China Reconstructs

VOL. XV NO. 2 FEBRUARY 1966

ARTICLES:

Comerence Serves the Countryside
Ho Wei

Serving the Mountain People
Li Fu-Zheng

New Approach Yields New Farm Machines
Youth Study Group

Lead Wrestled from the Sea
Shi Tan

How I Won the Peasants' Trust
Yao Wen-hai

Across the Grasslands with a Mobile Theater
Chen Ching-hai

A Day in Yenan
Baih Liee

Rebuilding the U.S. Flying Randus Post in China
Zhe

My Third Visit to China
Amada Kouta

Making a Transistorized Ultrasonic Flashtorch
Guang Chou Tse-shen

Ancient Corner Towers
Tan Tse-hian

Every day, we CHINA

COLOUR PICTORIAL:

Performances in the Pasturages

FEATURES:

To Our Readers: Everything for the Countryside

Language Corner: The Club

Do You Know? Chinese Silk Embroideries


Music Notes: Fighting Spirit in Songs

Song with Music: In the Taihang Mountains

Sports: Four New Track and Field Records

Children's Page: The Boy, the Old Woman and the Needle

Stamps: Second National Games Commemorative

Poaching

COVER PICTURES:

Front: Shanghai middle school graduate Chang Tian (right), now a member of the Young People's Committee in Anhui province, walks home from the school with his friends. Photo by Chang Chung-hui.

Back: One of the corner towers of Peking's Palace Museum. See story on p. 42. Photo by Chang Shu-cheng.

Inside front: A toy partition on the top of 2,000-metre Mount Haisan in Shensi province. Photo by Liu Pin.

Everything for the Countryside — this is the slogan of all of China's 600 million today. Specific attention to service to the countryside is given by people in every trade, job or profession. It is an important part of the strategy for building socialism in our country worked out in the thinking of Mao Tse-tung. In its policy of "making agriculture as the foundation and industry as the leading factor", the Chinese Communist Party has succeeded in determining the proper relationship between agriculture, light and heavy industries. With this main direction and the support of every part of the nation, the peasants have overcome the effects of unpredictable weather, and brought in good harvests year after year. The increased agricultural output has in turn promoted the rapid growth of industry, clearing the way for a continuous expansion of every sector of our national economy.

In this issue we report on the various facets of this universal support to agriculture. How trade participants is described in "Commerce Serves the Countryside" (p. 3). With other examples, we show how service to the peasants and herdsmen is becoming the purpose in life of China's engineers and technicians ("New Approach Yields New Farm Machines", p. 8), writers and artists ("Across the Grasslands with a Mobile Theater", p. 10) and medical workers ("How I Won the Peasants' Trust", p. 18).

"Everything for the countryside" has another equally important effect outside the realm of economics. It creates the conditions for gradually reducing and eventually eliminating the differences between town and country, between industry and agriculture and between mental and physical labour.

Before the liberation, the Chinese peasants were so crushed by exploitation that farm production declined steadily. Yet while the countryside was going bankrupt, the large cities were undergoing an abnormal growth with wealth piled up among a few. The decadent life of extravagance, drunkenness and the mad chase after gold of big landlords, high officials and imperialists was in stark contrast to the accelerating impoverishment of the peasants, who made up more than three-fourths of the Chinese people. Many intellectuals, cramped in their outlook by the old idea that "those who work with their brains rule others; those who work with their hands are ruled by others", could not distinguish one farm crop from another and seldom lifted a finger in labour. In varying degrees they looked down on physical work and the labouring people, while the latter were deprived of any opportunity for education. At that time methods of farming were extremely backward, so that its productivity lagged far behind that of industry.

Such differences were the inevitable product of the old society and they grew sharper and sharper as time went on. In revolutionary China, these legacies of the old society must be diminished step by step and finally done away with if we are to completely free the forces of production, thoroughly wipe out the old inequalities and achieve the real freedom and happiness of man.

Since the liberation, with the growth of agriculture, the formerly backward Chinese countryside has changed greatly. The life of the peasants has vastly improved, and the differences between town and country and between industry and agriculture are constantly narrowing down. With culture and education, science and technology being deliberately brought to the countryside, the peasants' cultural level and scientific knowledge are steadily raising. Gradually the difference between mental and physical labour is being reduced as intellectuals learn to become intellectual-workers and manual labourers learn to become worker-intellectuals. Both the work-study system in education and the system by which workers are at the same time farmers help to lessen the differences between mental and physical labour, between town and country and between workers and peasants.

In this way, the policy of "everything for the countryside" is pushing all spheres of work in China — industry, agriculture, culture and education — ahead with giant strides.
COMMERCE SERVES THE COUNTRYSIDE

BETTER service to the countryside is the emphasis in all fields of work in China today. This is also true of commerce.

The basic task of China's commerce is to advance the economy and to guarantee supply. The most important way to advance the economy is by promoting production. To guarantee supply means to provide for the needs of industry and agriculture and of the urban and rural population. Only an advanced economy can guarantee supply.

Regarding their jobs as work for the revolution, commercial personnel take an active interest in production, seek out and fill its needs. At the same time, they do everything they can to make it convenient for the communes and their members to sell their produce and buy what is needed so that most of their time can be devoted to production. The commercial units also see to it that the consumers' interests are taken care of, thus contributing to the gradual improvement of the standard of living.

Why Serve Agriculture?

Serving the countryside has always been one of the main aims of China's commerce because agriculture is the starting point for the development of the entire national economy. Its progress promotes the growth of industry. It supplies grain and non-staple foodstuffs for industrial workers and other city-dwellers and provides raw materials for industry. Agriculture also helps accumulate capital for national construction, both indirectly through supplying raw materials for light industry, which is an important source of capital accumulation, and, more directly, through the small agricultural tax paid by the commune. In these ways it provides a vast market for industry.

To look at the matter from the other side, an advancing industry provides more means for the technical transformation of agriculture—more farm machinery, chemical fertilizers and insecticides to augment the productive forces and speed the modernization which will fully solve the country's food problem. More and cheaper consumers' goods from industry also help improve the rural standard of living. The cities and the factory and mining areas provide a vast market for agriculture. Thus, while agriculture is the starting point, industry (and particularly heavy industry) is the leading factor for the development of the national economy. This is the general policy for China's economy.

Under the socialist system this economic relationship of interdependence, interplay and mutual stimulation between agriculture and industry, and between all sectors of the economy, gives rise to a very large extent through the circulation and exchange of commodities. Here the commercial organizations serve as the bridge or go-between. Therefore, it is only by firmly making service to agriculture their chief work and by doing it well, that the commercial organizations can contribute toward the advance of China's socialist economy.

Trade for Self-reliance

Socialist production and commerce are fundamentally different from what they are in a capitalist society. The ultimate aim of developing production under socialism is to improve the life of the entire people, not to make a profit. The cyclical phenomena of capitalist society, such as overproduction and decline in domestic trade, do not exist; there is never a need to ruthlessly exploit the working people at home or seek markets abroad by plunder and aggression. The very nature of the socialist system determines that we do not, and need not, expand beyond our borders. When we engage in foreign trade, we take some products from the home market in a planned way solely in order to obtain certain things needed in our socialist construction, or to assist friendly countries in developing their independent economies. In a word, in building socialism, we rely on the masses of the people and the domestic market to carry out accumulation, consumption and expanded reproduction. Because of this and because the main domestic market is in the countryside, the correct development of rural trade is fundamental to building up a socialist economy through self-reliance.

The emphasis on rural commerce also has great political significance. It promotes the further development and consolidation of the worker-peasant alliance, helps to build a new, modernized countryside and creates conditions for the gradual elimination of the differences between industry and agriculture, between town and country, and between physical and mental labour.

Serving Production

The primary task of rural commercial organizations is to promote in every way agricultural production and the collective economy of the people's communes. This lays the groundwork for expanding the circulation and exchange of commodities, and for guaranteed supply.

HO WEI is an economist.

A "sheep on camel back" visits his herdmen in a winter pasture in Sinkiang.

FEBRUARY 1964
ply of goods for both production and consumption. Actual service is given in scores of ways by:
in making all kinds of means of production available, helping the
rural workers and their teams to organize sideline production, offering tech-
nical guidance in grading and processing of farm produce, help-
ing to popularize good strains of seed and breeds of animals, help-
ing to pass on advanced production techniques, and organizing mutual financial assistance and technical exchange between the communities.
Many commercial workers have done such an outstanding job along these lines that the communes refer to them as "our good advisers", "our good suppliers" or "our good managers".
The commercial organizations' work of purchasing farm and side-
line products, in addition to procuring raw and other materials for
construction and industry, which improves the life of the people in
the cities, has a direct relation to developing farm production, help-
ing the communes accumulate funds and raising the income of
every commune member. By or-
ganizing production, purchasing and marketing in a planned way,
the commercial organizations link the producers on the farm with
the buyers in the cities, factories and mining areas. In the other facet of their work, the commercial or-
ganizations make every effort to provide the countryside with a
complete line of goods of standard quality, in ample quantity, and at
low prices. Much attention is given to selecting products that meet
purchasing needs and tastes. Com-
necial workers have established
close ties with their customers,
make every opportunity to find out
what they require and collect sugges-
tions for passing on to
the manufacturers.

State, Collective, Individual

The purchase of farm produce is
carried out according to a policy of
unified planning and over-all arrange-
ment with due attention to
the needs of all the parties con-
cerned. The interests of the state,
the collective and the individual
are placed in the correct relation-
ship. Town and country, industry
and agriculture, good years and
bad years, areas with good harvests
and those with poor ones, the needs
of domestic and those of foreign
trade are all taken into considera-
tion. This policy guarantees the
demands of both the cities and the
countryside, thus promoting both
the development of industry, par-
ticularly heavy industry, and of
agriculture. Areas with good
harvests are urged to sell more
to the state to guarantee food for
people in areas with poor harvests
resulting from natural conditions.

This encourages the storing up of
grain and other farm produce for
use during bad years and guaran-
tees normal production and life in
such periods. The policy enables
all three parties, the state, the
collective and individual commune
members to increase their store of
grain and material.

Prices are fixed by the state at
levels that promote the steady
development of farm production and,
or that basis, guarantees a rise in
the incomes of commune mem-
bers. Prices are not regulated
automatically by supply and de-
mand. The price differential be-
tween industrial goods and agri-
cultural products is adjusted in a
controlled and systematic way ac-
cording to the actual state of in-
dustrial development and the re-
quirements for planned, high-
speed and proportionate develop-
ment of the economy. This serves
to narrow the gap between the
standards of living of workers and
peasants. Since its founding the
People's Government has made
great efforts in this respect, and
obtained noteworthy results. By
1964 the difference between the
prices of industrial goods and agri-
cultural products had been cut
down by 34 per cent, as compared
with 1956.

Supply and Marketing Co-ops

The supply and marketing co-
opera tives, which exist in almost
every rural community, are the
main form of commercial organiza-
tion and the base of operation for
China's socialist commerce in the
countryside, and is in a land as vast
as ours, where people live in scat-
tered communities, it is not enough
to rely only on the supply and
marketing co-ops to handle tradi-
tional. The initiative of the reasons
are also needed. One new method in
this respect is for production bri-
gades and the larger production
teams to appoint one or more of
their members to act as village
buying or distribution agents
for the co-op. These agents work
under leadership from the local
supply and marketing co-op and
are generally active during slack
seasons or after their day's pro-
duction duties are over.

The staff of the rural supply
and marketing co-ops also make
the rounds of the villages. With
handcarts, carrying-poles or bas-
ks on their backs, they go right to
the production teams or the
homes of the peasants to sell their
goods and purchase farm produce.

This makes it unnecessary for
the peasants to take time out from
production. Recently city commercial
departments have also sent teams
of administrative personnel, shop
managers and shop assistants to
tour the countryside with the
rural commercial workers. They
are often joined by representatives
from factories, bookshops and
health centres, making up a multi-
purpose service unit. In some
places, trade fairs to facilitate pur-
chasing and marketing are or-
ganized by provincial or local com-
cmercial departments. These all
operate under the unified leader-
ship and planning of the state.

The members of the staff of the
supply and marketing co-op in the
Huangshan People's Commune in
Fangshan county near Peking
have won the affection and praise
of the local peasants for the way
they have for years been going into
the mountains with baskets on
their backs to bring goods right to
the home, taking the initiative in
selling production and taking
thoughtful care of the peasants'
everyday needs. They are called
the "pack stores". Another varia-
tion is the "carrying-pole store"
such as the one operated by the
Chaihe Supply and Marketing
Co-op in Shansi province. (See
"Serving the Mountain People" on
p. 6.)

Last year commercial organiza-
tions throughout the country
launched a movement for compar-
ing with, learning from, catching
up with, helping and surpassing
each other in the spirit of the "pack
store". As a result of it, many
trading units and staff members
have already been commended for
their spirit of "commercer for the
revolution".

FEBRUARY 1965
A SUPPLY and marketing co-operative that is being cited for the excellent way it serves the mountain people is located in the Chaiketa People's Commune in southern Shanxi province. It does much more than merely supply means of production and consumers' goods to the peasants and purchase their farm products, which is the regular function of such co-ops. Its workers take every possible initiative to help the commune promote its agricultural and sideline productions. In this way the co-op helps to strengthen the collective economy and increase the peasants' income.

Before the liberation the treeless mountains of Chaiketa used to be one of the poorest places in the province. The only people who would live there were those who had no future elsewhere, who had been ruined by usurious landlords or had fled from famine in nearby provinces. Eighty per cent of the area's 1,700 households had come there for such reasons. The peasants were too poor to have draught animals. In an area stretching roughly 35 kilometres from east to west and 20 km. from north to south, there were only one lean horse, one mule and a few hundred oxen. Most of the peasants had to pull the ploughs and push the millstones themselves. And since there was little animal manure to apply to the fields, the yield of grain was less than 100 jin per mu.

Today Chaiketa is a different place. The valleys and the mountain slopes are covered with fruit trees and forests for timber. One can see grazing herds of well-fed cattle and horses. In the 1984 autumn harvest, half the area's production brigades achieved yields higher than 480 jin per mu, and they all do a thriving business in sideline production. While this transformation has been brought about by the peasants' tireless collective labour, credit must also go to the Chaiketa Supply and Marketing Co-op.

Its predecessor was a consumers' co-op established in the war-time years 1943, when the area was an anti-Japanese base led by the Chinese Communist Party. In response to the Party's call to "get organized and develop production", the peasants formed mutual-aid teams for farming and the consumers' co-op for purchasing what they needed. As director of the latter they elected Liu Jung-sheng, who had come there after being ruined by a usurious landlord. In those years, with the single "carrying-pole" (which was the co-op's initial equipment, its staff of three repeatedly filtered through the enemy blockade to bring back salt, matches, cloth and raw cotton from the Japanese-occupied areas for both the local people and the troops. From 1951 on, the co-op purchased only animals for breeding purposes and encouraged the peasants to increase their stock mainly in this way rather than through purchases. None of the peasants, however, wanted to take charge of mating the animals, work which they looked down upon. Co-op director Liu Jung-sheng himself undertook the task, and under his influence others followed. By 1956 Chaiketa had become a seller instead of a buyer of draught animals. To date 2,700 head have been sold and present stock numbers over 2,500 head, or 14 per household. The Chaiketa commune, which was formed in 1958, has become one of the province's leading centres for breeding draught animals. Plentiful manure has also brought the commune a big increase in grain production.

In 1956-57, when the local Communist Party committee asked the co-op to help the peasants develop forestry and fruit-growing as another source of income, the staff worked with the county forestry department in making a survey of the soil and water resources of Chaiketa's 30 mountains. They purchased large quantities of seeds and saplings for timber trees, and 20,000 fruit tree saplings. Whenever they made such purchases they got the growers to teach them methods of cultivation and grafting to pass on to the peasants at home.

Wealth in the Wilds
Several other lines of subsidiary production grew out of the wild
The Friendly Co-op Man

Chaiketa's families live in some 300 mountain hamlets linked by narrow footpaths, so that going to the co-op centre or branch stores means quite a trip. To make life more convenient for the peasants, all the co-op workers, including the director and Liu Jung-sheng, who is now secretary of its Communist Party group, do their shopping at the mountain villages with the most-needed goods. On the same trip, they purchase the sidelines products. They have all become experts at climbing steep mountain paths with heavy loads hanging from their shoulder-poles.

Through these visits the co-op staff has built up close friendship with the mountain people. They even know when a family is going to have a wedding and when a woman is going to have a baby, and bring to the door what is required for the occasion. If the peasants are busy in the fields when a co-op worker comes to buy their produce, they simply give him the keys to their homes and tell him where to find what they have for sale. On the other hand, when they see that the co-op worker has too much to do or an extra-heavy load, they step forward to give him a hand.

All-round development of production has given the Chaiketa peasants great confidence in the future opened to their region through collective economy. Many who had moved to the foothills or plains have now returned. As one said, "In the old days, we used to look up at the mountains with a wistful expression, but now we see treasurers everywhere."

With rise in peasant purchasing power, the co-op's volume of business has increased to more than 400,000 yuan a year. It has 1,000 kinds of goods for sale, yet still cannot meet all the peasants' demands. Last year's sales of 180,000 yuan average out to 103 yuan per family. Along with the thermos flasks and cotton-woven blankets which have for several years been common in many mountain households, there are even expensive items such as sewing machines that can be seen.

1 Jin = 0.5 kg, or 1 lb.
2 mva = 0.06 kilowatt hour or 100 acres

THE countryside is the front line, the institute is the rear." everything for increased farm production."

These watchwords guide the actions of technicians at the Chinese Research Institute for Farm Mechanization.

Starting in the second half of 1964, our institute has sent more than 40 technicians and technicians on a planned basis to different farming regions where they join in experimental production and do research and design on farm machinery. So far they have made or improved over 80 kinds of farm implements and machines. I was in a team with three other techni- nicians who, like myself, had only recently graduated, and an engineer. In March of last year we went down to the Nanlu production brigade of Nanlu commune in southern Shansi province.

Contradiction to be Solved

Hilly Nanlu was once the most impoverished village in Chiang-hsin county. Since the forming of the people's commune in 1958, the peasants had wrought tremendous changes, turning ravines into farm land and terraces into neat terraces. In this way they had gained bigger grain and cotton harvests from their land. The Nanlu brigade now faced the contradiction between their desire to raise per-unit yields still higher and the backwardness of their farming equipment. Most of the work was still done by hand and there was not enough manpower to do it well. The practical solution was to introduce semi-mechanization, that is, gradually replace manual labour with simple machinery and pave the way for complete mechanization later on. Our task was to help what was done at Nanlu would also serve as a guide for the stage-by-stage mechanization of similar hilly regions.

We lived in the peasants' homes, took our food from the same pot, and worked alongside them on the land. We were soon asked by the brigade leader to assist in guiding production and the improvement of farming practices. This gave us ample opportunities to acquire first-hand knowledge of farming and to find out what the peasants thought and what they wanted.

When we arrived, preparations were being made for sowing cotton. In the past the seed had been placed in furrows made by animal-drawn ploughs, seed and manure fertilizer being spread by hand. As a result, the seed was not distribut-
The brigade had eight of the planters made but when they were used on cotton fields over large areas, some peasants grew to dislike them because they could not see the seed and fertilizer which, after being dropped, were automatically covered by earth. During a break Chu Shan-tien, the engineer in our group, took the planter to the path beside the field, lifted up the tubes and ever and ever again showed us how the seed and fertilizer fell. He explained patiently until all were convinced. Then each of us went to a production team and checked the sowing, inspecting every row of the 804 mow of cotton fields. The peasants saw what had been done and were satisfied. With the planters, sowing was finished in five days, seven days less than previously. Immediately afterwards rain fell. Within a few days, the fields were green carpets. "Never has Nanliu had such fine cotton shots!" commented the pleased peasants. This success showed us the correct way to go about our mission.

Making a Winner
The brigade had drawn up a plan to mechanize the reaping, threshing and winnowing. This received the hearty support of the peasants who saw how the planter had speeded up work for them. The brigade bought one medium-size and five smaller thresher-harvesters.

A machine for winnowing was needed, but the brigade's funds were limited and purchase was not possible. We decided to make one ourselves. There were only seven days until the wheat harvesting began and we asked the chief leader of the brigade if the village had ever had a winnower in the past. He told us to save a cardboard box where we found the wooden frame of an old winnower, which had belonged to a rich hand-loom before the liberation. It could be converted into a workable machine by adjusting it so that it could be driven by electric power. When we suggested this to Party Secretary Chou, he was enthusiastic.

We carried the winnower frame to the Nanliu Farm Machinery Workshop. I too moved over there and we began work. From steel we scrap the welders made a frame to support the conveyer. The carpenters made a wooden-bladed fan and the brigade bought a conveyer belt for 30 yuan. The electrically-powered winnower was completed within a week and brought back before harvesting.

"Why, isn't this the old winnower from our village?" the peasants exclaimed in pleased surprise at the sight of the converted equipment. It could winnow 6,000 jins (three tons) of wheat an hour. With the aid of this and the other machines, Nanliu finished harvesting in two weeks. Not only was the work done earlier but the time for the grain to be threshed to a second grade and this brought in an additional 30,000 jins of wheat! In the past this grain had been lost.

Toward the end of harvesting, the commune management committee organized a successful demonstration to attract the peasants. At Nanliu, inviting the brigade Party secretaries and production leaders to watch; the aim to stimulate interest and encourage people to think in terms of mechanization.

Later we designed more machines. To improve wheat sowing we built a horse-drawn five-row seed drill for ordinary fields and a three-row drill for the small hillsides. Kuo Kuang-chun, leader of the No. 5 production team, dragged the three-row drill round in a circle and exclaimed in delight: "Isn't this wonderful! Machines even enjoy our work. I can already see a big harvest next year." Last August, all 1,300 jins of Nanliu's wheat fields were sown by this type of drill. Altogether, 300 of the drills were distributed in Chiang-hung county. We also designed a simple ear thresher and a cloth cruncher, which greatly saved labour in the reclaiming of gullies and the levelling of fields.

Life's Aim Seen More Clearly
After we had been with the peasants for several months, we developed a deep affection for them, and they for us. We often visited their homes, asking advice on farm work, and listened to them compare their life today with that before the liberation. We became Nanliu people just like the commune members, our main concern was how the crops were growing along.

Last year rust appeared in the wheat fields and fungicides had to be applied immediately. This was a great worry of us and two young people from the village formed a team and got the brigade's 45 sprayers into working order in quick time. Then we showed the peasants how to use them to the best advantage. After 20 days of constant effort, we finally brought the rust under control.

Before the wheat harvest we helped the villagers to relocate 1,000 metres of high-tension and 1,500 metres of low-tension power lines. This was done to meet the growing demand for electricity as a result of increased mechanization, and the new locations fit in with Nanliu's long-range plan for laying out a new village. The power network was also extended to No. 5 team on a hillside a considerable distance away. We later converted the hand-operated equipment in the flour mill and the bean noodle and beancurd workshops to electric power.

We helped the brigade to farm a mechanism group, and set up a night school where we taught the educated young people such subjects as simple mechanics, mechanical drawing, the proper use and care of farm machines and implements, and basic knowledge about rural electrification.

Close to a year's stay in the countryside broadened our outlook and also made us better revolutionaries and better technicians. Speaking about what we had gained, Chu Shan-tien said: "In the past we had to work at our desks, it took us at least one year, sometimes four or five, to finally design or build on a model for a farm machine. And we used to think there was no way out! What a difference it is now when we feel the urgency of the need for machines just as the peasants do and understand the actual conditions under which they have to be used. This three-way cooperation of technicians, workers and peasants is the best way for both producing good machines and training capable technicians." As for us, four recent college graduates, this time in the countryside not only pointed the way for our research in the future but, more important, made us see more clearly the aim which we have set ourselves in life—to serve wholeheartedly our country and the peasants contribute all we can to the modernization of China's socialist agriculture.

The machine speeds up threshing of the wheat.
**Land Wrestled from the Sea**

**SHA TAN**

An ancient legend tells how the daughter of the sun god was drowned in the Eastern Sea and became the bird named the Ching Wei. In revenge, she spent all her days carrying twigs and pebbles from the Western Mountains with her beak and dropping them into the sea, trying to fill it up. Her name has become a synonym for persistence.

Once man's hope of filling in the sea or moving a mountain could only be realized in the realm of fairy tales. But today this can be done. One of the places where it has happened is Jooping county in south China's Kwangtung province. Chiefly by their own muscle-power, in ten months its commune members hewed rocks from the mountainsides and built a seven-kilometre-long dyke along the coast in order to drain the land inside for cultivation.

Jooping county has always had a large population but little land. Yet crossing tides revealed a vast coastal shelf high in phosphorous content from decayed shells and seaweed, and therefore extremely fertile. The people had often wanted to reclaim these tidelands for farming. Before the liberation, returned overseas Chinese had financed several such projects. These called for dykes connecting Chingshan Island, three kilometres away, with the shore on both sides of the bay, in order to drain the land inside. But every attempt had been foiled by the high waves and deep sea. As a local folk song went:

_Oh, the wave around Chingshan, half of it is tears._

In 1950 the peasants along the coast united in a collective effort and finally built a dyke to enclose Chingshan bay and, following that, another one up the coast. Then they decided to use their collective strength to build a still longer and larger dyke to enclose the bay into the Huangiang Canal emptied into the sea.

**Work Begins**

In 1961 the three communes which were involved in the project began to accumulate capital for it by going into sideline production: fruit-growing, pig-raising, fishing, salt extraction, and refining of sugar from their own cane. In three years they set aside 600,000 yuan for explosives, iron rods and other things needed for building the dyke.

Work began in March 1964 with three thousand commune members joining in. The dyke's two sections were to stretch out from the shore on the eastern and western sides of the bay. As the dyke grew, the rocks and sand were carried out along it on shoulder-poles, or transported by boats of the fishing toasts when the latter were in port. Two fishing communes up the coast sent 60 junkers and their crews to help.

The plan called for 310,000 cubic metres of stone, but it was estimated that local stonecutters would need two years to quarry that much. The directing committee therefore mobilized the commune members to solve the problem together. Many people were so eager to help that they contributed stone that they had stored up for building their own homes. Some were organized to learn to quarry. Another group went to the mountains and brought back rocks, some of them weighing as much as 500 li. Another group went to the mountains and brought back rocks, some of them weighing as much as 500 li. The women, old men and children gathered small stones and broken bricks, which also helped. All these efforts cut the stonecutters' quota down to one quarter of the original demand.

At first when rocks and baskets of sand were dumped into the sea, it seemed as though they were being poured into the mouth of an irresistible beast. But the knowledge that through their joint efforts, thousands upon thousands of loads would finally be dumped and take effect, kept the people going. They found that in some places they had to dump in 400 cubic metres of material in order to build one metre of the length of the dyke. An emulation campaign for fast loading and unloading and transport started by boatmen raised efficiency so much that 300 junkers were able to accomplish the task originally planned for 700.

**The Dyke Sinks**

As the peasants waged their battle against the sea they gradually learned to organize their work according to the tide. While it was ebbing or rising they loaded the boats, and then during the two hours of full tide, when the sea was calmest, all hands turned to transporting and dumping the materials.

After six months, a high hill near the coast had been half levelled and the two sections of the dyke were approaching each other. At this stretch of the dyke the water was seven metres deep and the current swift, and the mud on the bottom extended down seven metres. The barrier began to sink from its own weight. After a typhoon, its bottom was four metres down in the mud. Many people began to fear that even if they could get it finished, it would not hold.

The directing committee organized a discussion among those who knew the ways of the sea. Their unanimous opinion was that what had happened was natural, because the communes had not had machinery to dredge away soft bottom. But they thought that eventually the dyke would push down through the mud and come to rest on the solid ocean floor. All they had to do was keep building up the place that sank. Whenever they discovered a section of the dyke that had sunk, the commune members would fill it up the same day. Some spots were repaired more than twenty times. From this they learned to improve their way of building: to lay a more solid foundation of sand and stone before piling on sand and earth to increase the height of the dyke. At last, the great dyke rose majestically out of the sea.

**Resting the Tide**

The most dangerous operation was the joining of the two exits. As the gap narrowed, the tides rushed in with greater force. In one great assault on January 15, 1966, the builders manned hundreds of junks and the manpower to load them. With the smaller craft on the inside of the dyke and the larger ones on the sea side, the fishermen skillfully manoeuvred the boats one after another through the rolling current and past the gap, where the contents were dumped. After six hours the opening was closed. Then locks were opened at ebb tide to drain off the sea water and expose to the sunlight land that had been submerged for centuries.

From the Tanghsi Reservoir 35 km. away in the mountains, the commune members channeled in fresh water to wash away the salt. They levelled the 5,000 mu of new land and laid out orderly fields. The first crop of rice—in autumn 1965—yielded an average of 450 jin per mu, with records as high as 1,000 jin per mu in some places. Ripeing in the fields, glowing golden against the blue of the sea and bounded by the great white wall, the rich harvest was vivid proof that members of the people's communes can transform nature with their own hands and open a new way of life for themselves.
Chinese Silk Embroideries

Chinese silk embroideries are of many types. Four of the leading styles take their name from places that have made them famous: the city of Soochow and the provinces of Hunan, Szechuan and Kwangtung. In all of those the same stitch is one of the basic stitches. The embroidery is used to decorate clothing and household articles and on theatrical costumes. Screens, wall hangings and other furnishings are very often embellished with it. Traditional subjects for patterns include flowers, fish, insects, animals, landscapes and scenes or figures taken from paintings. Now large portraits of revolutionaries and scenes taken from the new socialist life in China have been added.

Soochow embroidery is made in the area around the city of Soochow on the lower Yangtze River. An old saying has it that, in this locality, "Every Home makes silks, every family embroiders." This style of embroidery was developed from the famous work done by the Ku family during the Ming dynasty (1368-1644). They were particularly famous for their reproductions of silk embroidery of the dynasties of Sung (960-1279) and Yuan (1271-1368). These had a luxurious sheen, and some people even preferred them to the originals.

Szechuan embroidery developed during the Tang dynasty (618-907). Chengtu, the provincial capital, is the centre for distributing the raw materials and collecting the finished work from embroiderers in the village. Although this style employs the same techniques as that of Soochow, the workmanship has a folk quality all its own. There is also a special way of working the figures in a natural, flat surface achieved by using short horizontal stitches over a base of longer vertical ones. This creates an effect of simplicity but is actually capable of much variation. Szechuan embroidery is popular for purses, aprons and other articles of everyday use because it takes less time to do, but is still beautiful to look at.

The Kwangtung style also has a long tradition. Unlike the others, most of the embroiderers are men. Already in the Tang dynasty individuals were famous for their work in this style. Its special features are the use of thick soft silk and innumerable threads for special effects. These are often made from gold, peacock feathers or hornet hair wound with silk. The figures are sometimes composed of several layers of stitching to create an effect of low relief.

Once much prized for wedding gowns, it is now used mainly for women's dress-up tunics, wall hangings, pillows and other decorative furnishings.
How I Won the Peasants' Trust

YU WEI-HAN

The doctor talks with an old peasant.

1st Tehtu

Dr. Yu (right) working in a commune.

Yung Huang

THE long cold winter in north China is the season when Keshan disease occurs. Named from the county in Heilungkiang province where it was first discovered, this malady affects the heart muscle and its cause is not yet known. In acute cases the patient suffers great discomfort of the heart, nausea and vomiting, coldness of the arms and legs, and dizziness—and dies within a few hours. As a doctor, I have worked for long periods in the countryside every year since 1933 as part of the concentrated cooperative effort to wipe out this disease.

I was an intellectual who was born, educated and had always worked in the city, so I had some misgivings about going to work in the rural areas. One night during a heavy snowstorm in 1934, I got my first emergency case of Keshan disease in a Tehtu county village. She was a woman named Sung Feng-lan. As soon as we arrived, her husband said, "Good! Chairman Mao has sent us doctors. She'll be saved now!" And one of the neighbours added, "If anything happens to Feng-lan, who will look after the family? It will have to break up." The responsibility weighed heavily on me. No one, behind this worried question lay an urgent appeal for help against the whole menace of Keshan disease in the area.

"Why didn't you call us earlier?" I asked.

"In the old society," the husband answered, "we were so poor for years on end that we're afraid of becoming poor again. We've only just begun to live better since the liberation. Who would think of spending money to call a doctor for every little thing?"

When I prepared an injection, the woman objected. "My disease can't be cured," she said. "An injection is a waste of money." When we explained that by government regulations the treatment of acute cases of Keshan disease was free, she replied, "You're fooling me. How can one be treated without paying for it?"

I realized then that medicine in the old society had had nothing to do with the poor, the working people. With 72 hours of care, I finally succeeded in pulling her through. Overjoyed, her husband told us, "You have no long face but it was here before. In the winter of 1933, some 400 people died of Keshan disease in the town of Lungheh alone. Poor people didn't even have money to buy coffin and had to put their dead in wooden boxes. No one of us can forget the field of the edge of town, where a kind of white with those boxes of refused bodies was a menace of Keshan disease in the area.

There were whole villages where nobody survived. The Japanese invaders and the rich people didn't get sick and they didn't care whether we lived or died—except that when one of us died, they would come out to the heart and study it!"

Truly, exploitation and oppression were written in blood. Bertrand Nordome in every page of the family histories of peasants in the old society! Whenever the peasant people speak of the past, they speak with hate; when they talk of the new society, it is always with a deep love. I, who had never felt the lash of misery, began to see that without thoroughly understanding the old exploitation and oppression I could never understand either the peasants or the Chinese revolution.

I was slowly getting to know and understand the peasants. A city intellectual, I made up my mind to do my full share to improve medical care in the countryside and to serve these people to the best of my abilities.

When I prepared an injection, the woman objected. "My disease can't be cured," she said. "An injection is a waste of money." When we explained that by government regulations the treatment of acute cases of Keshan disease was free, she replied, "You're fooling me. How can one be treated without paying for it?"

I realized then that medicine in the old society had had nothing to do with the poor, the working people. With 72 hours of care, I finally succeeded in pulling her through. Overjoyed, her husband told us, "You have no long face but it was here before. In the winter of 1933, some 400 people died of Keshan disease in the town of Lungheh alone. Poor people didn't even have money to buy coffin and had to put their dead in wooden boxes. No one of us can forget the field of the edge of town, where a kind of white with those boxes of refused bodies was a menace of Keshan disease in the area.

There were whole villages where nobody survived. The Japanese invaders and the rich people didn't get sick and they didn't care whether we lived or died—except that when one of us died, they would come out to the heart and study it!"

Truly, exploitation and oppression were written in blood. Bertrand Nordome in every page of the family histories of peasants in the old society! Whenever the peasant people speak of the past, they speak with hate; when they talk of the new society, it is always with a deep love. I, who had never felt the lash of misery, began to see that without thoroughly understanding the old exploitation and oppression I could never understand either the peasants or the Chinese revolution.

I was slowly getting to know and understand the peasants. A city intellectual, I made up my mind to do my full share to improve medical care in the countryside and to serve these people to the best of my abilities.

I told the president of our college, "The work of on-the-spot investigation can be closed for the time being. I think that we should do more experiments in the laboratory and more study of the published materials in the library. Actually, studies of Keshan disease in the field had only just begun. There were scarcely anything on the subject in the library, let alone enough data for laboratory work.

But I was finally persuaded and went out to the Tehtu county rural areas again that winter. The head of the province saw me off with these words: "The Party is determined to wipe out Keshan disease. What we need is to learn Doctor Bethune's spirit of complete freedom from selfishness." I thought: how many people can be like Dr. Bethune? But after I had been in the countryside for some time the many unsatisfied feelings of the people smashed my old ideas.

That winter a father and his small son became acutely ill with Keshan disease. They were alone and the neighbours took care of them. While I was worrying that the death of one would affect the other, a neighbour said, "Let me take the child into my home." Surprised, I said to him, "But he might die!" His answer was simply, "Death may come to any family. The important thing now is to try and save them."

The neighbours divided themselves into two groups, one to look after the father and the other the boy. They cared for them with such gentle and loving warmth!

In spite of all our efforts, however, the two died and the boy's death buried them with as much sorrow as if they had been members of their own families.

About this time, we were called in the night to treat the wife of Chang Chin, a former poor peasant about 30 kilometers away. But it was too late. When I reached the house, his wife had already died. Controlling his grief, Chang said, "I thank you just the same for coming. Take the body, doctor, use it to find out all you can about the disease as soon as possible so that others can be saved."

The extraordinary actions of these peasants moved me and I began to learn from them. More and more I saw in them what had been told to me about Dr. Bethune. Their selfless spirit spurred me on and I began to reject personal considerations and set my heart on staying in the countryside to combat this fatal scourge.

Keeping to My Post

As our work progressed we set up observation points and research bases in this and other rural areas,
tudes. When I first came to the countryside the peasants and I had nothing to say to each other. I was not interested in what they talked about, and they did not understand what I said. Sanitary conditions in the villages were inferior to those of the city. I would walk several miles from the factory to the township office on the pretext of attending a meeting. I slept in a cold room rather than to sleep on the warm brick beds of the peasants. My attitude towards work was wrong. I rationalized: "Coming to these villages to combat the disease is really taking an active part in labour and a superior kind of labour at that." I used to boil half a pupil of water just to wash a shirt, without ever carrying the water or collecting the firewood I used. Though occasionally I did a bit of helping in the fields, I thought it not at all worthwhile for me to put time into farm labour.

But constant living and working in close contact with the peasants gave us a common language and I gradually began to like the life of the countryside. As time went on I could eat out what the peasants ate and readily accept their hospitality when they asked me to stay overnight, sleeping with their children in their bedding on a very crowded brick bed. I was happy to cut firewood, collect manure and carry water with them. I learned many things about rural life and conditions which my books could never have told me, and this in turn helped expand my knowledge and taught me a great deal of how to prevent and treat the disease.

The peasants' love for the country made a deep impression on me. One rainy day in August 1960 I helped with the wheat harvest of a production team in Kangxi county. That evening in the home of a commune member I heard a boy ask his mother, "Now that we have so much wheat, will we grind some for ourselves?"

"Oh no," his mother replied, "not ourselves first. First we will send the wheat to the worker unions in the cities, they are making tractors for us."

Now if there is spring drought, autumn waterlogging or very frost, I too worry about the crops. When I see carts of grain going to town after I have helped in the harvest, I feel as happy as if I were taking grain to the people's granaries myself. Gone is my feeling of having nothing to talk about with the peasants. My in—


dd of 0.0075 millionth. The ultrasonic microbalancer made by the Shanghai Machine Tool Plant, which has a higher degree of precision, has an accuracy of 0.0075 millionth. This is shown in the picture. Its ultrasonic microbalancer can be used for measuring the mass of meteorological instruments, the mass of precision parts, etc.

In a recent demonstration, the weight of a piece of paper with no writing was compared with that of an identical piece on which two character. The ink used was written. The ink was shown to weigh 0.0075 milligrams. So accurate is the balance that for the same placed on the scale while the ink was still wet, it registered a heavier weight than when the writing had dried.

**Tires with Steel Cords**

Rubber tires with steel cords have gone into production in Shanghai after three years of test use have proved them superior to those with the usual core of cotton, rayon or nylon.
Across the Grasslands with a Mobile Theatre

CHEN CHUNG-HJSTEN

EDITORS' NOTE: Uses tamarisk mean "red (revolutionary) cultural troupe" in Mongolian. Groups of singing performers bearing this name brighten the lives of the herdsmen of Inner Mongolia by bringing them socialist culture and entertainment. The tamarisk have become a nationa- tion-wide phenomenon. These groups should serve the working people. (See Cultural Notes in the August 1965 issue of Family Life.) Below, our staff writer describes the uses of the tamarisk of Shunshun-ho Banner (county) in the Sengel grasslands, with which he toured for a month last summer.

HAVING set out from the commune centre where the tamarisk had last been, I had to spend two days on horseback searching for it. I finally caught up with it deep in the sand dunes in the northeastern part of the commune. The troupe members had set up their stage properties no-longer on sand but on a cart drawn by four horses, rolling toward a herdsmen's production team. There were five men and five women of Mongolian nationality, mostly young, with the suntanned faces of laughter, and big hands that mark the working people of the grasslands.

Dashi, the versatile actor who had taken the troupe, told me that they would make an arc-shaped circuit in a southerly direction, cover- ing the summer pastures of four people's communes. Then they would go to a collective herder centre where 16 communes would celebrate a good year of harvest at the annual Nadam fair.

I joined them on the cart. It bumped along over the grassy slopes, occasionally creeping up a sand dune or pushing through thick hollows that were mud ponds.

Playing a big four-stringed fiddle, began to sing. In a deep resonant voice, the old Nassing who saved the commune's horses one stormy night at the risk of his life, told the story of the young cheb (a stringed instrument played with small bamboo hammers) and the rapid tempo of the aman han (a three-stringed plucked instrument) suggested the gathering storm cloud; the thumming of the four-stringed fiddles, the roar of the storm, and Tseren was now thoroughly immersed in his tale. When he said that his horse the old man flew like an arrow over the rugged mountains and deep rivers, I exclaimed, "How bold his style so hard that it moved forward. The fast pace of some蒙古族人 said every word. Not until the chorus sang, "With his long nose waving in the wind, Old Nassing drove his horses back to the commune," did they relax with a sigh of relief.

This was followed by "High Tide in Production", a comic dialogue. Threading a thin woman, took the centre of the stage, dressed as a plump girl. The contrast in the figures of the two was comical in itself. Then they started trying to tell each other stories of how they had helped the people of their respective communes. When Chersuun uttered a sentence, Bargeqin burst out laughing as nervously. Chersuun, thinking her friend was making fun of her, became furious. The misunderstanding was finally cleared up when both discovered that both com- munes, through collective efforts, had increased their herd despite a spring drought that was bad for the pastures. The dialogue, which drew plaus of laughter from the audience, was a testimonial to the effervescent spirit on the grasslands.

Next a group of dancers, portray- ing herdsmen with rifles on their backs and whips in their hands, came "riding" into the performing area. They aptly captured the movements of a mounted militiaman on patrol, determined to safeguard their commune from any enemy of socialism. The dancers, who had just shown such dramatic talent, were now impressing the audience as good dancers.

When they had finished, the troupe leader Dashi, wearing a big false nose held high in the wind, bellowed like a ridiculously tall bull, strode out, posing as the president of the United States. He arrogantly threw his pick- up here and there, representing planes "flew" out, but shot down by the Vietnamese people, turned somersaults in mid- air and plummed heading to the ground. The loud laughter of the audience proved that the skit was a success.

Since this was the midsummer when the herds could be left grazing for long hours by themselves, the performance went on for nearly three hours. Altogether some thirty short numbers were given. Every member of the troupe took part in several acts, showing great versa-tility.

Most of the numbers in the troupe repertoire were their own creations or those of other artists much. Through traditional forms with which the audience is familiar, the performers expressed their new life in the grasslands and the way the most advanced herdsmen feel. In this way their art urged the herdsmen forward on the socialist path. The story of "The Heroic Horse-drover", for instance, is extremely popular. Some herdsmen have told me that for them this story has become an example for service to their own communes.

O N THE GRASSLANDS we of- ten spent the better part of a day travelling from one produc- tion team to another, arriving at our destination in the evening. The herdsmen and their families would rush back to their yurts to welcome us, explaining "Oh! Oh! (Come, come.) Your yurts were small, but each family insisted on giving me half a yurt or one two of them. We became members of the family. After sipping a few bowls of hot milky tea, we would go out into the twilight with our hosts to help them milk the cows, pile up the cow dung and drive the sheep into the pen.

One evening an old woman came out to watch some shows while they milked. "All fine children!" she said to me, nodding her head. "They work with us for years round, milking, shearing, delivering the lambs, making hay, digging wells — whatever we have to do they do too. They even go out with us to bring back the herds in a storm. Help repair the pens and shovel away the knee-deep snow so that our animals can get at the grass."

Late in the evening when the work with the stock was finished, we would help the herdsmen get supper, carry in drinking water, mind the children. At such times we had good talks with the herds- men, covering everything from their family and commune affairs to current international events. After supper the host would serve us sweet milk, coffee, or a cup of koumiss, the traditional liquor made from fermented milk, and we would continue talking into the night. This constant living and working together with the herds- men and sharing what they feel enables the members of the troupe to enrich their performances with fresh material from the people's lives.

T RAVELLING with the troupe, I soon made friends with its members. En Bajin, a beautiful man of 26 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children, and En Dashi, a taciturn man of 38 who plays the sah, his wife and two children.
Performances in the Pasturelands

The mobile library always attracts a crowd.

The bowl dance.

Herdsmen in Inner Mongolia's Jarad banner watch as a touring cultural troupe get ready for a show.

Amateur dancers learn a new number from members of the troupe.

Some of the audience at the "Hushu (Happy Banner)" celebration.
and her daughter-in-law, were so enthralled by the voices of Peking" coming over our transistor radio that we had stayed up late to listen more. As the women were listening, one of them remarked that he had worked for a big herd-owner before the liberation. At the age of seventeen, unwilling to stand for any more beatings from his master, he left his home and fled to a guerrilla area where he became a cavalryman in the Communist-led Eighth Route Army. He had learned to play the san xie in the army and after the liberation had joined a theatrical group in Huhehot. Later he joined the san xie maker, deciding that this was the kind of cultural work he wanted most to do. The hardships of his youth had left him with a chroniclem patient which often made him uncomfortable, but he told me, "When I see how much the herdsmen love our performances, I forget my own troubles."

I found that the members had come to this troupe through common, schools or other theatrical groups in which most of the children of poor herdsmen. Like the herdsmen, they hate the open air, which can only destroy their new life, and realize most deeply how their people, now freed from bondage, thirst for a new socialist culture.

No matter how tired they are, the troupe members are always ready to perform. Once they had just given a show for a team of the Herbei commune and were on the way to visit another one when they came across a unit of herdsmen at military drills and gave them a two-hour show right there under the hot noonday sun. During that time, the Alat production team, in remote eastern pasture belonging to the Shanxi province, was also on the same tour. The show drew to an end when we saw an old cowboy rushing up the road. In it was Old Norv, their 25-year-old grandson and their five grandchildren — too late. Especially for them, the troupe continued its show another hour, until sunis. With Gonghong from the troupe's troupe, the family stood outside in the evening sun illuminated the smiles on the old couple's wrinkled faces. Old Norv seemed to have been searching for words to express his joy. He hesitated a moment and finally said, "We never dreamed we could be so happy in our old age!"

A tour route toward the south, one evening we stayed at the Bayanugol production team, the home of Yangjiusi, a girl of 18 and the youngest member of our company. The people in this part of the grassland are particularly fond of singing, so, in addition to the regular performance, the troupe gave a concert of new folk songs through the loudspeaker. As the people went about their household chores in the dark of the evening, every yurt home was filled with the clear, soaring melodies, singing of the beautiful scenery of the grassland, the prosperity of the communes and the herdsmen's gratitude to the Communist Party.

I dropped in on Yangjiusi's father. The old cowhand was listening attentively with eyes closed and legs crossed, and his hands in the position of playing the traditional Mongolian horse-head fiddle. He told me that before the collective san xie maker were formed in 1957, the people in this area had never seen a performance by profession players. "My Yangjiusi is now the youngest member of the san xie maker, and her eldest sister operates a motion picture projector in the inner city," he said. "The folks say that she is an honour to our production team."

Some new voices were heard over the loudspeaker. I walked back to the microphone and found that some of the women of the team had joined in. A great many young and middle-aged herdsmen sing and dance well. The san xie maker often helps them to form amateur companies and teaches them new musical and dramatic numbers. I met some of these performers at the Nadam fair, which was our next step after Bayanugol.

The fair was held in a hag—
dezed open field outside the county town. In addition to performances by our san xie maker and troupe from outside, there were horse racing, wrestling, basketball matches and track-and-field com- petitions. For the duration of the ten-day celebration the members of various communes turned their yurts and set them up near the fairgrounds. During the daytime we went to these camps to perform. Whenever we came, the herdsmen immediately circled us and the amateurs, from 60-year-old players of the horse-head fiddle to teenage folk-singers, came to make music with us. In addition, the members of our troupe helped groups from five communes rehearse more than twenty new and old numbers which were performed at the fair.

Our small group gave three evening performances, each to an audience of more than a thousand, to the crowd, I learned to multiply emotion between the spectators and performers. I noticed this particularly in the night Dugujeima presented a new bowl dance, "Koumiss for Chairman Mao." On the rough stage made from squares of freshly-dug sod, she danced gracefully with six bowls in her head. But when she came to the whirling turns, her head caught in some grass roots. She dropped the bowls. Some members of the audience, forgetting themselves, called out, "Never mind! Don't get excited!" When she finished, applause was louder than usual, and she had to give an encore. For the farewell performance the crowd was extraordinarily large. When the show began, when huge dark clouds gathered on the horizon and a strong wind blew up. Obviously it was coming, but no one left. Big drops began to fall but the spectators sat motionless and the show went on as if nothing had happened. The story of this show was treated silently without disturbing the relation between performers and audience which has been welded through life and labour.

YENAN is a simple word that stands for a great deal in China today. And other languages too are learning its new meaning as more and more people come to visit it and study its history. These days a constant flow of visitors from five continents — Europe, Asia, Africa, Australia, Latin America, Canada and even the U.S.A. — make the comfortable plane-hop of anything an hour from Shanghai's modern capital, Pukou. Below you, the plains stream away in a great flood-tide of hand—
tended crops, golden and green and bronze in the morning sunlight, till the far hills on either horizon surge up and melt in the towering banks of the yellow plateau. The bus route winds up through those hills, a good eight hours of jinky journeying, past the grave mound of an ancient emperor.

But now a soft-voiced Chinese air hostess brings round sweets, drinks, magazines, and fruit and toasts — and you are there! Before the next day's return flight there is just time to visit Yenan's most famous relic. Impregnable to the eyes on the panorama of rugged towering hills rising into the sky like some huge cabled waves, this view of the pure cool air and sleep a night under blanket or quilt two thousand feet above the moist heat of the plains.

Yenan and Sian have been linked from the time when Sian was Chang'an, the most flourishing capital of early dynasties, and Yenan guarded its defenses to the north. Now they are linked as never before. From 1936-37 it was Sian that became a gateway to Yenan, with thousands of young people from all over China making their way up via the ancient capital, dodging Kuomintang checkpoints to join the new revolution forces. For after the triumphant ending of the Long March in October 1935 it was finally in Yenan that the stained and torn 20,000 Red Army men and the Central Committee of the Chinese Communist Party, under Chairman Mao Tse-tung's inspired leadership, became the nucleus of the new motive force in China, relying on the will of the people, this small potent force exploded into an nation—wide upsurge that by 1949 had swept out Japanese imperialism and U.S.-backed reactionaries.

In this recent history that people from all over the world come to visualize in Yenan today — this history of armed struggle that grew into a mighty creative force for peaceful production.

Riflets Plus Rifles

The policies hammered out there are what Yenan symbolizes today. A visit to the museum makes this even clearer. The Long light simple turret-strewn building is set in a flower-planted park not far down the main street from the flower-planted courtyards of our hotel. The street seems narrow between the towering hills behind, lined with modest wooden shop fronts painted bright indigo, dull red, green or brown, but opening often on the same gap consumer goods we are used to in Peking.

A visit to the museum is like an entire quick jural flight through revolutionary history, making its contours and details stand out in vivid relief. Here are the straw sandals and the clamy printing press from the Long March. Here is the clear call from the Wuyasann Conference in 1935 for a "broad revolutionary national united front" so recently read; here are the simple facts that by 1949 nineteen revolutionaries from various points north to south, while by 1943 twenty Kuomintang leaders and fifty-eight Kuomintang generals had gone over to the Japanese.

Day in Yenan

View of the town centre and river.

RUTH LAKE is a New Zealander who recently visited Yenan.

FEBRUARY 1944
Here is the record of military campaigns against Japan and the Kuomintang, whose three lines of encirclement and blockade had failed to strangulate the underground forces. A millet roll and rifle fire—call Chairman Mao's famous prediction—"We have only millet plus rifles to rely on, but history will finally prove that our millet plus rifles is more powerful than Chiang Kai-shek's aeroplanes plus tanks." The longugging clothe rags to bed Shensi's grain, slung over the shoulder, sustained the stoutest hearts. Here are the stories of Party congresses and the forward-looking leadership that planned for a protracted struggle, developing guerrilla and trench warfare with organic evolution, preparing for the enemy's rear, helping the peasants to struggle for rent reduction and tax remission, opening cadres, guiding cultural and educational work, correcting mistakes, and setting trends within the Party—which by 1945 had grown from 1,210,000 members. Here are photos of well-known Party leaders that under-line the atmosphere of those dif-ficult times, when the Party was thirty years younger. They wear the well-worn clothes that lasted a lifetime, the same cap of Chairman Mao, or the blue round cap of Chen Yun outside the Agricultural and Industrial Exhibition held in 1943.

The conception of the production campaign was typical of the triumphant spirit and clear Marxist judgment which again and again turned setbacks into victories.

Equally typically of the leadership which never rests upon its laurels and Chairman Mao's call to extend the campaign on mass cooperative lines to the people in the countryside. Organized, his talk to outstanding labour cadres from the whole border area invited to Yenan November 1943, he sums up in detail the practical results, under-lining the campaign's collective na-ture and outlines the methods of the new wider campaigns of the future:

In all the armed units of the Border Region that have been al-lotted land this year, the soldiers have on the average cultivated eighteen mu per person; and they can produce or make practically everything... By using our own hands we have realized the objec-tive of "all food and clothing".

Every soldier needs to spend only three months of the year in pro-duction and can devote the remain-ing nine months to training and fighting. Our troops depend for their pay neither on the Kuomin- tung nor on the government in the Bor.der Region Government, nor on the people, but can fully provide for themselves. Hence the province is of such a great and important for our cause of national liberation!

And pointing out that much of the production is also directed at helping the people to solve the problems of production, and improve their living conditions, he adds with cheerful scorn:

The Kuomintang only demands that the people hand over to them nothing in return. If a mem-ber of our Party acts in this way, his style of work is that of the Kuomintang, and his face, caked with the dust of his mediocrity, needs a good wash in a basin of hot water.

Nearly two years later, in an editorial article (Yenan Daily April 27, 1945), he still ex-plains its advantages to doubting dogmatists and stresses its impor-tance, saying that "production by the collective is our own support. It is progressive in substance and of great historical significance. Even though "formally speaking, we are violating the principle of division of labour". And so when victory came close they were well pre-

There is no time to inspect all that new social practice has done for Yenan—the industries, the Agricultural Research Institute, the hospital—only a glimpse can be given here. It is always a couple of metres thick. Sometimes there are connecting passageways between cells; in some others only a small peephole. Every cell is a cold storage, and every floor is a cold storage. It is not until you see some that need repair, because the damp trampled through and loosened the domed roofs and the earthy living there was not so simple as it looks.

We visit Chairman Mao's first cave headquarters on Phoenix
Mountain opposite the old pagoda where he worked from January 1937 till Japanese bombing moved this open site ate dangerous and the Central Committee moved up the valley to the more sheltered reaches of Yangchialing. The old road is being widened by sun- bomed workers as we pass and there are strapping mountaineer youths who actually run races with their bare- ous of earth — when they are not resting as lightly andred in the shade! Others are also repairing caves when we get to the old army headquarters at Yangchialing and to the beautiful grounds of the Date Garden, final seat of the Central Committees. These caves have very pleasant whitewashed en- trances; plain doors in natural wood with eyebrows of simple black nailed designs, light yellow against the white rice-paper that takes the place of glass in winter. All these places surprise us by the beauty of their trees, from lusher peaches (the peaches are already over) to tall locusts bursting into new brilliant leaf, under them there and there flat-roof traditional-style pavi- ons built by armymen give the quietness of a slight tourist to the military look. The little water- course in the Date Garden, built to irrigate the 1,300 gardens of crops, is still called Channel of Happiness.

The Yenan Spirit

Yes, Yenan was primarily a great revolutionary base, but its economy in itself is an interesting story. For example, in 1939 the army started a factory, the site's meeting hall at Yangchialing, with its curved and graceful roof and lovely lines, is less im- posing than the big purposeful stone structure for Party offices which forms a library at Yangchialing where the famous “Forum on Lit- erature and Art” was held throughout May 1940. It is smaller than the solid stone congress hall where the historic Seventh Congress wound up with Chairman Mao's short inspiring speech “The Foolish Old Man Who Removed the Moun- tains”, which has probably been more widely studied in commune and factory than any other except “Serve the People”. The valley hidden behind these massive buildings is the fields where Chairman Mao explained how a third world war could be avoided and predicted that China would win her liberation war despite the new weapons massed against her: “The atomic bomb is a paper tiger, which the U.S. reactionaries use to scare people.” Nearly two years later it is clear that to the bomb the hands of the im- perialists is primarily a weapon of blackmail and that the U.S. bomb is not more, but less strong and less respected because of it.

The Yenan spirit of self-reliance and creative production, of daring to start from scratch with the scientific approach that overcomes all difficulties, is new China's strong tradition. It grows in the countrywide movement for office workers, cadres and students to work part time in production, in the socialistization of education through part-work part-study schools that integrate theory with practice and remove the barriers between intellectuals and workers; in the recognition that man must struggle consciously to prevent the emergence of new exploiting classes; in the new economic base for production is made up not only of tools and machines but also of the hands of man, the political consciousness that controls them and must free itself from the old spirit.

It continues in the established People's Army practice of officers serving part time among the men and army units working in pro- duction. The army is still closely integrated with the working people — the people in their militia organizations are armed with the spirit of their army. It is true that to find a factory or a commune in China that is not studying Chairman Mao's thinking and “learn to build, to think, to act”. Again and again it is possible to recognize democratized PLA men in their factory offices and factory tes- tutes — by their quiet, even gentle manner, a certain inner firmness and discipline of the decent and good and patient listeners. At any rate, our guesses on this have been proved true: production enterprises we have visited: in a chemical plant, in a power plant, in a factory, in a mill. The workers there set the example and are already people as deeply as ever. Many of Nieh Erh's works were of the Chinese proletariat of this time — “Dockers' Song”, performed by an amateur group of the army, not only sharply describes the pain and misery of the Shanghai dockers under the double oppression of the impe- rialists and the domestic reaction- sries but even more clearly brings out the Chinese working people's optimistic and undaunted spirit.

Hsien Hsing-hai carried on the work begun by Nieh Erh, pressure with stronger force the working people's struggle in his productions of resistance to Japan- ese aggression. Like his "In the Taihang Mountains" (music and words on p. 50), written in 1939 and telling of the people's fight against the enemy in north China's mountains, all of his songs written in those difficult years overflow with revolutionary optimism and confidence that a people's war will be victorious.

This spirit is most marked in his two best-known pieces, "The Prop- ortion Cantata" and "The Yellow River Cantata". At a commemora- tion concert, the former was pre- sented by professionals and am-ateurs dressed as soldiers, cadres and peasants, just as it had first been performed in 1939. It was a well-drawn picture of the great produc- tion movement in the liberated areas by which the army and the civilians supported themselves, pitting their own self-reliance against the light blockade of the Japanese and Kiangsi-manned armies.

The Yellow River Cantata", per- formed by a 100-member chorus and the Central Philharmonic Orchestra, puts forth the sum and substance of the invincible spirit of the sons and daughters of China in fighting imperialism.

THOUGH the compositions of the early thirties given at the concerts could not represent the whole pic- ture of today's vigorous creative musical activity, they nevertheless reflected the forward development of the spirit of the times. An example was the song-and-dance number "I Am a Truck Mainte- nance Worker", created collec- tively and done by a railway am- ateur group from a mine, the misery-racked, indifferent workers in Nieh Erh's "Dockers' Song" but of much more profound meaning, masters of their country and with a great love for their life and work. This image of the sociali- man was also shown in a lively way in the oil drillers' song "Petroleum for the Motherland" and the piano solo "The New Countryside". The latter was per- formed by the young pianist Yin Cheng- tsang, who with four other young musicians composed the piece after living and working with the peasants for the countryside near Peking in the early half of last year. The suite, with varia- tions of themes adapted from rev- olutionary songs popular among the peasants, praises the commune movement as the means of discov- ery and their life of the collective. The musical concept is bold and strongly influenced by the folk music of north China's countryside.

While the anti-imperialist music of 20 years ago showed mainly the struggles waged by the Chinese peasant and worker, today the struggle against imperialism by the revolutionary peoples of the world seems to be on the whole, whether it was "Vietnamese Fights", "The Peo- ples of Asia, Africa and Latin America Want Liberation" or "Workers of All Lands, United!" the music of the commemoration concerts was filled with a new spirit of vigor not found in the songs written two or three decades ago.
In the Taihang Mountains
(Two-part chorus)

Words by Kuei Tao-sheng
Music by Hsien Hsing-hai

Forcefully

Red sun lights up the east sky.

Wives send their husbands to the front.

Mountains and valleys Stand like a bronze wall,

We're in the Tai-hang Mountains.

Burn-ing on Tai-hang Mountains,

Where'er the enEMY comes, We will destroy him where he is!

Tai-hang Mountains, Searing

Where'er the enEMY attacks, We will destroy him

to the sky.

Listen! Mothers tell sons to

to the sky, to the sky.

CHINA RECONSTRUCTS
Defeating the U.S. Flying Bandits

PA CHIN

I HAD JUST come back from Vietnam. In my suitcase I carried a few jagged pieces of metal with the soil of Vietnam still clinging to them. I had picked them up at Thanh Hoa and Vinh Linh from craters, pools and the ruins of buildings, places where U.S. planes had crashed in flames. Carrying them with me, I felt and shared the Vietnamese people's intense satisfaction in their victories.

PA CHIN, well-known writer, author of the novel and other books, is a vice-chairman of the All-China Federation of Literature and Art.

These fragments constantly remind me of the ignominious defeats of Lyndon Johnson and the U.S. air bandits.

From Hanoi I had travelled just last June to the Vinh Linh special district (bordering on the 17th parallel). Starting back in mid-August, I was held up one day on the south bank of the Khan Le River and was a guest in the clean and simple home of a Vietnamese peasant near by. That afternoon I sat writing at a small table. Outside, the rain had formed pools of water in the yard. And then I heard the all-too-familiar sound of planes. U.S. jets were flying north over the river. Not even rain would stop them from harassing north Vietnam.

This was not the first raid that day either. U.S. planes violate the air space of the Democratic Republic of Vietnam every day. There in that peasant house by the Khan Le River, it seemed to me that the millionaires in Washington could not go on living even one more day unless their planes dropped more bombs and a few more of their planes plunged to destruction on the land of north Vietnam. Every day since coming south from Hanoi I had heard their planes, at high altitudes and low, single planes, groups of them, jets, reconnaiss—ance, bombers, fighters, Thunderch—iefs, Phantoms—just about every kind there was. Each day I heard the shrill whine of falling bombs and the sharp whistles of rockets. The noise jarred on the ear. These pilots stopped at noth—ing to try to frighten the Viet—namese people, to make life difficult for them.

Shooting Down the 'Johnson's'

But what the Americans met in the north were forests of rifles. In Hanoi I had heard an air HERE tell how he had shot down a jet. Though outwitted, shot down two U.S. Thunderchiefs. Everywhere on my way south I heard stories of how the ordinary militiamen and women had brought down U.S. planes. In a Quang Binh village I met three heroes who had downed a big jet bomber with one shot each from their rifles. On the skirts of Thanh Hoa I saw the wreckage of a U.S. AD-6 which had been shot down by Vietnamese. I took a picture of the mangled remains of that plane.

From Vinh to Vinh Linh, whenever the people heard the planes coming they would say, "Johnson is here again." A millionaire of Do Luong in Nghe An province expressed his feelings this way: "Whenever I hear an American bomber, I feel it is Johnson himself. And I have an uncontrollable urge to get my hands on his throat, push him to the ground and choke him to death!"

The rain let up a little. More "Johnson's" flew over the river and I heard their bombs exploding in the distance. Do you know what the Americans have in plenty and if the fliers don't drop them, they would catch hell when they got back to their bases. Just how many bombs have the "Johnson's" dropped in the north? I do not know. But I remember two figures for the area around Vinh. One day some "Johnson's" dumped 46 bombs but only killed a chicken. For this "victory" one plane was shot down, three were damaged. Another time, 21 "Johnson's" of various types unloaded 146 bombs, killing one old man. Once, crossing a highway bridge, I saw craters and holes of all sizes on both sides of the span. I was told that the bridge had been the target of more than 600 bombs. But the bridge still stood and traffic was flowing as usual. I had heard that Vinh's power plant had been hit. But the first time I saw when driving into the city were the bright street lights. In the city of Ho Xa, many times bombmed by the "Johnson's", electric lights were on every night. But there I also saw the ruins of a modern hospital. The operating room was now a huge gaping hole. The hospital could no longer be used. But not one of the doctors, nurses or patients had been hit. The people of the north have had much experience in coping with the "Johnson's". Those who should be evacuated had left for distant places of safety.

I had seen the wreckage of an American F-105D in the military museum in Hanoi. On the fuselage 56 small black bombs had been painted, a record of the crimes committed in north Vietnam by the pilots of this Thunderchief. In all likelihood, the 56 criminal raids had included the bombing of schools, hospitals, sanitar—iums, water—locks and residential areas. The U.S. imperialists have committed every imaginable evil, even delib—erately bombing and killing helpless—less patients such as those in the leper and tuberculosis hospitals. They are still dreaming the dream of a century ago, thinking they can build their fortunes by mass slaughter. But they always pay dearly for the losses and hardships.

FEBRUARY 1966
they bring, for the Vietnamese people have become modern ex-
porters at hunting down the crim-
inals and their planes.

Capturing Them Alive

At Ho Xa one day I passed an open doorway and saw some of these plane-snatchers, members of a self-defense corps, playing chess under a bright light. The squad leader, whom I had met, invited me in. In the small room I saw a sewing machine, a set of barbed wire and instruments and tools for repairing bicycles. It turned out that the team consisted of a tailor, a barber and a bicycle repair man. Their families had already been sent to the country. When the revolutionists destroyed their homes, they had brought their work tools and moved into a place only a few steps from their combat post. Here they went about their usual work. But whenever the air raid alert sounded, they were at their mach-
cine guns in only a few seconds. They have thousands of such "Johnston-hunters" in the north Vietnamese cities and vil-
lages. I met them every day, everywhere. A captured American pilot confessed that he and his companions had been terribly afraid of the Chinese, for Chinese young men and slim girls around twenty are not only not tall but very short. Vietnamese and American production and sharpshooters of planes, but experts at capturing them fly their flyers away.

A militia leader once saw one of the flying bandsits bile out of his plane. This was over a village near the Delta River, Hoa. With no time to go back to his rifle, the militia went after the pilot with only its carrying-

"With this victory we send you off on your way," my Vietnamese host said to me with a broad smile: "It's much too impressive a fare-
well," I replied.

In almost every place my hospi-
table Vietnamese hosts sent me on my way with such reports. In the 50s I traveled I the 17th parallel and back. I added up the number of "Johnsons" I caught, but had no idea how many of them had been blown up. In the midst of the North Vietnamese, I learned that the total number about 200 planes in north Vietnam had reached 560. By the time I had returned from visiting Dong Nai, Binh Phu and Hau Nghia and was getting ready to come back to China, the number had gone over 700 — the airplane pilots threw in the evil face of the U.S. aggressor.

Bombing Only Steels the Will

The U.S. rule clipping constantly beat the best efforts the Vietnamese in the air. They think that by sowing death and destruction they could bring the Vietnamese to their knees. But the Vietnamese people have become ever more fresh and angry. When the red flash of its death did not take place, they considered it a sign of the close protection of the Vietnamese people. The Vietnamese people have become ever more fresh and angry. When the red flash of its death did not take place, they considered it a sign of the close protection of the Vietnamese people.

In Hanoi and the surrounding areas they have become invincible.

A 3.000-kilometre front of enemy aircraft and enemy gun positions was set up only on the night of the 20th. besieged by American planes, they stopped the American offensive. But when the Vietnamese people could not be brought down, the U.S. aggressor could only expect more losses in the air battle.

On the front only the Vietnamese women are worried about is that no "John-

workers of Dong Ha repairing guns. Even in air raids, people are on the

Introducing

WORKS OF ANNE LOUISE STRONG

CHINA'S MILLIONS

This book, by Anne Louise Strong, famous American author and jour-
nalist, is the first of a four-volume edition published on China over forty years. It deals with the Chinese revolution of 1925-31 and was written and reviewed at that time. Colonel Strong was a

CHINA RECONSTRUCTS

FEBRUARY 1960
Four New Track and Field Records

Men's 110-Metre Dash: 10 Seconds

In Chungking on October 24, Chen Chia-chuan, aged 27, ran the 100 metres in 10.0 seconds at an exhibition athletic meeting by members of the Szechuan Second National Games Team. His time equals the official world record. The feat is universally regarded as one of the most difficult of all for athletes to achieve.

It required only five years for China's athletes to improve the national record for the 100 metres from 10.3 sec. to 10.0 sec. while a similar improvement in the world record took 30 years. The world record was set in 1960 by Armin Hary of West Germany and later equalled by Harold Jerome of Canada, Howato Esteves of Venezuela, and Bob Hayes of the United States, who is a Negro.

Chen Chia-chuan first came into the limelight in 1956, during the mass movement to beat the national record for the men's 100 m. He was then a middle school student. In 1958 he was timed at 10.7 sec. He made rapid progress after adopting a rigorous training programme in the winter of 1964 and last June he improved his time to 10.2 sec. A week before his record run in October he returned 10.1 sec.

Women's Shotput: 16.61 Metres

The national women's shotput champion, Chung Hsiao-yun, put the 4 kg. shot 16.61 metres during an athletics meeting at Nanking on October 16. In doing so she bettered by 0.24 m. her old record of 16.37 m. set at the Second National Games.

Men's 110-Metre Hurdles:

At an exhibition contest in Wuhan during a friendly meeting between track and field teams of the Democratic Republic of Vietnam and China's Hupoh province last November, 23-year-old Tsui Chih-chih broke his own world record for the men's 110-m. hurdles. This was one of the best world performances for 1965. Earlier in the year two United States hurdlers also had returned 13.3 sec. The world record is 13.2 sec.

Newcomer Tsui Lin could do no better than 14.9 sec. in 1961. At the Second National Games, however, he won the title with 13.9 sec. At the end of October, the seasoned Liang Shih-chiang covered the distance in 13.7 sec. to break the five-year-old national record of 13.8 sec. A week later, Tsui Lin bettered this with 13.6 sec. Eight days later still, he clipped another tenth of a second off to set the new record.

Men's High Jump: 2.25 Metres

On November 20, also at the Wuhan meeting, Ni Chih-chih, China's men's high jump champion, cleared 2.25 m., which is just 0.03 m. short of the world record. Ni is the second man in the world to jump 2.25 m. Aged 23, he comes from Fukien province.

Where he took up high jumping in 1959, Ni Chih-chih's best leap was 1.90 m. However, his progress was steady and despite many obstacles. Early last year he suffered a severe foot injury and was operated on. While still in hospital, he trained every day to prevent the contrac- tion of the muscles which often occurs after an operation. Shortly after being discharged, Ni resumed solid training. In competition two months later he jumped 2.22 m. to break his own national record of 2.21 m. Con- tinuing to improve after the National Games, he won the event with a leap of 2.15 m. Ni had cleared 2.23 and 2.24 m. before his November 20 jump.

Editorial action shows Ni Chih-chih's 2.25-metre jump.
They display a truly revolutionary spirit and talk of their readiness to make any sacrifice at all to protect all the peoples of the world who struggle against and fight U.S. imperialism, the main enemy of mankind today. They are full of praise and admiration for the heroic and victorious struggle of their Vietnamese brothers. This political maturity has moulded the whole people into a great force, more revolutionary than ever. This is China's pride and power, and her hope too.

The Chinese friends say that no force on earth can stop them in their forward march. But mind you, they never hint at their nuclear strength. They very seldom refer to the two successive nuclear explosions of theirs, and that also only to refer to the high level of scientific and technological development they have reached by self-reliance. It is the people, it is the persistent struggle of the people, they count on. They ardently believe that the people's power is infinitely superior to any other power. This firm conviction of theirs is manifested in various fields of activities: above all in today's literature and art. Their modern dramas, operas and films skillfully embody the true beauty and superb aesthetic sense with one basic theme: the unity of the people against the last of the individual and for the good of the collective. This theme has become the vitality of China's new culture. This, as I understand it, is the ideological and psychological basis of their struggles in national construction as well as on the international plane. Weapons will not destroy man but man will eventually destroy all weapons, they confidently say, hence they do not take pride in the possession of atomic bombs.

This is one reason, I believe, why Peking invariably presents to all visitors a picture of leisurely calmness and peaceful enjoyment with a high tide of cultural activities. We do not see any kind of mass hysteria here. The intensively active but entertainingly peaceful life in Peking is itself a high tribute to man's faith in himself.

I must say a word of appreciation about the role of women too. To me it seems that the women of China today have reached the springtime of their emancipation and awakening. I have silently but admiringly noted the glint of self-confidence and determination in the eyes of many thousands of industrious young women I saw. It is inspiring to see them full of energy and full of courage, working at complex modern machines in factories, dexterously manipulating them. Here we do not see superiority of men or inferiority of women; they work and live on an equal footing, contributing an equal share to the construction of their motherland. With every passing year their role will certainly be more significant and more decisive.

I BELONG to a people who have had a long traditional friendship with China, extending far back into early centuries. There was disruption of these relations due to imperialist aggression, but since we regained our independ- ence we have revived our age-old friendship. Ceylon was one of the first few countries to recognize the People's Republic of China and break the embargo imposed by the U. S. imperialists, although it took a few more years to establish diplomatic relations. During the past decade and more, China has given us much selfless help. She gave us rice at a fair price at a time when imperialists were seeking to starve our nation into submission; she bought our rubber at a higher price and thus helped save our economy when colonialists were plotting to ruin it. We have received big interest-free loans from her, apart from a lot of aid with no strings attached. These acts manifest China's sincere friendship for my people. Our mutual friendship is now based on equal cooperation and a more enduring policy; I mean the Five Principles of Coexistence. The Chinese people aim to uphold the ten Bandung principles. I am sure that, despite all obstacles, the friendship between our two peoples will develop and expand.


city youth who have finished their schooling and taken up farm life.

FebrUary 1964
Making a Transistorized Ultrasonic Thickness Gauge

A worker uses the new transistorized thickness gauge to check the hull plates of a ship.

CANT you make us some kind of an instrument for checking the thickness of ship hulls? The way we do it is hard work, takes too much time and costs too much.

The question plagued everyone at the Shanghai Shipyard, where the thickness of the steel plates of ships in drydock had to be measured to determine the effect of corrosion while at sea. This was done by drilling holes in the hull in order to measure directly.

Today, after several years of persistent work by engineer Yang Chun-ching and his assistants, such an instrument is being produced—a small portable thickness gauge which has a transisitor circuit and uses ultrasonic waves to measure the thickness of metal. It can check plates, pipes, boilers, high-pressure vessels of steel, aluminum and copper, and has wide application in the shipbuilding, petrochemical, aviation and chemical industries. Weighing less than two kilograms, the thickness gauge is easy to operate, highly accurate and sensitive, and can save the old time and labor of drilling and greatly reduces the costs of repair. Shipyard workers are especially enthusiastic about it.

Yang Chun-ching began thinking of such a device in 1960 when he was working at the Shanghai Shipyard and saw the tremendous amount of labor that went into the drilling of a ship when it came into drydock. The problem was to determine which of the steel plates in the hull had to be replaced as a result of corrosion by salt water. The men had to carry heavy tools, climbing the sides of the ship and down into the hold, knocking here and there and drilling many holes in the plate. To examine a 5,000-ton ship, it was often necessary to drill as many as 1,000 holes. If the plate did not need replacement, the holes had to be closed again by welding. The process was costly in time, and sometimes the workers kept pointing out. Yang set out to answer their appeal for an instrument which would do away with all this.

In a foreign technical journal he read about an ultrasonic thickness gauge of resonant type, an instrument which measured the thickness of metal by the resonance frequency of ultrasonic waves. He made one in the laboratory and took it to the docks to try it. It showed many defects. It was not sensitive enough. It could only be used on smooth surfaces, and the bored out hull plates were corroded and uneven. There was no dial for easy reading of the thickness. This had to be calculated and most of the workers found it hard to do. Moreover, it weighed over 10 kilograms, too heavy to be carried around the ship easily. The workers wanted something like an ordinary voltage meter which was light in weight and indicated the thickness within any calculation error.

Easier said than done! Yang had no idea how it could be made.

Neither Chinese nor foreign technical journals helped. A foreign expert told him that the problem was still being studied abroad. Well, if years of research abroad had not yet produced one, Yang thought, how can I do it, with neither data nor experience?

Toppling Old Ideas

Yet the need and hope of the workers for such a device made him go on with his experiments in spite of his doubts. Didn’t they say, the less you know, the more you learn? To give up in a revolutionary task? After all, he told himself, I’m an engineer of the new China and a Communist; difficulties are only there to be conquered. Besides, it is wrong to think that everything foreign is superior. Just because the others didn’t do it is no reason why we can’t. Following Party instructions, he went out of his way to look for workers side by side with factory and dock workers, and he knew from practical experience that he continued to rely on the workers for supplying workers and workers for solving difficulties and success.

He reviewed what he had done in his work at the Shanghai Electric Transistor Factory. He had handled to make one better than a similar foreign model because he had dared to go beyond the limitations set by technical rules normally accepted in foreign countries. This had taught him that while one should learn the use of foreign techniques, it was more important to dare to work with independent creativeness.

When he was transferred to the Shanghai Shipping Research Institute in 1961, he told them that he wished to continue trying to make an ultrasonic thickness gauge. “We need such an instrument badly,” the secretary of the Party branch and appealingly, “The Party wants you to go ahead. It will be more than the making of a new product. It will amount to adding up our own experience and blassing a new star.” When Yang began spending time at the shipyard and the drydock asking the opinions of the workers, they were excited by the fact that he was continuing his experiments on the thickness gauge they needed so much.

New Problems, Harder Work

Yang and his assistants decided to switch their investigations from using resonance frequency of ultrasonic waves to a pulse method. They concentrated on making a transistorized ultrasonic thickness gauge, a vital part which transforms electrical energy into acoustic energy and for which the device is named. Though this was only a small disc-plate and putting it was complicated and involved many theoretical problems. First, one had to understand the phenomena of acoustic energy and Yang had had no experience in this field. His answer was to study it in his spare time.

Much of the equipment necessary for making a transistor was not available in the institute. Yang and his group had to make it. After they had found the right formula for the combination of materials of the piam-electric plate and learned how to solidify it under heat without melting it, they had to grind the plate carefully for long hours to meet the specifications. Just before it was finished, a slightly uneven pressure of the machine would often cause it to be broken and they would have to start all over again. They needed a high-temperature electric resistance furnace and built a simple one themselves. Over 500 experiments did not disturb them; they finally found the right formula and process, and with their accumulated experience turned out their first workable transistor.

They went on to make a dial system which could be read directly and finally assembled China’s first electronic pulse thickness gauge. It weighed 5 kilogrammes. They took it to the shipyard in early 1962, going over a ship with the workers to test it. It worked. They held an open-to-the-street meeting of shipyard administrators, technicians and technical workers to criticize and discuss the new invention, made improvements on it according to the ideas and suggestions of the men and women and turned it over to the shipyard to test thoroughly. Six months of use proved the instrument satisfactory. The days of drilling holes were over for the workers.

The shipyard workers were delighted with the new instrument, but it had shortcomings. First, because it used alternating electric current (A.C.), it carried a long wire, making it inconvenient to use. Second, it cannot measure electronic tubes, which had to be replaced often and which were still too bulky to handle. “The instrument is a little too delicate,” said the workers, “and it can be much better if it didn’t have that long electric wire tail.” It was a demand for anew better model.

The answer to most of these problems would be a transistor circuit, eliminating the long wire and weight and cutting off the ‘tail’. But at this point Yang’s work was complete. Yang and his group had to make it. After step up their efforts and produce a better one.

Neither Yang nor his assistants understood the circuit design of transistors, so they went to university lectures, asked the advice of experts and studied experiments in the laboratory. A few months later, they replaced the electronic tubes in their gauge with transistors—all except one special tube for which they could not find a suitable substitute, and if this tube was kept, the long ‘tail’ would still have to be used. If they changed to D.C. current, it would require heavy batteries. The answer was to design the offending part by designing a new transistor circuit. Finally, from a professional Factory University, they learned a way of replacing the special electron tube with an ordinary transistor by redesigning the circuit. This, after many more experiments, enabled them to bring out the better instrument.

Their transistorized pulse ultrasonic thickness gauge proved sensitive, reliable, weighed only 1.5 kilogrammes and was easy to carry and operate. In early 1963 the China Dresses Shanghai began manufacturing it. "Just what we wanted!" exclaimed the shipyard workers.

Testing the gauges at the Chang-hua Electric Plant in Shanghai.

CHN Pao-shan (left) and Yang Chun-ching.

Engineer Yang Chun-ching in his laboratory.

CHN Pao-shan.

CHN SHIPYARD.

They worked in the Shanghai Shipping Research Institute under the Ministry of Communications.
Ancient
Corner
Towers

TAO TSUNG-CHEN

A brightly-colored tower of unique structure stands at each of the four corners of the wall of the Forbidden City which encloses the ancient imperial palace in Peking. Its extraordinary shape gave rise to many legends in the past. The most popular one has it that construction of the tower was started then and again, but without success because the structure required too much complication. For each delay, many people were put to death by the emperor. One day a white-haired old man suddenly appeared among the workmen holding a skillfully-made cricket cage. From the structure of this small cage the workmen got the idea of how the tower could be built. It was said that the old man was none other than Lu Pan, the patron god of building workers.

Though a legend, the story expresses the cruelty of the feudal rulers and praises the labour and wisdom of the ordinary working people.

In spite of its intricate shape, the tower was actually based on China's traditional timber post and lintel structure, the flexibility of this type of architecture enabling the builders to construct the unusual features of its design.

The essential pattern of the tower is that of a 9 by 9 metre square pavilion. From each of the pavilion's four sides a rectangle protrudes more than one metre on the two sides next to the palace mast and four metres on the two sides facing into the grounds. Thus the layout forms an irregular cross. The platform on which the building stands is larger but of the same shape (Fig. 1).

The white marble platform has a finely-carved balustrade and two flights of steps on the extended sides. From this base rise 20 vermilion pillars. The beams and brackets are painted in gold and other brilliant colours. Resting on these is a three-tiered roof of golden-yellow glazed tile. The roof is the most exquisite and complicated part of the tower. Directly over the central square of the floor is the top roof (Fig. 2), in reality two roofs whose intersecting ridges form a cross and four gables with gold designs painted on a red background. At the centre of the crossed ridge is a gilded square-shaped crown which is the highest point of the tower. Under this top roof there is a double-tiered gabled roof covering each of the four extended parts of the building. Thus the entire roof, actually a combination of many gabled roofs, has a varied beauty and yet remains a harmonious whole.

AT THE top of the roof has 10 gables and 16 ridges. Where the ridges meet, there are glazed figures of immortals and animals. These decorative figures have a historical background. Structurally, some objects such as a boy on the roof of the tower were later added. After a palace hall burned down during the Han dynasty (206 B.C. - A.D. 220), the ornaments began to be made in the shape of a legendary sea monster which was supposed to have had the power to put out fires. It was forbidden to use the monster on buildings other than palaces and temples. This object gradually developed into the stylized dragon head so well known today.

The four corner towers date from 1420 in the Ming dynasty. During the period of the reactionary Kuomintang rule, they were utterly neglected and left to fall apart. The liberation returned these ancient masterpieces to the people and since 1949 the People's Government has been repairing them. Today, the two towers on the north side of the Forbidden City have been fully restored and again stand in their original splendour, casting their fascinating reflections on the water below.

The Boy,
the Old Woman
and the Needle

LI PO was one of China's most famous poets. He was born over twelve hundred years ago in the days when the Tang emperors ruled China. Legend has it that as a boy Li Po found it hard to sit for long hours at his studies.

When spring came round and the peach trees blossomed and the willows put out their buds, the countryside was most tempting in its gink and green dress. "How dull to sit all day at my books!" thought Li Po, "I'll go out and play a while." And with that he was off.

It really was fun out of doors with butterflies flitting round the flowers and birds singing in the trees. Li Po looked here and there, listening to the sounds as he ran. Before long he came to a brook. How lovely was the sound of the rippling water!

Suddenly he saw an old woman sitting under a tree rubbing a thick bar of iron on a rock. Li Po advanced a few steps towards her, bowed and asked, "Grandma, why are you grinding that bar?" The old woman looked up and, glancing at Li Po, replied, "I'm making a needle to embroider with, my son."

She dipped the iron bar in the brook and went on with her grinding. "Can you make an embroidery needle out of such a thick bar?" Li Po was more puzzled than ever. The old woman chuckled, "Yes, it can be done! The only thing it takes is time." Li Po asked again, "Will you finish before dark?"

"If not today," the old woman said, "then tomorrow I'll go on working at it. If I can't finish tomorrow, then the day after. If I keep at it day after day, I will in the end have a needle."

At last Li Po understood. If you keep at a task it can be finished, no matter how hard it may be. It was the same with learning. And from that day Li Po was a good student who in time became a great poet.
Greetings from Western Samoa

Commemorative stamps by the free magazine. Your October issue is especially appointed to admire your illustrations. The article on "The Long March" is an admirable example of the national liberation movement, and it is hoped that the images may inspire the people of the world to believe that the Chinese people have taken a firm and honorable stand towards the national liberation movement in the whole world. They mark our victory in this cause because they stand in arm with the peoples of the Arab world and because they support us, especially in the Palestine and south Arabia questions. We promise you a magazine with our common principles and goals. We will stand with them to annihilate oil and neo-colonialism and to achieve the friendly society under the justice of socialism. We hope that you will be a constant member in the side of imperialism.

MUSAFI ALLA ZAAD

Sino-Arabian Friendship

The article "Friendly Relations Between the Chinese and Arab Peoples" (May-June 1965 issue of the Arabic edition of China Reconstructs — Ed.) was very heartening to the Arab peoples who are fighting against U.S. imperialism and Zionism. China's support for the liberation of Palestine is a great glory to the Arab peoples. This simply indicates the solid friendship the Chinese people cherish for all the Arab peoples.

At the same time the article impressed me with the fact that China's 400 millions stand firmly with the Arab peoples. Greetings to the peace-loving peoples and to the Chinese people for their joust. Down with U.S. imperialism and Zionism!

ZAWAI MOHAMMED ALHAJI

Nigeria, Algeria

I was very much surprised by the great progress which our friendly China has achieved in several fields, especially in industry and agriculture, as shown in the last three issues. I am most impressed by the following articles: "Advances in China's Economy," "How China's 1956-70 Hydraulic Press Was Built" and "Friendly Relations Between the Chinese and Arab Peoples." I found the last the best because our beloved China has paid further attention to Arab problems, and first to the Palestine problem. We thank very much the leaders and people of China who appreciate the Arab cause, which is a part of the same foreign aggression. We eagerly await that all the countries unite with the Arab peoples for the liberation of occupied Palestine from the enemies of liberty and peace.

USHEIN EL MOUDEN

Tunisia, Morocco

Can Lamb Coexist with Wolf?

The article which shows the fiercees of U.S. imperialism and the atrocities committed by your correspondent, I fully understand. It shows to the whole world the civilization and progress which the Americans forge. It is civilization and program in the acts of murder and terror against the peoples who will not submit to humiliation and disgrace. How can peaceful coexistence be possible between lamb and wolf? We either defeat imperialism in its various aspects in order to live a happy and free life or perish in honour and glory.

My warmest greetings to the friendly Chinese government and people who have taken a firm and honorable stand towards the national liberation movement in the whole world. They mark our victory in this cause because they stand in arm with the peoples of the Arab world and because they support us, especially in the Palestine and south Arabia questions. We promise you a magazine with our common principles and goals. We will stand with them to annihilate oil and neo-colonialism and to achieve the friendly society under the justice of socialism. We hope that you will be a constant member in the side of imperialism.

Yorobus, Syria

Salute to Mao Tse-tung

On one of the most glorious occasions of the revolutionary world, the 10th anniversary of the founding of the People's Republic of China, I most heartily congratulate you and the great Chinese people, and salute respectfully the most devoted friend and the greatest revolutionary sympathizer of the present-day oppressed nations the world over, respected Mao Tse-tung, with more progress and success to the great heroic people of revolutions play up!

MUSTAPA PASHIYUSSTANI

Kandaha, Afghanistan

The Armed People Are Invincible

"An Armed People Are Invincible" is for me a most important article. When the masses are united they are invincible in the fight for liberation against Yankee imperialism and its puppets, which are paper tigers after all. Their dreams of colonizing all the Latin American countries will be frustrated and defeated by the masses.


MANUEL JESUS DIAZ

Patio, Colombia

Against the Gangsters

I congratulate you for your uncompromising stand against imperialism and for your firm and unconditional backing of the heroic Vietnamese people. By your wise right do those American piggies attack the Democratic Republic of Vietnam, waging in actual fact an undeclared war against it? By what right do they have to be in the south Vietnamese people's affairs to oppose their just aspirations towards reunification and a people's government free from foreign domination? May all the communist and progressive forces support the Vietnamese people's struggle for their own freedom, for genuine liberty and independence! May all the communist and progressive forces understand that this struggle is as closely connected with the complete crushing of U.S. imperialism.

M. BOUAMINE ABDEL

Falck, France

Reliable Information

I am really impressed to read articles about socialist construction in China. I find it most impressive because the development of China in the world will help the young national states to safeguard their sovereignty and their territorial integrity. China is our federal country. From China we get real information concerning the world revolutionary movement and world communist movement.

In Meet Chou En-lai's visit to Tanzania we have opened our eyes in so many ways.

JAMES J. M. YINGO

Lusaka, Zambia

Seawage Treatment

"Seawage as a Source of Production Increase" made me appreciate what I never believed before, for the employment of treated sewage in agricultural schemes is somehow quite new to me. In this part of the globe we are undoubtedly show the world that China is working very hard with eminent scientists to see that nothing is wasted.

HASTINGS J. UGBRA

Lagos, Nigeria