?" Here the elderly gentleman completely lost his temper.

"Take a look at that!" he fumed, and pulled a watch out of his pocket. "I got it back from your place three days ago. Last night it stopped, and it hasn't run since."

The watchmaker calmly picked it up, put it to his ear, shook it slightly, and then smiled. "You dropped it," he said.

"I dropped it, you say?"

"Yes, you dropped it."

"Nothing of the sort!"

"But it did fall."

"I shall warn everyone not to come here, and you'll have no customers."

"That's as you choose. But someone dropped your watch. It fell on the floor or on a table, on something hard."

"Nothing like that happened!"

"It must have."

"Do you suppose it could have been Petka?"

"That is quite likely. By the way, who is Petka?"

"My grandson. He's a big boy. He'll soon be two years old," the customer replied proudly, his face beaming.

"Is that so?" the watchmaker asked, and his face also lit up. "I have a granddaughter, Marina. She's not little any more, either. A year and four months."

"A wonderful age for a woman! Let me introduce myself. I'm Grigory Sazonov, Professor of Mathematics."

"Very pleased to meet you, Professor. Have a seat. My name's Miron Kupriyanov. Don't worry, Professor. We'll have it running soon."

"Who, Petka? Why, he runs so fast that I can hardly keep up with him."

"I mean the watch. Leave it with me. I'll take care of it. You say your Petka runs. So does my Marina. It's impossible for her to stay still two minutes."

"And the way Petka can talk! A remarkably clever, affectionate boy. The other day he said to me: 'You're crazy, Grandpa.'"

"Marina doesn't say words like that. After all, she's a girl. But she can say 'Mama' and 'Papa.' And the way she sneezes! A very capable child. I'm not one of those grandparents who think their grandchildren are the finest in the world. Not a bit of it. But, frankly, I've never seen a child her age as clever as she."

"You've never seen a child as mischievous as my Petka. The other day he took my papers and drew colored pictures all over them. I laughed myself sick. Then I sat up two nights rewriting them."

"My Marina loves to have me dance for her. I never danced in my life. Didn't even dance at my own wedding. But now I have to."

"What do you dance?"

"Mainly the *Kamarinskaya*. She adores it."

"Petka prefers the *czardas*. I tried the polka but he waved it away, wouldn't have it. Well, well, I've been taking up your time. I'll leave my watch with you. My, won't I give it to Petka! Now I must hurry, have my lunch, rest a bit, and then take Petka out to the Boulevard. We go coasting there. That rascal is pretty good, I must say. He uses me as his horse. A remarkable boy!"

"May I ask on which boulevard you fulfill your equine duties, professor?"

"Just around the corner from here."

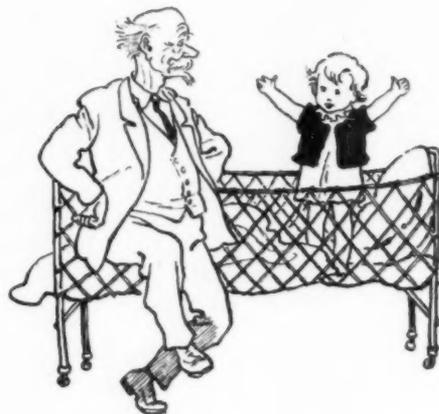
"Why, I race there too some afternoons. We're sure to meet."

Late the next afternoon the boulevard witnessed a new kind of race as the two grandfathers went to the post. Gripping the sled ropes firmly, they started with a slow trot that increased in pace until they were going at a gallop.

The professor led by almost a head for a time but then the watchmaker put on speed, and soon they were running neck and neck.

The youngsters on the sleds squealed with joy, firmly convinced that this is what grandfathers are for.

Soon the grandfathers were worn out and sat down on a bench, while their descendents scrambled off the sleds. The two men were puffing so



hard that for a time all they could do was beam at each other, conscious that they were the happiest people on that boulevard, in that city, on that planet.

The professor was the first to catch his breath.

"Thirty is the right age to be a grandfather. Then you can run. Now all one has are spasms and myocarditis."

"And gout," added the watchmaker. "As for the heart, it is like a watch. It ticks along all right but if a doctor starts poking about expect the worst."

"You are perfectly right. Thank goodness, you and I are sensible people, more or less."

"Not like some grandparents, who are quite abnormal."

"Mad!"

"You've hit the nail on the head. I have a neighbor who crows like a rooster for her granddaughter all day long. She even crows when the child isn't home. Evidently rehearsing."

"Amazing! There are a lot of them like that."

Martiros Saryan was born in the suburbs of Rostov-on-the-Don in 1880, into a peasant's family. A childhood spent in the open instilled in him love for nature, and at 15 he was attempting to paint its beauties. Two years later he entered the School of Painting, Sculpture and Architecture in Moscow, where he studied under the famous Russian painters Valentin Serov, Konstantin Korovin, Abram Arkhipov and Leonid Pasternak. They found Saryan an able pupil and helped him to develop his own style of painting.

Beginning with 1900 Saryan left Moscow each summer for Armenia to paint landscapes and portraits. In 1921 he moved to Armenia to live. He was one of the organizers of the Union of Armenian Artists and helped to found an art school and picture gallery in Yerevan.

Saryan traveled a great deal through Turkey, Persia, Egypt, Italy and France. By the age of 60 he had produced some 600 landscapes, still lifes and portraits. The greater share of them were on display at his recent one-man show in Moscow. He is a member of the Academy of Arts of the USSR.

When asked not long ago to what school of painting he belonged, Saryan replied: "It seems to me that the only school for the artist is life. I know of no other. I have had moments when I seemed lost, my aesthetic ideals failed me, and I found myself facing a creative impasse. But I never stopped loving life, which changes constantly and we with it, and life rewarded me by unfolding new secrets that urged me on. My school is life, only life. As an artist I cannot imagine myself outside life, and I paint it the way I see it, imagine it, feel it, love it. What most appeals to me is nature with its endless harmonies of color and form, and man."

Saryan feels that the future of painting depends to a great extent on what the public will demand of the artist. He is not afraid of the word "demand," he says, because that is reality, from which the artist cannot escape. A painting must find its public. It must reveal to this public the soul of the artist, his thoughts and aspirations, must enlighten it. A gifted and healthy-minded artist can instill lofty aesthetic ideals in the beholder, while a gifted artist who is psychologically unhealthy can poison his mind and taste. That is also life, and there must be mutual understanding and support in that life. Without this, painting will die as an art.

It is impossible for him, states Saryan, to say which of his paintings he considers the best. Those that he liked yesterday he finds unsatisfactory today. At his Moscow show in the Academy of Arts he heard many compliments, and that, he feels, puts him under a great obligation as an artist. Right now he is planning a canvas for the USSR Art Exhibit at the end of this year, but he has not yet decided definitely on the theme.

Many of Saryan's paintings have been displayed at international art shows. He recently sent several paintings to Italy. The Moscow show, which was visited by 14,000 people, has gone to Leningrad. Saryan may next take it to Paris. "That my paintings find an audience naturally gives me profound satisfaction," says Saryan. "My desire is that painting, which plays a tremendous role in bringing people of different countries and continents closer together, should have no boundaries. Painting will help people to think, and to believe and understand one another."



SELF-PORTRAIT OF THE ARTIST

"My School Is Life."

MARTIROS SARYAN



ARMENIAN LANDSCAPE

FLOWERS





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THE YOUTH OF ART

At the Anniversary Exhibition of Martiros Saryan

By Ilya Ehrenburg

I remember Saryan's landscapes sparkle among the canvases of other artists at different exhibitions. They seemed like oases to me then. This is the first time we have seen the creative course followed by this remarkable artist from the very beginning.

Saryan belongs to those masters who seek but do not toss from pillar to post, who persist in self-perfection but do not disavow their earlier works. There is a self-portrait at the exhibition. The artist pictured himself in different ages, morning, noon and evening, and all three countenances are blended into one. That is true also of his paintings. The early Egyptian or Turkish landscapes belong to the brush of the Saryan we know and love.

Before our vision lies Armenia, dry with the sweltering heat of July, her scaly brown earth, invigorating mountain air, peaches in blossom. It would, however, be naïve to limit the significance of his art to that. Saryan is one of the greatest artists, if not the greatest, of the Soviet Union. The catalog tells us that he is 75 years old. But that is not the impression conveyed by his latest works. They represent an embodiment of the whole youth of art.

Saryan pictures the world as man sees it. But the artist does not only see, he digests what he sees. Saryan's paintings are realistic and profound. They furnish added proof in support of the fact that works drawn from nature, qualified condescendingly by some critics as "sketches," are complete productions. Saryan expresses his attitude toward life through painting.

The artist of the early Renaissance who pictured a Biblical scene produced a landscape, but that was only a painted inventory showing that the place was Umbria or Toscana. The olive or fig leaves were accurately drawn, just as in a botany textbook. Each era has its own eyes. Saryan is an artist of our age, and he strives to connect what he pictures with man's perception. It is in this that I am inclined to see realism, although, of course, words may be given different interpretations, and a conventional reproduction of the world may be called realistic.

Naturally, at an exhibition featuring hundreds of the artist's productions some of them seem better than others. But there is not an untruthful production among them; there are no unrealistic figures, drawn and then painted, not a trace of the falsehood which is found even in the most perfect photographs. Looking at Saryan's paintings, one feels more keenly than ever that the human eye is unlike the lens of the photographic camera, and that the artist's wisdom is unlike the reporter's efficiency.

Saryan has no fear of clashes of what would seem to be incompatible colors, or of departures from the linear, conventional academic compositions. Many of his landscapes and still lifes are distinguished by clashing colors, but he always finds a unifying blend for them. The large still life dedicated to Armenian soldiers of the Second World War is a multitude of bouquets, and Saryan has succeeded in welding the details together, in evading disunity and incongruous mixture.

Southern sunshine devours colors, but Saryan has acquired command of the difficult material. It is remarkable how one feels the sultry heat of midday in summer, the tense quiet. The springtime landscapes, fruit trees in blossom, are wonderful. There is so much light and airiness in them that the people pause before them and smile. Saryan does not conceal his attitude toward the world; his painting contains a profound philosophy which encourages and edifies man.

Many of Saryan's portraits disclose the inner world of the original. Looking at Isaakyan's portrait one gets the feeling that he can hear his poems which gained the admiration of Russian poets, from Blok to our contemporaries. Marshal Bagramyan is calm and gentle, but one feels the will power and passion behind these features. There is caution and wonder at life in Lozinsky's portrait. And there is sadness in Anna Akhmatova's compressed lips.

Saryan's exhibition is a great event in art. Seeing all his works collected there, one feels doubly glad at the sight of his springtime landscapes and an urge to bow before the artist for preserving his creative ardor through all difficulties, throughout his long and great life.

The Soviet Government reduces its troop force in Eastern Germany.





JUST TOUCHING UP

HER DEBUT IS A PROMISE

By Gennadi Sibirtsev



HERE'S A NEW BATCH OF FAN MAIL

More than 50 actresses were given tryouts for the part of Desdemona in the film version of Shakespeare's *Othello*. But none of them quite came up to what Director Sergei Yutkevich wanted. He had begun to despair when one night at Cinema House in Moscow, he caught sight of a girl with flaxen hair and dreamy gray eyes.

"Who's that?" he asked.

"Irina Skobtseva. She just graduated from the Art Theater studio school," he was told.

"She'll be my Desdemona," said Yutkevich, and forthwith told the happy girl that he wanted to screen-test her.

But imagine Irina's disappointment the next morning at Mosfilm Studios when Yutkevich's assistants told her, after the test, that she would do splendidly for the part of Bianca. Playing Cassio's pretty mistress was not bad, of course, but after all, it was only a supporting role.

The matter was straightened out when Yutkevich arrived. But the Bianca test was not wasted. When the director of *Don Quixote* was searching for actresses for his new picture at the Lenfilm Studios in Leningrad, he saw the test of Irina as Bianca and said approximately what Yutkevich had said: "That's what I want."

Othello was released last March. Critics were divided concerning Irina's Desdemona. Some thought she was not the "true daughter of the South" that Heinrich Heine had once said Desdemona should be, that she was too feminine and serene. Others found her manner of playing the daughter of a Venetian Senator tenderly and gently in love with the fearless Moor exactly right. The majority agreed, however, that Yutkevich had discovered a new star.

Irina Skobtseva's new role in *Don Quixote* is quite different from Desdemona. The Duchess of Altisidora is a dark, vivacious creature, who plays many mean and amusing tricks on the Knight of the Rueful Countenance.

Now that Irina is on the way up, she is receiving all kinds of motion picture offers. Soon she will be packing her bags for a trip to Lvov. While the first part of *Don Quixote*, in which she does not appear, is being shot in Leningrad, she will play in a Kiev Studio production of *Ivan Franko*, a biographical picture about the famous Ukrainian writer of the end of last century. In *Ivan Franko* Irina plays a tragic role, that of a woman forced to leave the man she loves and marry another. She will again be starred with Sergei Bondarchuk, who played the title role in *Othello*.

You can learn much about a person from his surroundings. Some people surround themselves with books, paintings and elegant knickknacks. But the books remain unread; about the paintings the people know nothing, and the knickknacks often reveal a lack of taste. When I visited Irina Skobtseva at her apartment in a house on one of Moscow's busiest squares, I had no intention of being a Sherlock Holmes. But it was impossible not to notice the definitely Parisian atmosphere of the room. On the table stood a flower vase with a Ferdinand Leger drawing on it. Beside it lay an album of Leger reproductions. There were French newspapers and magazines scattered everywhere.

PACKING FOR A WEEK-END TRIP



"All mementos of the Ninth International Film Festival at Cannes," said Irina.

I leafed through *Le Temps de Paris*. One whole page was taken up by photographs of Irina and Kim Novak, headlined "USSR-USA Beauty Contest at Cannes." The evening *Othello* was shown there it became clear that those two girls were the stars of the festival. Both are tall blonds. "A beauty," they said of Irina, while they called Kim "a charming creature."

"Who won the contest?" I asked.

"No one. There was room for both of us at the festival."

Meanwhile, I continued to glance about the room, and I discovered things I had not noticed before, like the head of a girl carved out of wood. Obviously Konenkov.

"Yes, it's an original. I have the highest opinion of his work and never lose an opportunity to acquire a piece of sculpture by him."

"But Leger and Konenkov are quite different in style."

"Leger is a new passion with me. I didn't know much about him before my trip to France. As for a difference in styles, I can worship more than one god."

That attitude evidently explains the choice of books in the room: Shaw, Pushkin, Flaubert, Gozzi.

"Which is your favorite?"

"It's hard to say. I like Eliza Doolittle as much as I do Pushkin's Tatyana, and Madame Bovary as much as Princess Turandot."

Beside the color photographs from *Othello* on the wall hung a small Crimean landscape done in oils.

"Don't pay any attention to that. It's not much good," said Irina, her manner too offhand to be entirely natural.

"Whose is it?"

"Mine. I've always enjoyed painting. That is what led me to enter the art department at the University when I finished school."

It is not often that you meet movie stars who are graduates of two colleges. I asked her why she had switched to acting.

"Because I had dreamed of being an actress from the time I was a little girl. Not that acting runs in the family. My father is a meteorologist and my mother a civil engineer. But then, all girls dream of going on the stage. I wanted to be different, however, so I did not tell anyone how much I wanted to act, and when I graduated from high school I entered Moscow University."

While she was an undergraduate, Irina spent most of her spare time going to the theater, particularly the Art Theater, where she never missed an opening night and knew all the actors. But that did not prevent her from studying hard. Her graduation thesis, devoted to the work of the 19th-century Russian painter, Velentin Serov, won high praise, and her teachers predicted a brilliant future for her in art research. They had reason to, for the catalog of Serov's landscapes which she compiled was recognized to be fuller and more exact than any that existed. But she could not overcome her passion for the theater, and immediately after she graduated from the University, Irina took entrance examinations at the Art Theater's studio school. She was immediately enrolled as a second-year student.

Irina graduated last year. In the play which the graduating class presented, Lope de Vega's *The Crafty Lover*, she played the feminine lead.

So now Irina has two diplomas. It seems like rather a large number for a young actress, but Irina is certainly not the scholarly type. She ignores neither cosmetics nor clothes. Her clothes, by the way, she designs herself. She enjoys skating, skiing and tennis.

"Aren't you afraid of being left without a husband?" I asked jokingly. Irina laughed. "I haven't really had time to think about it seriously. Before, I thought I'd get married after I graduated from the University. Then I decided to wait until I finished the studio school. After that came *Othello*, and now I won't come back to Moscow when I finish in Lvov. I'll go on to the Crimea where the *Don Quixote* cast will be on location. Then . . ."

"Then you'll be invited to play in another film."

"No, I've promised I won't make him wait much longer."

"May I ask who he is?"

"Not right now. Let's keep it a secret a while longer."

Irina smiled and added with a chuckle: "I'm not telling you for your own sake. I want to give you a chance to write another article about me for your magazine."

But I am sure movie-goers will hear about Irina Skobtseva often in the future without that. Her debut is a promise of it.



MOVIE STAR AND HER MOTHER

YOU CAN BE SURE SHE HAS MALE FANS, TOO



THEIRS IS A GIGANTIC TASK

Students of the Moscow Electrical Engineering Institute

By Dmitri Gudkov



FRESHMEN STROLL IN FRONT OF THE MOSCOW ELECTRICAL ENGINEERING INSTITUTE'S MAIN BUILDING.

Each and every day the Soviet Union generates as much electric power as it did during the whole year 1920.

Translate this fact into light and power for millions of people who before 1920 knew only the kerosene lamps and the muscle power of their fathers and grandfathers and you have the amazing story of Soviet electrification.

It began in 1920 when Vladimir Lenin, head of the government, addressed a session of the Congress of Soviets at the Bolshoi Theater in Moscow. He laid before the delegates what must have seemed a visionary plan for the electrification of an enormous country that under the czars produced even less electric power than tiny Switzerland.

Professor Krug, a well-known Moscow engineer, was present at the session. He had helped draw up the plan. As he watched the pointer of the speaker move across the map of Russia spread on the stage, he saw more than the great chain of future power stations stretching across the country. He saw thousands of students trooping into lecture halls and engineering laboratories.

The plan called for the establishment of a college for electrical engineering in Moscow, to be headed by Professor Krug. That was how the Moscow Electrical Engineering Institute was born. Today it is one of the largest in the Soviet Union.

As Large as Many Towns

The Moscow Institute trains engineers in all phases of power production and electrical engineering—hydroelectric engineers and specialists for atomic power plants, designers of colossal generators and of semi-conductor instruments no bigger than a fly, radio engineers and builders of electronic computers—engineers in forty specialties.

The Institute is as large as many towns, with 11,000 students and 1,000 faculty and staff members. It would entail a walk of 15 miles to go through its 100 laboratories, which include a power station and heat and power station with a kilowatt capacity large enough to serve many a small city. The library houses half a million volumes in a score of languages. There is a student lounge with a theater seating 1,000, gymnasiums, a swimming pool, a stadium and an infirmary.

Creative Engineering

The course of study is planned to give a rounded engineering background. In the first five semesters the budding engineer takes physics and advanced math, the theory of mechanics and resistance of materials, fundamentals of electrical engineering and electronics. After that he begins to specialize in his chosen field. One of the courses an electrical engineer takes, for example, is "Transmission of Energy by a Continuous Current"; a radio engineer, "Germanium Semi-Conductors."

Work is evenly divided between theory and laboratory practice. The Institute wants to train not engineers alone, but research scientists, equipped to do creative work.

The many research laboratories are geared to combine theory and practice. Professor Leonid Sirotinsky of the Institute faculty puts it this way. "We want our students to keep their fingers on the pulse of modern science and practice."

The high-tension lab is a case in point. The impulse generator mounted in the lab can work up a tension as high as 1,800,000 volts. The "lightning" it produces can breach a group of 15 to 20 insulators. This is equivalent to the number of insulators used on the Kuibyshev-Moscow transmission line with a tension of 400,000 volts. Laboratory investigation of this kind by students has both scientific and practical value.

Twenty-Six Days to Payday

Classes end at 3 o'clock. After that all activities center around the student dorms, the gymnasium and the lounge.

About 5,000 students who come from all parts of the country live in the dorms. The rooms are shared by either three or four students. Although they are built pretty much alike, they each have the individual touches given them by students anywhere. But there is one touch which is distinctively Soviet. Many of the rooms have a peculiar sort of calendar tacked on to the wall. It reads, "Twenty-six days to payday." The number changes daily, but the idea remains the same. Every student with passing marks gets a monthly stipend.

The girls' dormitories—women make up more than one-third of the student body—present a typical picture of the widely separated parts of the Soviet Union from which students come. Here are four roommates: Lyusia Petrova, Lilia Eminova, Rimma Gerasimova and Zhenya Maltsura. Lyusia comes from Kazakhstan, Lilia from Kirghizia, Rimma from Siberia and Zhenya from the Far East.

Not All Work and No Play

Sports are a major activity at the Institute. Students go in for everything from soccer and track to yachting and mountaineering. In the five years they study at the Institute many of them develop into top athletes, like Igor Koshkarov, who holds the USSR record for high jump.

On days when inter-scholastic tournaments are held in gymnastics, basketball, skating, track and field or soccer, the whole Institute moves to the Stadium. The engineers have a sizable collection of cups and pennants won from other schools to testify to their athletic prowess.

STEM stands for the student theater which puts on plays, revues and musical comedies. It is one of the very popular student activities. More than 1500 student dancers, singers and musicians took part in the festival the Institute held this year.

Every division of the Institute features a map showing where its alumni are working. Seventeen thousand engineers have been trained at the Institute since it was founded, and a glance at any one of the maps is an excursion through a vast country which has plenty of working room for many more thousands of trained engineers than the Moscow Institute and other engineering schools can turn out every year.

The traditional "Open House" is held for high school seniors. Professor Leonid Sirotinsky converses with a group of future students in the Institute's laboratory.



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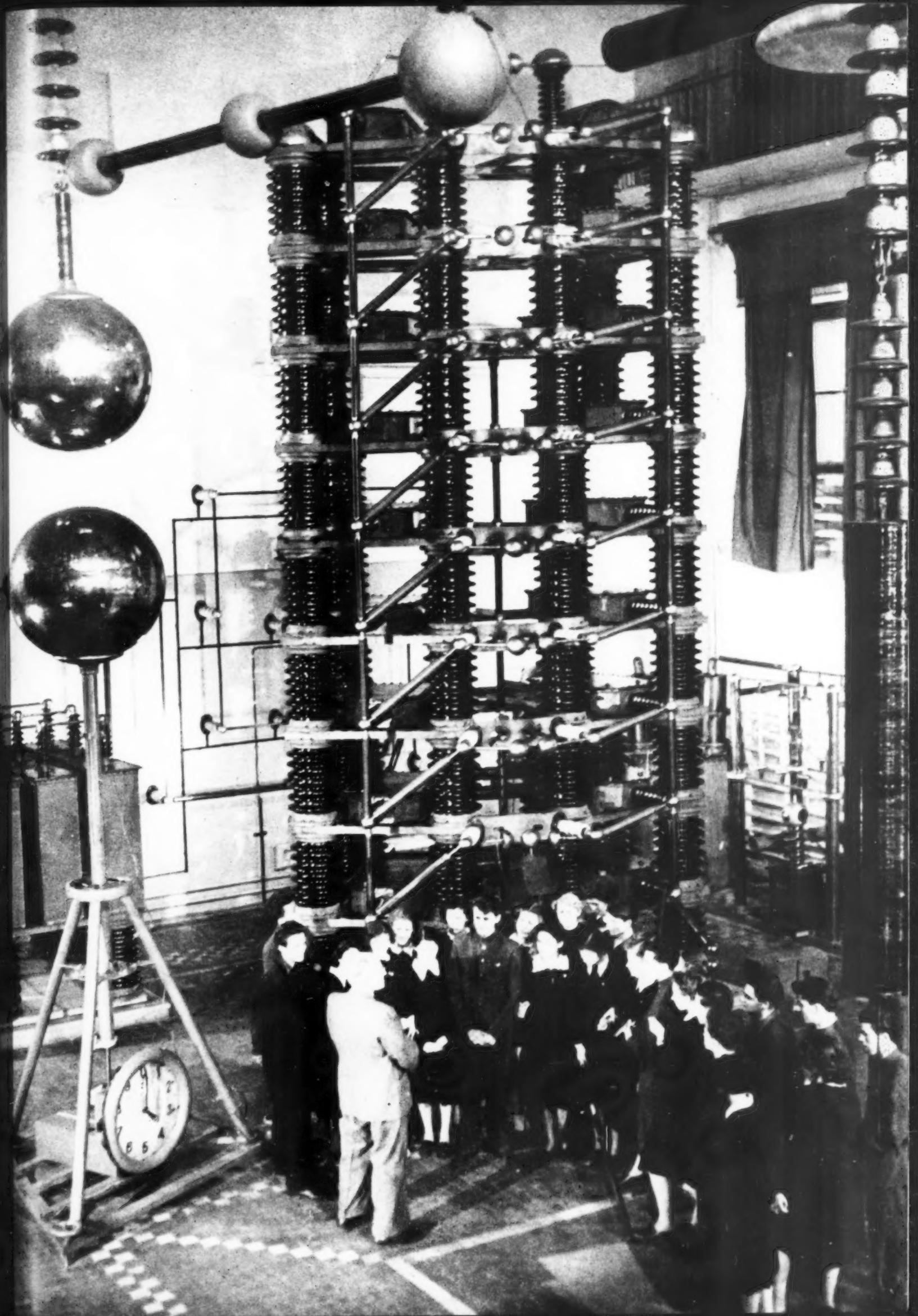
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BASKETBALL IS ONE OF THE MOST POPULAR SPORTS WITH STUDENT ATHLETES.

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Students of the Moscow Electrical Engineering Institute



ON SATURDAY THERE IS DANCING TO MUSIC OF THE STUDENTS' JAZZ BAND.



There are no vacant seats when the student performers come out on the boards of the Institute's Concert Hall.



IT'S TIME FOR EVERYONE TO UNMASK AT THE STUDENTS' BALL.



THE GIRLS SING, "LOVE DOES NOT HURT OUR STUDIES," FROM A NOW POPULAR SONG.



AMATEURS DANCE TO ACCOMPANIMENT OF THE STUDENT ORCHESTRA AND CHOIR.



THIS CAMERA-CONSCIOUS GIRL IGNORES BALLOON OFFERED BY A WOULD-BE SWAIN.

MEET OUR ATHLETES

Vasili Kuznetsov-

European Decathlon Champion

Introduced by Coach Lev Liebkind

Top-notch athletes aren't born that way, any coach will tell you. They make themselves—the hard way. Vasili Kuznetsov, Europe's decathlon champion, is six feet of evidence that goes to prove that stubborn fact of life.

Landmark number one in Kuznetsov's career is Pokrov, a little town about 60 miles out of Moscow on the Moscow-Gorky railroad. His family moved there when he was six. That was in 1938. The road to the town's athletic stadium wasn't the shortest way from home to school and back again, but the youngster's feet seemed to take naturally to the route past the stadium.

The big moment in Vasili's life came when he was 14. He was standing at the edge of the field one day watching a big, broad-shouldered athlete throwing the discus. It was Fyodor Shulyatski, physical training instructor. Shulyatski said to the boy, "How would you like to try tossing it over the stadium fence?"

Vasili picked up the heavy shining discus. It was the first time he had ever held one. He flexed his muscles, hopped as he had seen the field stars do and threw. The discus flipped over and over in a crazy arc and landed—four yards away.

Shulyatski didn't give him time to get discouraged. "It takes knowing," he told Vasili. "Come around tomorrow and I'll show you how." That was the beginning of the making of a champion.

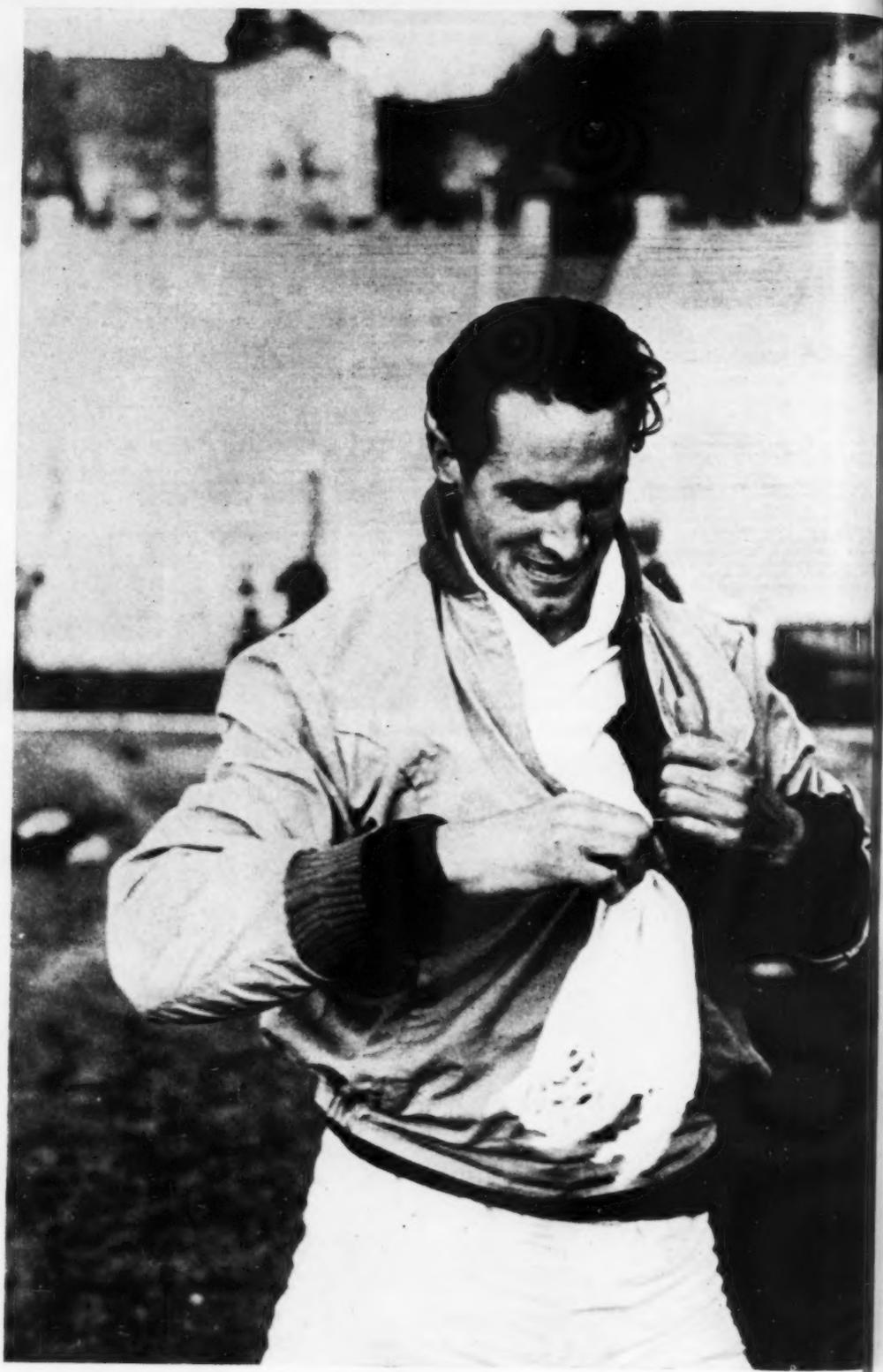
Then Vasili began to work, with discus, javelin, and at sprinting, jumping and hurdling, with Shulyatski to give him pointers and encouragement. Once the physical training instructor showed him a booklet, "The Road to the Top in the Decathlon." On the cover was a picture of Vladimir Volkov, USSR champion, throwing a javelin. The booklet put into words what Vasili was learning on the field in tough day-to-day practice, that the decathlon man must have the speed of a sprinter, the agility of a jumper, the strength of a thrower and the stamina of a distance runner.

Vasili told the instructor he'd like to try for the decathlon.

"You've got the makings," Shulyatski said. "The rest is up to you. Practice and then more practice."

Friendly Rivals

A few years later Kuznetsov, then a student at the Moscow Teachers Training College, tried his luck in a major decathlon contest. Volkov was in the contest. It was a grim experience for Kuznetsov. There were two days



VASIL KUZNETSOV

for ten events. It took him nearly 18 seconds to do the hurdles and he cleared only 9 feet 8 inches in the pole vault. By a Herculean effort he managed to get through the final event, the 1,500-meter race. It was a very dark day for the future champion.

He was almost ready to drop the decathlon. It wasn't for him, he told himself; he just didn't have what it takes. He tried to convince himself that even Volkov, toward the final event, had looked as if he were ready to cave in. However, there was one big difference between the two of them. Volkov had come out winner.

But when Volkov came over to him the next day and said, "I was watching you yesterday. You've got the stuff," Kuznetsov felt as though he'd been given a shiny gold medal.

Volkov offered to coach him. They became fast friends. They trained together and studied together. Volkov was a graduate student working on his thesis. Kuznetsov was an undergraduate preparing for his exams.

Volkov knew that he was coaching a formidable rival, one who, probably sooner or later would contest his championship. But there's a tradition in sports, and Volkov is a

Continued on page 50



1,500-METER EVENT



THROWING THE JAVELIN



POLE VAULT



THROWING THE DISCUS



COACH VLADIMIR VOLKOV (LEFT) AND VASILI KUZNETSOV



FINISH OF THE 400-METER EVENT



HURDLE RACE

100-METER EVENT

BROAD JUMP

SHOTPUT

HIGH JUMP



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sportsman. He gave Kuznetsov the benefit of all the knowledge he had.

In the autumn of 1953 they were the two main contenders for the USSR title at the championships in Ashkhabad, the Turkmenian capital.

At first Kuznetsov kept close behind Volkov. But then he began to fall behind badly. He got nervous, upset, began to lose his form. His first two shot-put trials were badly placed. He came up for the last trial.

Volkov, watching, knew what Kuznetsov's trouble was. He could keep quiet and eliminate his friend. That would leave only one contender, a Byelorussian boy, Listopad. But Volkov stepped up and said, "Take it easy, Vasili, and watch that open palm of yours."

That piece of advice lost Volkov his title. Kuznetsov's third shotput was successful. And in the following events, he pushed ahead of Volkov and won the championship.

But they kept training together. In July 1954, with Volkov still his coach, Kuznetsov set a new USSR record, at the same time breaking the European record which had been held for 20 years by Hans Siewart of Germany. In August of the same year he was one of the 19 top-rated contenders for the European crown at the Neufeld Stadium in Berne.

He faced a strong opponent in Heintz Oberbeck, of Germany, who was out to avenge the

defeat of his fellow-countryman. After the first five events, 100-meter sprint, broad jump, shot-put, high jump and 400-meter race, the German contender was leading by 256 points. But on the second day, Kuznetsov beat Oberbeck by more than a second in the hurdles, won the discus throw, placed first in the pole vault in a hard fight and left his rival behind in the javelin throw. When he broke the tape at the finish line of the 1,500-meter race, the stadium stood up and cheered him as European champion.

In the fall of 1955, Kuznetsov chalked up another performance. He boosted the European and Soviet records to 7,645 points.

Melbourne Is Next

Kuznetsov has a busy schedule. At 8 every morning he does setting-up exercises. A while later he races down the stairs from the seventh floor, where he lives. No elevator for him. "Stairs are good for the biceps," he explains. He's on his way to classes at college. At 3 he's back and at 5 out again for training with Volkov. In the evening there's a stroll with his pretty wife, Ann, and their year-old son. And then it's books and talk.

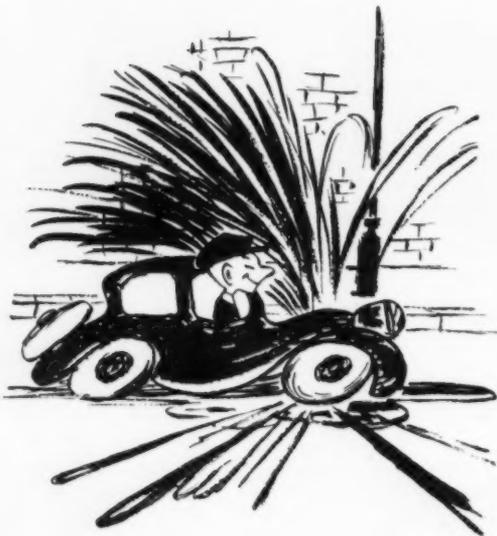
These days conversation in the Kuznetsov household keeps referring to the Olympic games in Melbourne and the pre-Olympic trials at home. This summer Kuznetsov has

twice demonstrated his prime condition and given his fans new reason to cheer.

At the Kiev tournament, he broke the world pentathlon record. That isn't the decathlon of course, but his record was regarded as a fine pre-Olympic showing. Then early in July, participating in the Moscow tournament, Kuznetsov set a new USSR and European record in the decathlon. His record in the ten events follows:

100 meters—10.7 seconds; broad jump—7.16 meters; shot-put—14.51 meters; high jump—1.83 meters; 400 meters—49.6 seconds; 110 meter hurdles—15.4 seconds; discus throw—46.86 meters; pole vault—4.10 meters; javelin throw—59.61 meters and 1,500 meters—5 minutes 2.4 seconds. This showing gave Kuznetsov a total of 7,688 points which is 66 points less than the total garnered by the crack American decathlon entry, Rafer Johnson, who placed first in the U. S. qualifying trials in California. Johnson also holds the world record of 7,983 points.

It's difficult to forecast how Melbourne will shape up. Olympic forecasts are risky. And Kuznetsov himself says, "The last thing I am is a prophet." But he adds, "I'm glad that I'm going to have a chance to meet the European decathlon performers I already know. And, of course, the world record holder, Rafer Johnson, and the other top American athletes. It's going to be a tough fight."



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EXPLORING AN INLET IN A KAYAK

HAVING A WONDERFUL TIME

Moscow School 46 has maintained this camp for a number of years now for senior grade children. It is set in a beautifully wooded spot near the Pestovol Reservoir, on a riverbank.

Summer is camp time anywhere in the world. And Soviet children in camp had the same fun and managed to get into the same mischief as American children.

These Soviet boys and girls, city children, set up the camp themselves. They pitched their tents, built the kitchen, mess hall and dock.

They ran the camp themselves. There were counselors around, but

they were guests, not to be bothered unless something really serious came up. Sometimes the camp council, elected by all the campers, called on the counselors for advice. But that was a rare thing.

The summer wasn't all hikes, swimming and sailing. There was K.P. and wood-chopping and any number of other chores. But that's part of camp life, too, and got no more than the usual amount of grumbling.

The letters which the children scrawled to send home all repeated themselves. "Having a wonderful time," they all said.

Continued



BUILDING A BRICK OVEN



SETTING UP CAMP TAKES A LOT OF WORK



MAKING FINAL TOUCHES

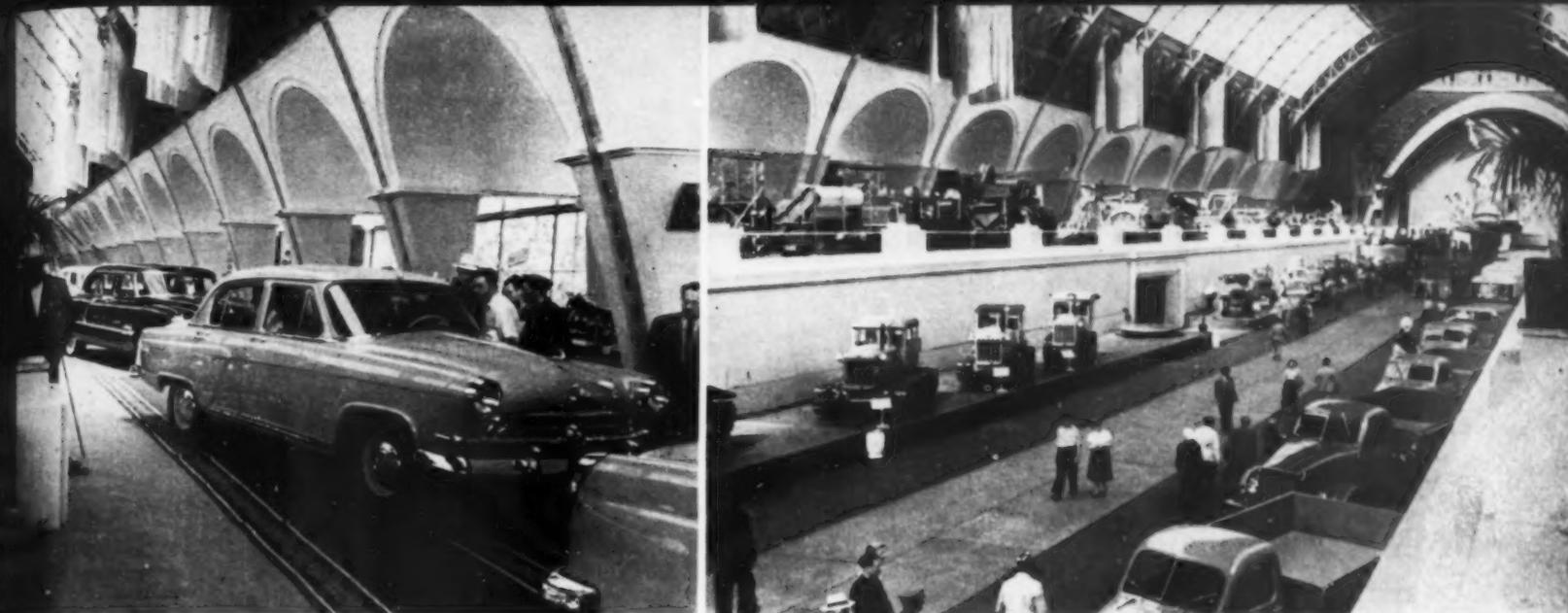
UNPACKING TENTS AND EQUIPMENT







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THE DISPLAY OF NEW PASSENGER CARS AND TRUCKS AT THE PAVILION OF MECHANIZATION.

Continued from page 22

Everything for the People

The exhibits in the pavilions of the consumer goods industries express the main theme of the Exhibition: all the achievements of science and technology to provide the good things of life for all the people.

Soviet light industry was hard hit by the war. It has to move along now at top speed to meet an ever-growing demand.

The production of consumer goods is scheduled for a sharp increase between 1956 and 1960. Production of various artificial fibers is to be boosted fivefold over 1955. Another 3,166,000 spindles and 95,000 looms are to be installed. New factories with an annual capacity of 85 million pairs of shoes are to be built.

The quantity and variety of food available to the population will increase tremendously within the next five years. Retail stores will have 60 per cent more butter, and the supply of other dairy products will more than triple.

Soviet specialists are busy with the realization of the program. Visitors to the exhibition can see new machines and equipment used at various plants.

New and improved techniques have been carried over to light industry, such as a circular knitting machine which increases output by 400 per cent and a machine for tanning leather which is 60 times faster than the old process. Automatic and semi-automatic machine lines work without the aid of human hands.

The Light Industry Pavilion is decorated to suit its displays. The columns are draped with fabric of beautifully varied colors. The light is reflected from sparkling cut glass. Housewives crowd around the bright new sewing machines, refrigerators, washing machines and vacuum cleaners.

Science and Technology Working Together

When a high shrill whistle sounds through the great exhibit hall, it signifies that apparatus at the super-pressure physics laboratory has been set in motion. Professor L. Vereshchagin, the head of the laboratory, and his colleagues have designed apparatus which releases a liquid with fantastic properties. In a tiny stream, almost invisible to the naked eye, the liquid cuts through rock and metal.

The section of the Central Pavilion devoted to the work of the USSR Academy of Sciences is packed with many amazing things. Here are research instruments to trace processes that begin and end in a millionth

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PAVILION OF MACHINE-TOOL BUILDING.

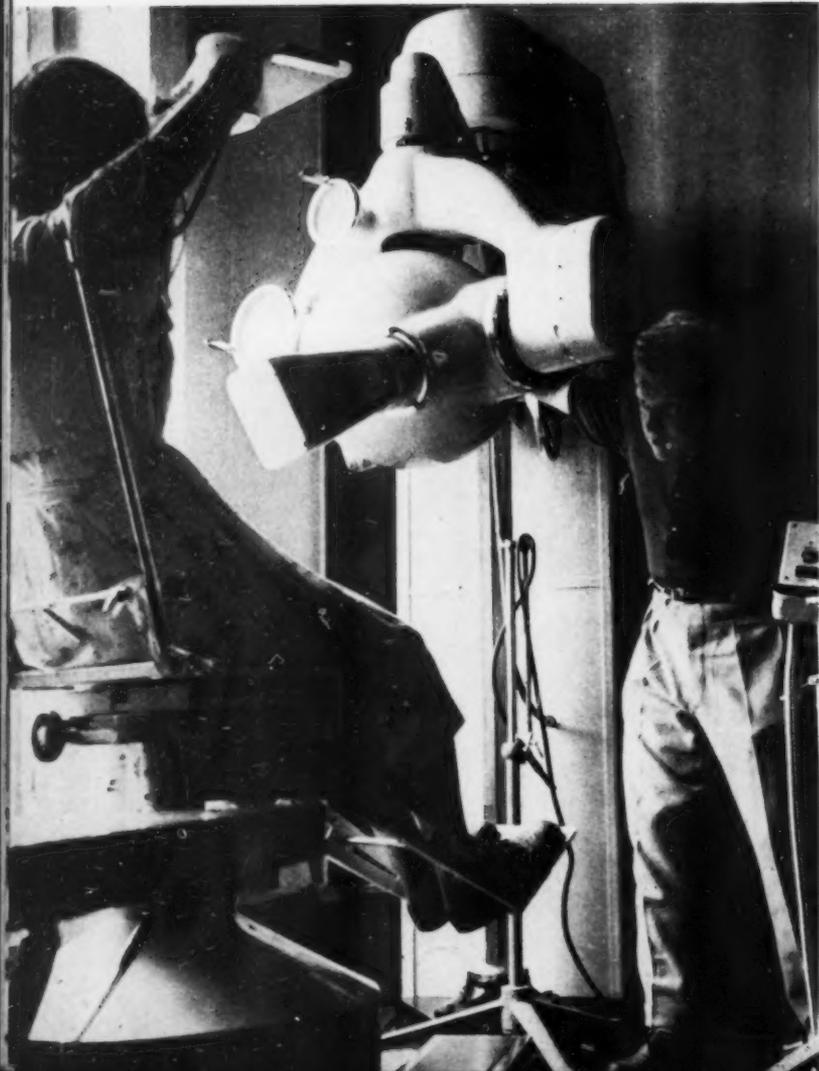
TRACTOR RATED AT 250-HP CONTRASTED WITH 4-CYLINDER MUSCOVITE CAR.





A WORKING 150-KILOWATT ATOMIC REACTOR.

THE GUT-400 APPARATUS FOR RADIOACTIVE COBALT TREATMENT.



Continued from preceding page

of a second. Here are microscopes that magnify the infinitesimal 40,000 and 100,000 times.

One display shows the use of biochemistry and geochemistry in ferretting out mineral deposits. The trained eye of a geochemist sees a clue to mineral deposits in the character and color of plant life; chemical analysis of roots and leaves will show tiny traces of valuable ores. By analysis important mineral deposits have been found, including the rare and dispersed metals.

New Sources of Energy

The pool in the Atoms-for-Peace Pavilion is not especially impressive by comparison with the many other beautiful pools and fountains scattered throughout the Exhibition grounds. But this is a rather special pool. Its 20 feet of bluish water serves as a protective screen for an atomic power reactor with a capacity of 150 kilowatts.

Young visitors to this exhibit are markedly casual about atomic power. They have grown up with atomic nuclei studies in school. These future engineers of atomic power plants, captains of atomic liners and pilots of atomic-powered planes take the atom very much for granted.

For older people the speed with which atomic power has invaded life today is still an incredible phenomenon. Industry, agriculture, medicine, almost every area of activity has been affected and altered.

Five big atomic power plants, each with a capacity of from 400,000 to 600,000 kilowatts, will be built in the Soviet Union in the next four years. But in spite of the rapid development of atomic power, fast-growing requirements for electricity will have to be met for a long time by coal, oil and gas. Even hydroelectric stations, the cheapest source of power, can meet only part of the need. No less important than atomic energy, therefore, is development along other lines, more effective steam-producing engines, thermal and hydropower stations and the harnessing of the energy of wind and sun.

Nevertheless, atomic power has caught people's imagination, and visitors crowd to see the display of instruments in which gamma rays are used for continuous measurement of the density of cold- and hot-rolled metals, the atomic defectoscopes and other applications of atomic energy to geological prospecting, to chemistry, metallurgy and medicine.

A Step Forward in Electrification

New developments in electrical equipment and in the electric power industries are illustrated by many models. A 2,000-ampere aerial switch, arresters and other apparatus used in the Kuibyshev-Moscow transmission line are shown. An alternating current of 400,000 volts is used on that line. Scientists are now experimenting with a current of 600,000 to 700,000 volts, to be used for transmitting power from the Yenisei River in Siberia to the Urals.

Exhibition visitors learn what Soviet engineers are doing to solve problems of transmitting super high-voltage direct current over long distances. A high-voltage, mercury-arc rectifier shown is similar to those now in use on the experimental line near Moscow.

There are only two such lines in the world. One is in Sweden, stretching from the mainland to Helgoland Island, and one near Moscow. Exchange of information between Swedish and Soviet power experts has proved mutually profitable.

Energy development is by far the most important job of Soviet engineering. The current five-year plan marks a significant step forward over 1955. It calls for a 2.2-fold increase in thermal turbine station capacity and for a 2.7-fold increase in hydroelectric station capacity.

Blueprint for the Future

The USSR Industrial Exhibition shows more than technological progress today. It is a blueprint for tomorrow. Whether the Exhibition visitor begins his tour with the Central Pavilion of Science which dominates the grounds, or the Industrial Pavilion, or the Atoms-for-Peace Pavilion, he carries away with him the same impression of the magnificent alliance of science, technology and labor which makes the future so promising.

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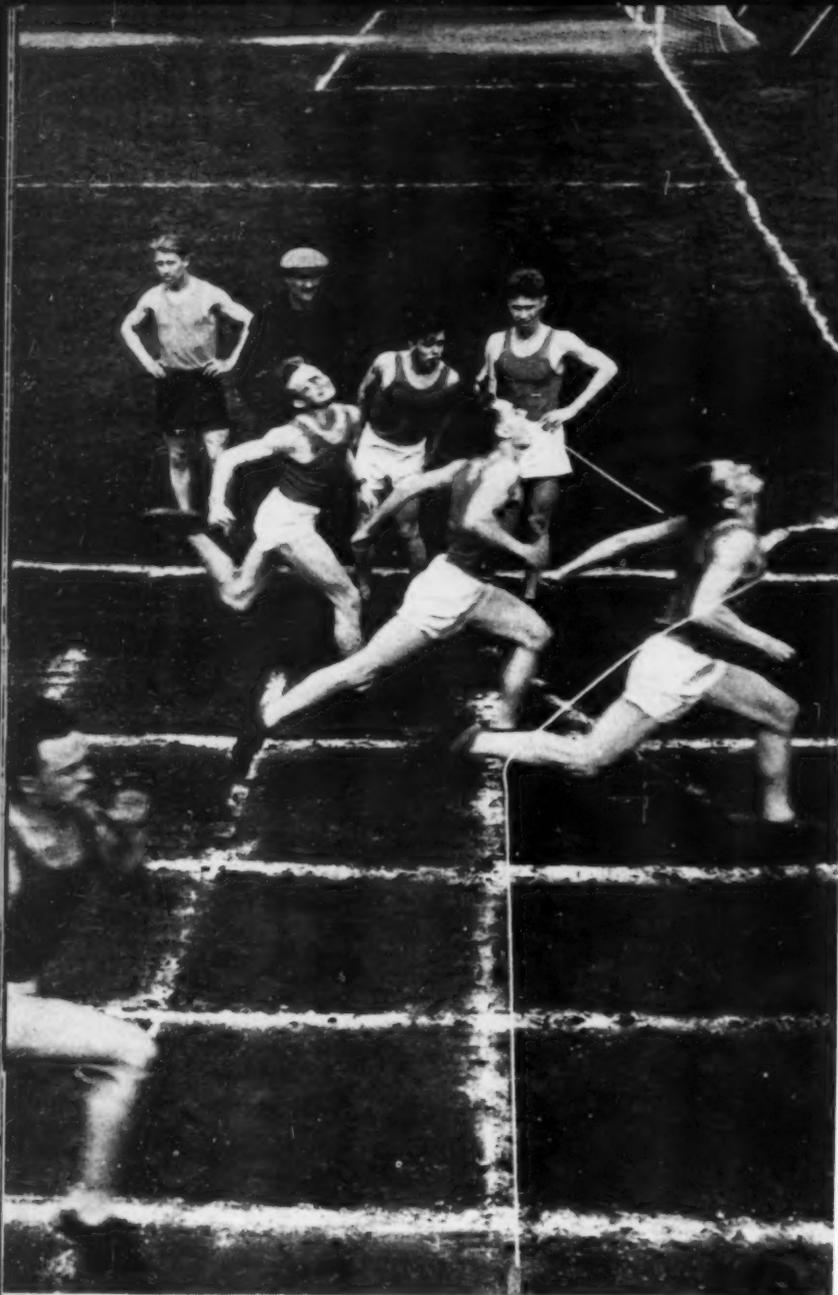
THE RUSSIA RADIO COMBINATION



IN THE FURNITURE DEPARTMENT.

A 25-TON DUMP TRUCK OF THE MINSK AUTOMOBILE PLANT.





"AVANGARD'S" SPORTS SCHEDULE INCLUDES MANY TRACK AND FIELD EVENTS.



VICTOR RAGOZIN, A MOLDER AT THE FOUNDRY SHOP, TAKES THE HIGH JUMP.

SKATERS' SUMMER SCHOOL. NEWCOMERS WHO JOINED "AVANGARD'S" ICE-SKATING SCHOOL LAST WINTER GO THROUGH SUMMER PRACTICE. ICE-HOCKEY IS POPULAR.



"AVANGARD" a Workers Sports Club

By Alexei Vasiliev

The Ural Heavy Machinery Plant in Sverdlovsk is one of the biggest in the country specializing in machinery for the mining, metallurgical and oil industries. It is called "Uralmash" for short. But "Uralmash" means more than just a giant plant; it stands for a whole town of big apartment houses, hospitals, schools, junior and regular colleges, recreation centers, sports installations and extensive retail trade services. The local population is extremely sports-minded and the "Uralmash" Sports Club is certainly worth visiting.

Familiar Faces

On my tour of "Uralmash" I dropped into the chief designer's office. My attention was caught by a rather thin engineer with jet-black hair who at the moment was bent over his drawing board. The face, figure and even stance seemed familiar to me. I racked my brain for a clue. I had never been at the plant before, but I was sure I had seen him somewhere.

Just then someone entered the office and called this familiar-looking stranger, "Ilivitski!"

That was it! I had seen him in Moscow in the big chandeliered Hall of Columns at Moscow's Trade Union House. I immediately recalled the huge demonstration boards and the tense atmosphere of a big chess tournament. This man was none other than International Chessmaster Grigori Ilivitski.

Ilivitski is an old-timer among the plant's design engineers. He came to be known not only as a good engineer, but as a good chess player, too. His first appearances in plant tournaments showed him to be a player of no mean ability.

My reporter's soul felt a story here, so I interviewed him.

He did not prove too talkative, but I did learn that he and a team of





A KEEN MOMENT AT THE "AVANGARD" GOAL. THE VISITORS, THE TBILISI SOCCER TEAM, BROKE THROUGH TO PENALTY ZONE. THERE ARE FOUR SOCCER FIELDS, 40 TEAMS.

fellow-designers are working on a model of a new type of lathe. As to chess prospects, he hopes to qualify for the grandmaster title in the near future.

I must admit I was a bit surprised to see a front-page chess player hard at work away from a chessboard. But there were quite a few similar surprises awaiting me. I met men and women at the plant who are big names not only at home, but abroad as well. I might mention Anastasia Plotnikova, who has held the women's skiing title for many a year; or Tatyana Karelina, who holds a world record in ice skating, or Ludmila Gornostayeva, a long-distance runner who took part in the cross-country race in Paris for the *L'Humanité* prize. I might also mention Boris Osipchuk, a volleyball player of international class, and sharpshooter Vladimir Smolin.

All this proves the point I made to start with. They're very sports-minded out at the "Uralsmash."

Five Thousand in Club Colors

Outside the trade union office there is a big billboard reading: "AVANGARD."

It appeared that there was always something doing. One of the signs read: "Strongman's Contest. Show 'Em You're No Weaker than the Other Man!" There was another one announcing a "lightning-loser-drops-out-tennis-tournament." A third sign invited everybody to a weekend hike along the divide of two continents, Europe and Asia, which passes down the Ural mountains. Then there was an announcement of the plant boxing tournament for all comers in all weights. There was something for all tastes and inclinations. I saw notices of basketball, water-polo, soccer, cross-country running and all sorts of exciting games. This was the "Avangard" Club keeping its membership posted on latest happenings. And to me it all looked like an Olympic game program in miniature.

Five thousand workers at the plant wear the club's colors. They go in for 20-odd different sports. And these include not only the more popular events, such as track and field, soccer, volleyball and basketball, but figure skating, mountain climbing, fencing, tennis and gymnastics.

I got all the details from the head of the Club's Council, Valentin Gornostayev, whom I found at the Avangard Central Stadium. And I might add that I found him only after a long search. You see, it was Saturday afternoon, and the workers were taking advantage of their short day to have their fill of soccer, athletics, swimming at the indoor pool and cycling at the Club's bicycle center.

When I came up, Gornostayev was in the midst of a heated discussion with a group of soccer players.

After the necessary introductions had been made, he explained what had been taking place. "I was solving a problem in algebra, one of those sticklers with 40 unknowns," he said.

I looked question marks. "Algebra?" I asked, "What's the connection with sports?"

"Connection? We have four soccer fields and ten times more teams. In

fine weather the strictest schedule breaks because more players want to train, and I've got to juggle around so as not to hurt anyone's feelings. What a job!"

I certainly sympathized with him. What helps to whet interest in soccer is the fact that the plant's soccer team is entered in the Division B tournament for the USSR title.

A very close second on the popularity list is ice-hockey. The plant has approximately 400 players. There are 23 shop teams taking part in the plant championship. Four more teams, a men's, youths' and two children's teams, take part in the city tournament, and they have managed to take top honors for several years in succession. All in all, 500 hockey games were played by the plant's teams during the winter season.

The figure is no less impressive in volleyball, which is also a very popular sport here. The plant numbers 50 teams taking regular part in tournament play.

I decided it was time for a question. "How many coaches do you have to train your teams?" I asked.

"More than 500," was the answer. Most of them are "rated" players for whom coaching is a hobby after working hours. But there also are quite a few professional coaches with special training.

All for Three Rubles a Year

It's quite an experience to be at a stadium when the fans are yelling with excitement during some keenly-contested tournament. It's fun to watch the rooters cheering for their favorites. But I think it's no less interesting to take a look into the sports "kitchen."

On the plant stadium grounds there's a fair-sized cottage which at times hums with excitement no less than that in the gyms and outdoor courts. This is the sports equipment storehouse, the place one gets balls, javelins, discuses, pole-vaulting gear and all the other necessary equipment "from soup to nuts."

I happened to walk in, in the midst of a burst of laughter. It seems that a husky boy, just a few inches short of the ceiling, was having some difficulty in choosing training togs. (I afterward learned that it was Vladimir Uzhegov, the plant's number one hammer thrower.) "Don't they make them my size any more?" he complained, as he tried unsuccessfully to squeeze himself into what they were offering him. Uzhegov was ready to give it up as hopeless. But slim little Magdalena Pereleshina, who works in the designing bureau and who is in charge of togs and gear at the sport club, picked several outfits—the biggest she had, and put them into Uzhegov's valise. "Here, take them and try them on at home. Maybe you'll find something that fits. And don't forget to bring the rest back!"

"Avangard," like most sport clubs in the Soviet Union, is financed by the trade unions. It is true that every member pays annual dues, but they are a mere token payment of three rubles, which is the price of two packs of cigarettes. This three rubles entitles you to the use of the stadium and sports equipment. It also includes coaching fees. There is no special fee for the services of the qualified trainers they have.



EMBOSSSED BOWL



SAMPLE OF ANCIENT MAYAN PAINTING ON CERAMIC

Continued from page 7

Biography of a Discoverer

The young scholar was graduated from Moscow University after the war. His career up to that time had not been essentially different from that of most Soviet students. His father was a railroad worker. He is the youngest of four brothers and sisters, all doing scientific work. He was still undecided about a profession when the war broke out. He served in a howitzer regiment and returned to the University when the war ended to complete his degree.

It was then that he became interested in Egyptology and attracted the attention of his professors by his work in hieroglyphics. But what seems an insatiable appetite for study

led him at the same time—and this against the advice of his teachers, who thought he had all the makings of a brilliant Egyptologist—to attend lectures on Japanese literature, to study Arabic, Chinese characters and the writings of ancient India, certainly, a voluntary course of study that would take an ordinary man several lifetimes. It is probable that even then he was working on the theory that significant discoveries are often made at the point where a number of fields of knowledge meet.

His work on the Maya inscriptions began quite by accident. His professor showed him an article from a foreign magazine by the German linguist Paul Schellhas. The article carried the title "The Maya Inscriptions—a Hopeless Problem." Schellhas had reached that sad conclusion after 50 years of work in a fruitless attempt to solve the riddle.

Knorozov read the article and said mildly, "I believe Schellhas is wrong." Then he had to prove his point.

Spade Work

It was a complex job of research that he undertook. It meant first a study of the voluminous work that had been written on the Mayans. He had to know the everyday details of the culture, what clothes the Mayans wore, the gods they worshipped, how they waged their wars, what they grew for food, how their society was organized. There were the writings of the Spanish conquistadors and missionaries. Knorozov studied Spanish and translated Bishop Diego de Landa, who had seen the old Mayan writings, and had had them burned by the Inquisition after the completion of his own work.

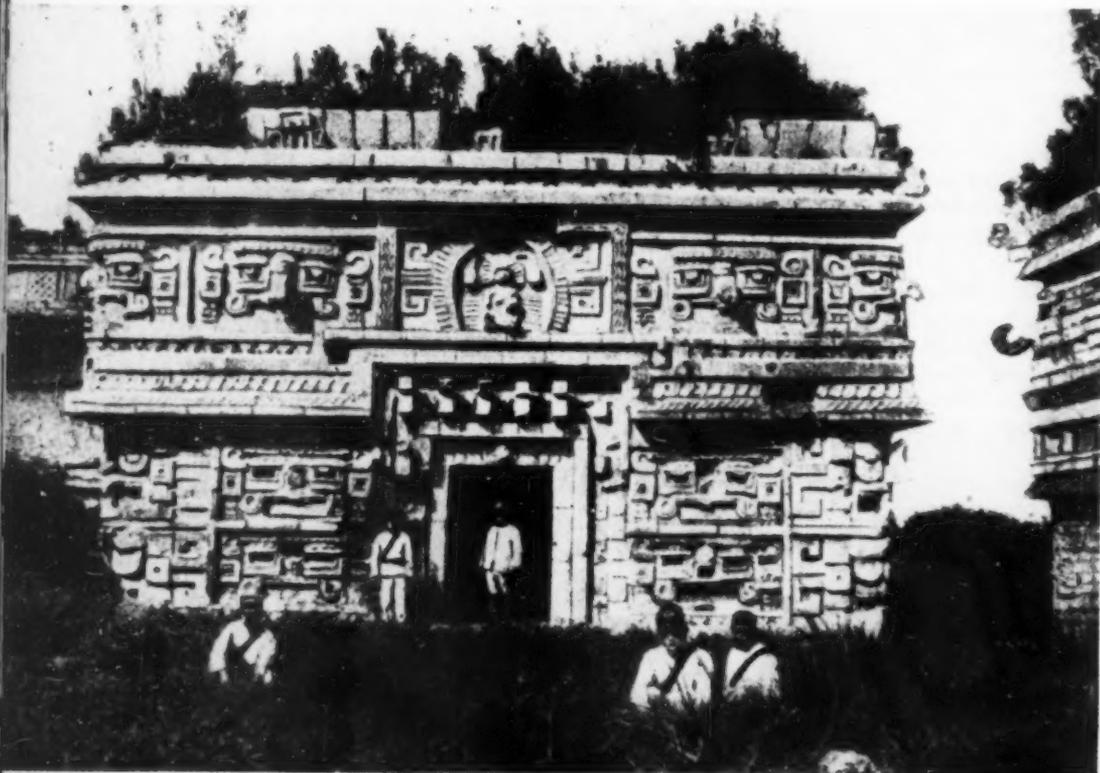
It was not until this spadework was done that Knorozov began his decoding. For a full half year, he transcribed the ancient texts. He copied for hours every day until his hand was tired, and involuntarily made the same slips and distortions of the characters which the Mayan scribes would naturally have made when they wrote. His problem at that time, as he himself put it, was "to refrain from attempts to decode." It would have been too easy to "read" a symbol and then follow it down the blind alley of wishful thinking which had led so many other decoders astray. He wanted no preconceived ideas, no blind wandering.

He spent many months doing what he called "pure bookkeeping," a weary business of taking one symbol and comparing all its possible combinations with other symbols. At the same time he was learning the Mayan language as it had been preserved in monastery records and in 16th century Maya-Spanish glossaries in which the Indian words were spelled out in Spanish.

How a Discovery Is Made

Champollion's brilliant work in deciphering the Egyptian hieroglyphics is the classical "reading-book" method of decoding. Thanks to the Rosetta stone, a large basalt slab with parallel versions of a decree issued around 200 B.C. and inscribed in Greek and in Egyptian demotic and hieroglyphic charac-

"NUNNERY"—MONUMENT OF ANCIENT MAYA ARCHITECTURE





THE SUN BURNS EVERYTHING AT THIS TIME



BAS-RELIEF WITH HIEROGLYPHIC INSCRIPTION

What Now?

ters, he was able to compare letters and so find the meaning of the hieroglyphics.

But on the American continent there was no such lucky find as the Rosetta stone, with its bilingual inscription. That was the obstacle that had stopped all Knorozov's predecessors.

He had to find a different road. He suspected that it lay in the relationship between two classifications, the phonetic and hieroglyphic, and that they were bound to cross if he kept working. And then one day, out of an almost infinite set of comparisons, emerged the first three words: *kuts*—turkey, *tsul*—dog, *mut*—sign. It was a happy day for the young scholar.

This was not the end of the job by far. Each small discovery brought dozens of new problems. But slowly the old manuscripts revealed the secret they had kept hidden for centuries. The single words grouped themselves into the first phrases: "the sun burns everything at this time," and "the rain makes the land fertile."

When Knorozov is asked how it feels to be ranked with Champollion, he smiles diffidently and talks about how much work there is still to do.

He has compiled a comparative grammar of the Mayan language and is preparing two Maya-Russian glossaries for publication.

As for future work? Mountains of it! There are still the rest of the undeciphered Mayan manuscripts. Then there is always hope that new manuscripts will be found. Take the Dead Sea Scrolls, a historic discovery that will keep scholars busy for years. There is mention in Bishop de Landa's work of old manuscripts buried with Mayan priests. And Knorozov's face lights up with interest as he talks of the Mexican archaeologists led by Alfonso Caso who are following this lead. "Plenty of future work. It needs the cooperation of ethnographers, linguists and archaeologists of many countries."



A HIEROGLYPHIC LETTER





"WE HAVE PRACTICALLY NO MARGIN FOR ERROR." BORIS YEGOROV, FAMOUS NEUROSURGEON, PREPARES FOR OPERATION. HE HEADS THE BURDENKO NEUROLOGICAL INSTITUTE.

MIRACLES WITH NEUROSURGERY

Continued from page 23

The Operation

An operating theater is a meticulously organized unit. Every instrument is in its precise place, every movement calculated. The patient is wheeled in. Professor Yegorov takes his place at the operating table. The anesthetist injects novocaine to deaden sensitivity in the operative area. The patient feels no pain, although he is conscious throughout.

This is an operation for a tumor of the hypophysis. The hypophysis is the pituitary gland, lodged deep in the base of the brain. The operation is a difficult one and needs great skill and a sure and delicate hand.

The skull is opened and the brain is exposed. Professor Yegorov asks how the patient feels. The patient answers, "Fine."

The Professor bends his head lower, the light on his forehead illuminates the exposed section of the brain. The nurse hands him an instrument. He probes for the tumor.

The Professor asks again if the patient feels any pain.

"None," the patient answers. There is a curious kind of wonder in his voice, as though he doesn't believe it himself.

The people around the operating table watch every motion of the Professor's hand. He has located and exposed the tumor now. The overhead light is switched off. Another light is switched on which sharply spotlights the growth. The Professor reaches out. Another instrument is placed in his hand. With one clean motion, he removes the tumor.

He straightens his back, says to the patient,

"We have it out. You'll be seeing all right now."

The assisting surgeons take over.

The tension in the operating theater lifts. You know that under their sterile masks, surgeons, nurses and observers are smiling. It's more than a skillful job done, it's a person healed.

Case History

The diagnosis which led to the decision to operate was the painstaking product of all 17 of the Institute's divisions. This is the "overall" principle in action.

In the division of brain architectonics, drawings like geographical maps are spread on the tables. These are detailed diagrams of brain injuries. Each case must be studied separately, the nerve fibers and blood vessels of the brain diagrammed to help the surgeon find the area for dissection so as not to disturb the functions of the nervous system.

This division has made its important contributions to research on the structure of the brain. Its work helped to develop methods for removing tumors of the lateral and third cerebral ventricles. After years of careful investigation, Soviet neurosurgeons arrived at the conclusion that the safest place for dissection lies in the frontal lobe region, a procedure which has saved many lives.

Special attention is paid in the architectonic division to diseases of the brain in childhood. And progress has been made in such congenital diseases as hydrocephalus and encephalocoele, which have long been thought incurable.

The findings of specialists in the X-ray division furnish one of the most important indices for diagnosis and operation.

The electro-physiological division of the Institute is equipped with precision instruments to help the surgeon examine brain functions and determine brain damage. Electroencephalograms, for example, chart charac-

teristic electrical impulses for different regions of the brain and show the neurosurgeon the changes produced by one or another disorder or injury.

There are special laboratories where the cardiovascular system of neurosurgical patients is studied.

Institute investigations have supplied the basis for a new concept of the vascular center as a complex structure with its highest regulating center in the cerebral cortex. Through it the cardiovascular system is connected with both internal and external environments. It has been established that the cerebral cortex plays an important part in regulating respiration and blood circulation.

Over the last 25 years each one of the divisions has made its distinctive contribution both to neurological research and to surgical practice. Institute workers have published more than a thousand papers on various phases of diagnosis and clinical and surgical treatment of disorders of the central and nervous systems.

Back to Life

I dropped in at Professor Yegorov's office to say good-bye after I had visited some of the Institute's divisions. A young woman was just leaving his office. She looked familiar to me.

Pleased and a little excited, the Professor said, "You know who that is?" He named a well-known author. "She was wounded during the war, a head wound. I operated on her. She brought me this." He held up her new book, just off the press.

During the war years, when surgeons operated, not in sterile operating theaters, but in dugouts, they had to do the most intricate brain operations. It probably never occurred to them that they were performing miracles.

I opened the book. The dedication read, "To Professor Boris Yegorov, who brought me back to life."



THE POKROVSKY CATHEDRAL

(Church of St. Basil the Blessed)

By I. YAKOVLEV, Director, Pokrovsky Cathedral Museum

The Pokrovsky Cathedral, more popularly known as the Church of St. Basil the Blessed, one of the most splendid architectural memorials of the Russian Middle Ages, rises in the center of Moscow, on Red Square. The majesty of its architectural forms, combined with the remarkable diversity and color of their ornamental work, and the compositional boldness of the entire ensemble have always aroused admiration.

The Pokrovsky Cathedral was built in 1555-60 by the gifted Russian architects Barma and Posnik. It was put up as a symbol of the Russian people's triumph over the Kazan Khanate which had harassed the State of Muscovy with its raids over a period of 100 years. At first the cathedral was a handsome group of nine independent church towers, placed on a common foundation of a tall vaulted socle. The main Church of Pokrov towered above the rest in the center of this composition. It was crowned by a high cupola, ornamented by gilded wrought spirals and rings and polychrome tiles. The other eight church towers were symmetrically placed around it in the form of an octagonal star and were connected to each other by open galleries and passageways.

The cathedral existed only about 30 years in its original form. It repeatedly suffered from fires, which were so frequent at the time, and foreign invasions in 1612 and 1812. It underwent many repairs and additions and, quite naturally, changed considerably in appearance.

In 1588 the tenth church was added to the building on its northeast. It was built over the grave of the Moscow holy beggar Basil the Blessed.

During the seventeenth century the open galleries and passageways between the church towers were closed up by stone vaults, while the arches in the socle floor were barred with brick. All this spoiled the compositional unity of the monument, and it came to be accepted as a building with a single large interior.

Attempts were made during the nineteenth century to restore the cathedral to its original form. This work, however, undertaken without sufficient scientific preparation, did not produce the desired results.

Only after the cathedral was turned into a museum in 1923 did it become possible to undertake truly scientific and systematic restoration of the cathedral. Professor of Architecture Dmitri Sukhov and Artist Yevgeni Bryagin restored to a considerable degree the original architectural appearance of the cathedral and the seventeenth-century frescoes in its interior as a result of long years of research.

Large-scale repairs and restoration work were conducted in the cathedral in 1954-55 under the guidance of Professor of Art Nikolai Sychev and architect Nikolai Sobolev. In the course of the work, which cost over 2,000,000 rubles, the time-worn brick and white stonework were strengthened, the roofing fully replaced, the crosses freshly gilded, and the decorated gilded spirals and the vaulted gilded rings on the main cupola restored.

The restoration work conducted there has brought the monument still closer to its original appearance and has re-established its former beauty.

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VASILI SMYSLOV PLAYING AGAINST ARTHUR BISGUIER IN THE 1955 USA-USSR CHESS MATCH IN MOSCOW.

THE SECOND ATTEMPT

By Grandmaster Alexander Kotov

In the early thirties a chess tournament was launched in Moscow. A tall, slightly round-shouldered, elderly man with gray hair entered the hall with a crowd of fans. He was a well-known Moscow chess enthusiast who used to attend the meets. He was followed by a lanky, red-headed boy of 10 or 11 years who was casting his eyes about him in uncertainty. "Two Smyslovs, and both Vasilis," a neighbor whispered to me. The father approached our group and introduced his son to us, "Vasili Smyslov." Smyslov Senior was bringing his son out into "high chess society" for the first time.

As the saying goes, "All living things bear a special mark from childhood." Smyslov Junior also had his "mark." He became acquainted with the rules of the game at the age of six and since then replaced his lead soldiers with chessmen. Every chess player who had anything to do with the childhood of the future grandmaster was struck by the child's talents, his inclination for analyzing games. They were impressed by his ability to delve into the labyrinth of variations and discover sudden combinations during discussions at the demonstration board. Of course, nobody foresaw at the time how far he would go.

Within three years Smyslov Junior came up from the ringside to take his place at the chess table on the stage. And he made short work of his rivals.

In 1940 Smyslov took part in the USSR championship meet, where he placed third. At

the beginning of the following year he also took third place in the USSR six-man match-tournament. The 20-year-old chess player was awarded the grandmaster's title for these two attainments. His roll of victories includes Moscow championships, many tournaments abroad and the 1949 USSR championship, which brought him the national crown.

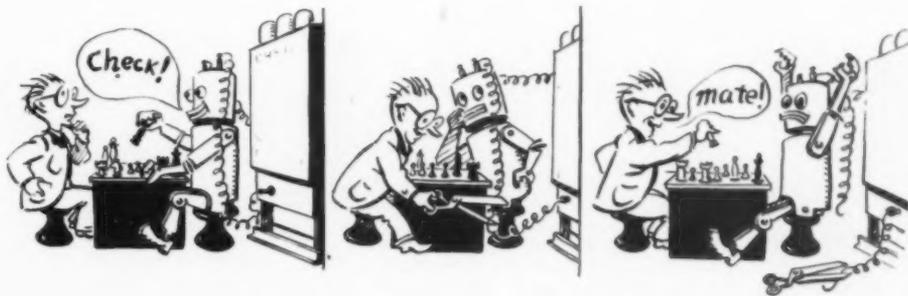
In the 1948 world championship meet he placed second, ceding the palm to Mikhail Botvinnik. In 1953 he emerged victorious in the Challengers' Tournament in Switzerland and the year after played his match with Botvinnik. This was indeed a tense battle, but neither of the contenders was able to gain the upper hand. The match concluded in a draw, and in keeping with the rules governing such meets, Botvinnik retained the title.

Two years have gone by. Now Smyslov has another coach: Grandmaster Isaac Boleslavsky. Their collaboration has borne good fruit. The

substantial, solid style of Smyslov was enhanced by new ideas characteristic of Boleslavsky's creative endeavors. Smyslov's play became more dynamic and keen. This may be seen by contrasting the last two rounds of this year's Challengers Tournament in Holland and the 1953 tournament in Switzerland. Moreover, he began to go in for greater complications and entangled positions on the board.

Smyslov played confidently in the Challengers Tournament last March and April in Holland. In the decisive second half of the meet, he played with a special flair. At the crucial points Smyslov defeated his rivals Yefim Geller and David Bronstein and spurred ahead at the home stretch. As a result Smyslov lost only one game, to Boris Spassky, while winning six and drawing eleven, and gaining a margin of a point and a half over his nearest rival, Paul Keres.

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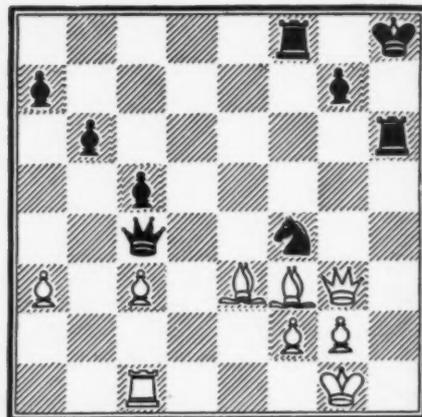




◀ "Rest?" Smyslov answers to a question. "I know of nothing better than angling with a spinning rod for complete relaxation." This time, however, our photographer caught up with Smyslov in a vacation spot near Moscow where there is no fishing at all. "This time I am sparing the perch's lives," said Smyslov. "You know that Botvinnik is already training, but all I do is talk with Masha." Masha is Smyslov's favorite, the six-year-old daughter of one of the vacationers.

Continued from preceding page

Here is the ending of one of the most interesting games in the Challengers Tournament, the Geller-Smyslov encounter.



GELLER—SMYSLOV

This was the adjourned position. The participants in the tournament were doing a lot of guessing, as Geller himself did, as to what move Smyslov, playing Black, had sealed. And they all failed in this for Smyslov's reply was entirely unexpected:

41. . . . Q-K5!

Simply beautiful! If White takes the Queen, then after 42. BxQ Kt-K7ch 43. K-Q1 KtxQch and 44. . . . KtxB he loses a piece. Therefore, Geller is compelled to go in for simplification.

42. QxKt	QxQ
43. BxQ	RxB
44. R-K1	R-QR5
45. R-K8ch	K-R2
46. B-K4ch	P-Kt3
47. P-Kt4	RxP

Remaining with tremendous material advantage in the end-game, Smyslov forces his opponent to resign several moves later.

As a result of his victory in this tournament Vasili Smyslov qualified for the second time for the match with World Champion Botvinnik.

Next spring Botvinnik and Smyslov will again contest the world chess crown in a title match. Smyslov's advantage is his age; he is ten years the junior of his rival. But this margin proved inadequate in his efforts to overtake Botvinnik in the last eight years; being the USSR's player No. 2 since 1948, he was unable to become player No. 1. And it certainly is not so easy to vanquish Botvinnik. In order to cope with this task, Smyslov has to learn from his rival the art of preparing for such a duel and of the careful study of one's opponent.

While rejecting any guesswork as to the outcome of this duel, one may be certain of this: the chess world will witness a most interesting battle of two of the greatest stars in the present chess firmament.



He's a grandmaster and a singer, too. Possessing a pleasant baritone voice, Smyslov often sings over the radio. Chess players of many countries have heard him at impromptu post-tournament concerts. Possibly some New Yorkers still remember one such performance by Smyslov in the Roosevelt Hotel in 1954 after the USSR-USA chess match.

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