This material, translated under U. S. Government auspices, is distributed for scholarly uses to repository libraries under a grant/subscription arrangement with Joint Committee on Contemporary China of the American Council of Learned Societies and the Social Science Research Council. The contents of this material in no way represents the policies, views, or attitudes of the U. S. Government or the other parties to the arrangement. Queries regarding participation in this arrangement should be addressed to the Social Science Research Council, 230 park Avenue, New York 17, N. Y.
FOREWORD

This publication was prepared under contract by the UNITED STATES JOINT PUBLICATIONS RESEARCH SERVICE, a federal government organization established to service the translation and research needs of the various government departments.
Subscribing Repositories

SS-C

University of Arizona
Tucson, Arizona

Mathews Library
Arizona State University
Tempe, Arizona

Non-Western Program
Atlanta University Center
Atlanta 3, Georgia

University of British Columbia
Vancouver 8, Canada

State Paper Room
British Museum
London, W.C. 1, England

General Library
University of California
Berkeley 4, California

Center for Chinese Studies
University of California
Berkeley 4, California

Government Publications Room
University of California
Los Angeles 24, California

Serial Records Department
University of Chicago Library
Chicago 37, Illinois

The General Library
University of Cincinnati
Cincinnati, Ohio

Director, East Asian Institute
Columbia University
433 West 117th Street
New York 27, N. Y.

Librarian, East Asiatic Library
Columbia University
New York 27, New York

Univ. of Nebraska Library
Lincoln 8, Nebraska

Wason Collection
Cornell University Library
Ithaca, New York

Council on Foreign Relations
58 East 68th Street
New York 21, New York

Baker Library
Dartmouth College
Hanover, New Hampshire

Denison University Library
Granville, Ohio

Duke University Library
Durham, North Carolina

Centre de Documentation: Chine
Ecole Pratique des Hautes Etudes
10 Rue Monsieur-le-Prince
Paris 6, France

Fletcher School of Law and Diplomacy
Tufts University
Medford, Massachusetts

Harvard College Library
Cambridge 38, Massachusetts

Center for East Asian Studies
Harvard University
16 Dunster Street
Cambridge 38, Massachusetts

Harvard-Yenching Institute
Cambridge 38, Massachusetts

University of Hawaii
Honolulu 14, Hawaii

The Hoover Institution
Stanford, California

University of Illinois Library
Urbana, Illinois

Utah State University Library
Logan, Utah
Indiana University Library
Bloomington, Indiana

Institut für Politische Wissenschaften
Technische Hochschule
Vinzenstrasse, 22a
Aachen, Germany

Institute de Sociologie Solvay
Rue du Chatelain, 49
Brussels, Belgium

State University of Iowa Library
Iowa City, Iowa

Documents Librarian
University Library
Lawrence, Kansas

University of Kentucky Libraries
Lexington, Kentucky

Library Association of Portland
801 S.W. 10th Avenue
Portland 5, Oregon

Librarian, School of Oriental and African Studies
University of London
London, W.C. 1, England

Asia Library
University of Michigan
Ann Arbor, Michigan

University of Michigan Library
Ann Arbor, Michigan

Michigan State University Library
East Lansing, Michigan

Ohio State University Libraries
1858 Neil Avenue
Columbus 10, Ohio

University of Oregon Library
Eugene, Oregon

Pennsylvania Military College
Chester, Pennsylvania

Pennsylvania State University Library
University Park, Pennsylvania

University of Pittsburgh Library
Pittsburgh 13, Pennsylvania

Princeton University Library
Princeton, New Jersey

Purdue University Libraries
Lafayette, Indiana

Research Institute on the Sino-Soviet Bloc
P. O. Box 3521
Washington 7, D.C.

Institute of Asian Studies
St. John's University Graduate School
Jamaica 32, New York

University of San Francisco
San Francisco 17, California

Seton Hall University
University College
South Orange, New Jersey

McKissick Memorial Library
University of South Carolina
Columbia 1, South Carolina

University of Southern Calif. Library
Los Angeles 7, California

Morris Library
Southern Illinois University
Carbondale, Illinois

Serials and Documents
Joint University Libraries
Nashville 5, Tennessee

University of Texas Library
Austin 12, Texas

University of Vermont Library
Burlington, Vermont

Alderman Library
University of Virginia
Charlottesville, Virginia

Far Eastern Library
University of Washington
Seattle 5, Washington

General Library
University of Washington
Seattle 5, Washington

University of Western Australia
Nedlands, Australia

Yale University Library
New Haven, Connecticut
Foreword

This serial report is comprised of translations of selected articles from the above-mentioned daily newspaper published in Peking. The source span indicates only the earliest and latest issues processed for any given report; the dates should not be construed as all inclusive. Selections are full text translations unless otherwise indicated.

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Part</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ECONOMIC</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Prepare Summer Harvest Tools Early to Meet a Good Harvest</td>
<td>1</td>
</tr>
<tr>
<td>Busy Harvest Season</td>
<td>3</td>
</tr>
<tr>
<td>Farm Tool Repair Work in P‘en-Lai</td>
<td>5</td>
</tr>
<tr>
<td>Ling-ch‘uan Hsien Party Committee Decreases Cost of Small Agricultural Implements</td>
<td>6</td>
</tr>
<tr>
<td>How a Hsien-owned Agricultural Machinery Factory Serves Agriculture</td>
<td>9</td>
</tr>
<tr>
<td>Advertisements</td>
<td></td>
</tr>
<tr>
<td>Nanking Industrial Chemicals</td>
<td>12</td>
</tr>
<tr>
<td>Brick and Tile-manufacturing-machines from Heilungkiang</td>
<td>13</td>
</tr>
</tbody>
</table>
Part

Medicine for Anaemia 13
Mukden Electrical Equipment 14
A New Liver Drug 15
Ying-k'ou City Colored Metals Precessing Factory 16
Nu-tan-chiang Shih Education Bureau Machine Works 17
Domestic State Operated Yingkow Consolidated Chemical Works 18

Industrial Management & Labor 19

Leading Cadres Join Factory and Strengthen Industrial Management 19
Leadership Learned from Miners 23
Increase in Labor Efficiency at Li-chuang Coal Mine 25
Encourage Workers to Work More Hours 30
The Development of a Movement to Save Industrial Materials at Shanghai 33
Preventive Measures Taken in Handling Problems of Summer Rains 36

Industry 39

Use Inferior Cotton to Spin Good Yarns and Weave Good Fabrics 39
Great Possibility in Power Conservancy 41
Everybody Cooperates to Make More Steel Become Useful Materials 42
To Create Conditions for the Fulfillment of the Task 45
The Various Means to Economize Materials 47
The Completion of a Small Production Line in Ch'eng-tu Red Banner Iron Works 49
Steel Production in Shanghai Achieves Improvements 53
<table>
<thead>
<tr>
<th>Part</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievements of the Kweichow Automobiles Parts Factory</td>
<td>55</td>
</tr>
<tr>
<td>The Emulation Campaign in the Power Industry</td>
<td>57</td>
</tr>
<tr>
<td>Workers' Continuation School of Shanghai Fourth Radio Plant Promotes Product Quality</td>
<td>62</td>
</tr>
<tr>
<td>Artificial Wool Quality Quickly Improves in Shanghai</td>
<td>65</td>
</tr>
<tr>
<td>Nan-ning Umbrella Factory Expands Production in Overcoming Raw Material Shortage</td>
<td>68</td>
</tr>
<tr>
<td>Yung-li Chiu-ta-ku Chemical Plant Increases Soda Ash Production</td>
<td>70</td>
</tr>
<tr>
<td>Anshan Steel Mill's Electrical Repair Factory Develops 'Five Goods' Family Emulation Campaign</td>
<td>73</td>
</tr>
<tr>
<td>Improving the Quality of Products Is Our Positive Policy</td>
<td>75</td>
</tr>
<tr>
<td>T'aiyuan Scrap Corporation Develops New Use for Scrap</td>
<td>79</td>
</tr>
<tr>
<td><strong>Mining</strong></td>
<td></td>
</tr>
<tr>
<td>Protect the Electric Carrier for Better Transportation</td>
<td>81</td>
</tr>
<tr>
<td>Technical Reforms in the Ching-ching No 2 Coal Mine</td>
<td>84</td>
</tr>
<tr>
<td>Shantung Wang-she-jen Iron Mine Increases Production of High Grade Iron Ore</td>
<td>86</td>
</tr>
<tr>
<td>How Did the Chiao-hsi Coal Mine Settle the Problem of Coal Transport Carts</td>
<td>88</td>
</tr>
<tr>
<td>Coal Carts for Coal Mines</td>
<td>91</td>
</tr>
<tr>
<td>Improve Old Coal Carts in Order to Improve Transportation</td>
<td>92</td>
</tr>
<tr>
<td>The Prevention of Accidents at A-kan-cheng Coal Mine in Lan-chou</td>
<td>93</td>
</tr>
<tr>
<td>Speeding up Mining Technical Reforms</td>
<td>96</td>
</tr>
<tr>
<td>Part</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
</tr>
<tr>
<td>Chang K'o-ts'ai Engine Crew Conserve Coal for Five Years</td>
<td>98</td>
</tr>
<tr>
<td>Workers of Pen-ch'i Railroad Office Raise Loading and Unloading Efficiency</td>
<td>98</td>
</tr>
<tr>
<td><strong>Technical Information</strong></td>
<td></td>
</tr>
<tr>
<td>Success in Refining Iron with Anthracite Coal</td>
<td>101</td>
</tr>
<tr>
<td>Technological Training Movement Developed at Chungking Oil Paint Factory</td>
<td>103</td>
</tr>
<tr>
<td>Technical Reforms for Increased Steel Production in Shansi</td>
<td>105</td>
</tr>
<tr>
<td>Wind-driven Machinery Shop Blossoms</td>
<td>108</td>
</tr>
<tr>
<td><strong>II. GENERAL</strong></td>
<td></td>
</tr>
<tr>
<td>A Reborn Ancient City, Urumchi</td>
<td>110</td>
</tr>
<tr>
<td>A Trip to Kashgar</td>
<td>113</td>
</tr>
<tr>
<td><strong>III. POLITICAL</strong></td>
<td></td>
</tr>
<tr>
<td>New Situation in Ssu-yuan Contingent After the Discipline Regulating Movement</td>
<td>119</td>
</tr>
<tr>
<td>On the Promotion of Education with High Morale</td>
<td>122</td>
</tr>
<tr>
<td>The Application of Hao Tse-tung's Ideology in Production</td>
<td>125</td>
</tr>
<tr>
<td><strong>IV. SOCIOLOGICAL</strong></td>
<td></td>
</tr>
<tr>
<td>A Dualistic Approach in Treatment of Chronic Diseases</td>
<td>130</td>
</tr>
</tbody>
</table>
I. ECONOMIC

Agriculture

PREPARE SUMMER HARVEST TOOLS EARLY TO MEET A GOOD HARVEST

Following is a translation of an unsigned article, in Kung-jen Jih-pao, Peiping, 19 April 1961, page 2.

The Party Committee of I-ch'eng Hsien, Shansi Province, from the first part of February, started to make preparations for summer harvest farm tools. Because of early planning and arrangement, it has attained obvious achievements.

In the first part of February this year, the Hsien Party Committee, based on the situation that the seasons and summer harvest were earlier this year, began to make preparations of farm tools for the summer harvest. First, it organized 66 persons from the related industrial, commerce and agricultural departments and sent them to the 225 production brigades under the nine communes throughout the hsien. Through keypoint and penetrating investigations and through an all-out investigation, these people made a thorough estimate of the conditions of the broken farm tools and their exact needs for repair. After the estimate was made, they made arrangements for these tools, based on the principle of urgency. The Hsien Party Committee requested the various units, based on the spirit of self-providing, to implement the policy of repair and creation at the same time, with repair as the main activity. From the middle of March to the first part of April, about 90% of the repairing and creating power was thrown into the production of summer harvest farm tools. It was guaranteed that before the end of April, all the summer harvest farm tools would be delivered to the peasants.

While arranging production, the I-ch'eng Hsien Party Committee strengthened its leadership, from top to bottom and at every level. One of the executive secretaries of the Hsien Party Committee assumed the leadership and the related departments of commerce, industry, material resources, water conservancy, agriculture, communication and banks organized a united office. The Party secretaries of the communes and the production brigades all assumed leadership at every level as persons with special responsibility; thus, the preparation work for farm tools for summer harvest was greatly hastened. The industrial departments continued to gather their technical workers in helping the 225 production brigades establish and strengthen their repair stations. The production material company and the basic level supply stations provided the movement with an enormous amount of raw materials, machines and spare parts. Under the cooperation of these departments, by the middle of March, this hsien already prepared 15,000
sickles, 1,900 wooden chisels and a great supply of ropes, blooms, trays, and bamboo rakes, and other summer harvest farm tools.

The Hsi-an City organized eight large-scale machinery factories, utilizing odd and surplus materials and modern equipment to produce sickles to support summer harvest throughout the province. After accepting the task, these factories organized the workers immediately to conduct discussions and arrange labor power to begin production rapidly.

The related departments of the Shensi Provincial Government, this year, has assigned the Hsi-an City with a task for the production of 850,000 sickles and the goods to be delivered before the end of May. Based on the estimates of the Hsi-an City Agricultural Machinery Bureau, if they only rely on the sickle factory, the agricultural machinery and tool plant through the forging method as it was in the past, the fulfillment of this task would require five months; as such, it would be a delay for agricultural production. Accordingly, the Hsi-an Party Committee decided to establish eight large-scale machinery factories, including the Hsi-an Electrical Welding Plant, the Hsi-an Switch Factory, etc., while guaranteeing the fulfillment of the State production plan, they also utilized this factory's odd and surplus materials and modern equipment to produce a quantity of sickles.

After the sickle production task was arranged, the Party Committees of these factories regarded it as an honorable political task and they told the workers about this arrangement and planning. They requested the workers to hurry the production and deliver them to the peasants before 1 May. The workers' morale was very high. For instance, the Hsi-an Electrical Welding Factory's electrical machinery workshop changed from two shifts to three shifts in order to hasten the production of sickles. When the sickles were packed in boxes, the heat treatment workers were too busy, so the workers of the workshop took united action and helped the heat treatment workers and packed their boxes, thus greatly raised productive efficiency. As of the beginning of March, the daily production of sickles rose from 450 to 1,500 sickles, with quality completely meeting specifications.
BUSY HARVEST SEASON

Following is a translation of a news report by Yuan T's'un-I in Kung-jen Jih-Pao, Peiping, 5 May 1961, page 27.

Workers in the Hsin-Hsiang Tractor Repair and Assembling Plant have solidified their thinking in serving agriculture and have greatly supported the production of the spring planting by conquering the difficulties caused by the lack of raw material and parts, by improving technology and business administration, and by speeding up repair work as well as maintaining the quality of their work.

After intensive investigation and study, employees of that factory realized that the repair jobs this year would be more heavy than last year and the lack of parts would be more serious than ever before. Nevertheless, there are a small minority of workers who were reluctant to do repair work because of the small cash value involved. In order to eliminate this idea, the party committee has called various meetings for clarifying the ideologies involved in developing agriculture as well as in developing the production of grains. Discussions were held in those meetings. One repair worker, Liu Yun-an said: "Since one tractor could plant 80 mou of land a day, we would support agriculture better by quickly finishing the repair of tractors."

Once the employees' thinking was clear, they developed aggressiveness on their work. So far they have conquered a lot of difficulties involving the lack of material and parts. There was one No. 25 model tractor which could not be used because of the lack of proper brass bearings. It was not possible to buy or make such bearings. The workers then used their ingenuity by successfully making use of a modified, old set of bearings from another model. In order to benefit the masses and shorten the time required for repairs, the employees have also improved the system of business administration. As soon as a broken tractor arrives, it is sent to the workshop for examination by technicians and workers. A complete file on the tractor is made containing the information of its number and model, the damaged parts, the name of workers to be assigned for its repairs, and the expected date for delivery. After the tractor is repaired, every part is carefully checked and everybody concerned must sign on the papers. They also record the opinions of the owner and the repaired tractor is not released until the owner is completely satisfied.

The summer harvest season is about to arrive. For the sake of getting the broken tractors at the factory back to the field for the summer
harvest, all employees of this factory have begun a movement for "high quality" and "high efficiency." They have improved the handling of tools and have doubled their working efficiency. One lathe worker Cheng Fu-tien (詹福田), with fuel fighting spirit, finished making 23 pieces of lathe work in one shift instead of his quota of eight pieces in one shift.

During the past quarter, more than 160 tractors of different models and 13 power tools for irrigation purposes were repaired. In addition, more than 890 parts were repaired and more than 15,900 pieces of precision engine oil pumps and alloy parts were manufactured to supply brother factories in this province as well as in Hupeh, Shantung, Hopei, Kiangsu and other provinces where the products of this factory have been very popular.
FARM TOOL REPAIR WORK IN P'ENG-LAI

Following is a translation of a news report by Sung Hui-ch'uan (宋會泉) in Kung-jen Jih-pao, Peiping, 5 May 1961, page 27:

All workers of the machinery factories in P'eng-lai Hsien, Shangtung Province, are working hard in farm tool repair work. Up to the present, more than 300 power machineries for irrigation were repaired, thus ensuring both high quantity and high quality of their repairs and supporting the spring irrigation.

In view of the fact that there had been little rainfall and snow in this hsien last winter and that there are large areas of land in need of irrigation, and especially early spring irrigation, eighty workers and cadres in the five agricultural machinery factories in this hsien were organized to visit all communes and production teams for the investigation of irrigation equipment. Consequently, they discovered that 361 irrigation power machines and more than 4,900 water pumps were in need of repair. Also they discovered a shortage of 10,330 parts.

According to the same investigation, parts are absolutely necessary for the repair of these machines. In order to have these machines ready in time, the employees of these factories immediately began to make parts with available material. Should there be any shortage in material, those factories would check their storehouses thoroughly and hunt for substitutes. Commercial agencies also helped collect scrap iron and scrap steel as supplementary material. In the first quarter of this year, more than 8,900 parts were produced in this hsien, amounting to 80% of the total parts needed for the season. Some of the parts involved complicated manufacturing techniques, and some have never been produced before, such as spray guns and pumps on a diesel engine.

For the sake of speeding up repair work, a division of labor has been devised so that major repairs be assigned to the four hsien-owned machinery factories and minor repairs be assigned to commune repair factories. The hsien-owned factories have adopted a flexible repair system which calls for both doing repair jobs on the spot as well as taking the damaged machine back to factory for more complicated work. The Hsien-owned Lung-k'ou Machine Repair Factory has made a thorough study of all the irrigation machines in the four communes under its care so that repair jobs may be assigned to suitable workers. This over-all planning greatly strengthened workers' sense of responsibility and raised the quantity and quality of the repair work. During March, this factory finished repairing 86 machines for water irrigation purposes, all with very high working standard.
LING-CH'UAN HSIEN PARTY COMMITTEE DECREASES COST OF SMALL AGRICULTURAL IMPLEMENTS

Following is a translation of an article written by the Central Correspondence Section of the Ling-ch'uan Hsien Party Committee in Kung-jen Jih-pao, Peiping, 13 May 1961, page 27

In decreasing the production cost of small agricultural implements to achieve excellent quality and cheap prices, the party committee of Ling-ch'uan Hsien turned its attention to the Hou-ho Iron Factory, the Li-i Iron Factory, and the Agricultural Machine Repair Factory of the Lu-ch'eng Commune. The committee conducted a detailed investigation of the quality and cost of small agricultural implements in order to find and adopt effective methods of decreasing production costs of small agricultural implements and at the same time achieve higher quality.

Since last winter the various agricultural implements factories of Ling-ch'uan Hsien have made great efforts to decrease the price of agricultural implements. However, without coordination, the implement prices of the various plants were different. Take the iron harrow as an example. For four different harrows, each weighing two chin and seven liang (one chin equals 0.5 kilogram, one liang is 31.25 grams), there were four different prices. The price at the Agricultural Machine Repair Factory of the Lu-ch'eng Commune was 3.40 yuan. The price at the Hou-ho Iron Factory was 2.90 yuan. The price at Li-i Iron Factory was only 1.94 yuan. Most surprising of all, in the Hou-ho Iron Factory, if blacksmith Wang San-kou (王山川) made the harrow, the price was only 1.63 yuan. With the same product, why were the prices so different? The party committee went to the three agricultural implement factories for more detailed investigations in order to discover the cost difference of raw materials and tools, the differences of material consumptions and differences in labor used. To decrease the cost of small agricultural implements, all three factories had some experiences. In synthesizing, there are four important factors: the manufacturing layout in given locality, the utilization on different materials, computation on two levels and the "three-divisions five constants" method.

The first factor is the manufacturing layout in a given locality. The relationship between one thing and other things in a given environment is mutually restrictive and dependent. In lowering the cost of
small agricultural implements, the solving of problems should begin
from the related productions of iron, coke, steel and other materials.
In this direction, the Li-i Iron Factory has made great efforts.
Basing their actions on local resources and the techniques of the workers,
they arranged the distribution of manufacturing facilities. They esti-
\begin{itemize}
\item established near the factory three blast furnaces, a wrought iron hearth,
\item a big iron bar furnace and a coal mine. This formed an integral pro-
duction line from ore to pig iron, wrought iron, and finished products
\end{itemize}
and decreased the running expenses of raw materials and the cost of iron.
It resulted in a decrease in the cost of small agricultural implements.
Though the Hou-ho Iron Factory has six blast furnaces and two coal mines,
the middle hearth production step for the making of wrought iron was miss-
ing. After the remodeling of the grill furnace(s), with the exception
\begin{itemize}
\item of coal at 0.003 yuan per chin, wrought iron still had to be purchased
\item from outside. Thus the price of agricultural tools was higher than that
\end{itemize}
of the Li-i Iron Factory.

The second factor is the utilization of different materials.
The old blacksmith Wang San-kou can produce low-cost iron harrows be-
\begin{itemize}
\item cause he can utilize scrap materials which cannot be used and are con-
\item sidered as scrap by others. Before he begins his work, he always arranges
\item the raw material first. From certain iron pieces, he forges square iron
\item into hoe blades, five-ts'\un \(/ one ts'\un equals .035 meter\)
\item wire into harrow teeth, small iron wire the size of a black bean into iron locks,
\item and two-ts'\un iron wire into iron pins. The processes of iron smelting
\item and dividing are skipped, thus saving more than 50\% of the labor.
\end{itemize}
The third factor is computation on different levels. A heavy
\begin{itemize}
\item burden of 1,000 chin only can be carried by many people. Everybody must
gather wood to start a fire. Since last November, the Li-i Iron Factory
\item has been conducting "two-level computations of the cost of agricultural
\item implements." Two-level computations are the computation of the shop
\item and the final computation of the factory. Every month, based on the
\item estimated total labor and material costs of quotas, the factory separate-
\item ly assigns sub-quotas to the different shops to greatly inspire the
\item workers' subjectivity. Two old workers, Wei Fa-so (魏法所) and Chi
\item Pao-wang (龔保旺), eliminated the old method of blowing air by bellows.
\item They devised a method of blowing from four air outlets of a power blower.
\item Thus eliminated three blowing workers and decreased the labor cost of
\item picks from the original 0.07 yuan to 0.04 yuan.
\end{itemize}

The fourth factor is the three divisions-five constants. The
management system of three divisions-five constants is an advanced
\begin{itemize}
\item experience of the Agricultural Machine Repair Factory of the Lu-ch'eng
\item Commune. The factory established a work responsibility system divided
\item into three areas: furnace, material and product. The constants were:
\item worker, piece, time, material and quality. First of all, based on the
\item special techniques of the factory workers, the eight baking furnaces of
\item the factory were divided into three hoe forging furnaces with six workers,
\item two pick-forging furnaces with four workers, one shovel-forging furnace
\item with two workers and two harrow-forging furnaces with three workers.
\end{itemize}
Afterward, the furnace was allocated product and raw material quotas. Every month the factory assigns production missions and raw materials to a particular furnace and its workers. If the monthly production quota is met by workers without overusing raw materials and the product is of acceptable quality, the standard wage is paid. If the production quota is exceeded and the product is of acceptable quality, an award is given. If the production cannot meet the quota, the shortage is taken into account and deducted from wages. In a case where too much raw material has been used, no compensation is given. Thus, daily furnace computations make every worker save raw material. The worker has a clear target and is further inspired from the standpoint of subjectivity in terms of economy and work efficiency. Since January more than 90% of workers have actively decreased the labor used for forging agricultural tools by 30%. Coke consumption has dropped by 25% to appreciably decrease the cost of the small agricultural implements.

Because of the investigation in Ling-ch'uan Hsien, the cost of small agricultural implements decreased. The consumption of coal and raw material is different in the various factories, and advanced experiences haven't been timely or universally promulgated. There are raw material potentials which can be exploited. The hsien industrial bureau, through extensive investigation and study has made preparations to introduce feasible target for economy and technique. In this way, the workers in the various factories can better develop the movement of learning, emulation, and helping to further decrease the production cost of small agricultural implements.
HOW A HSİEN-OWNED AGRICULTURAL MACHINERY FACTORY
SERVES AGRICULTURE

Following is the translation of a study report in

How could a Hsien-owned agricultural machinery fac-
tory support agriculture? The following relates the support
to agriculture given by Ho Hsien Agricultural Machinery
Factory.

Produce Small Agricultural Tools

In the past, the Ho Hsien Agricultural Machinery
Factory had no clear-cut policy in serving agriculture. Be-
fore 1960, it considered the manufacture and repair of farm
machinery as secondary work. Consequently, its support of
agriculture was piecemeal and limited. For example, during
harvest seasons, workers from that factory were sent to help
the farmers with their planting, sowing, and harvesting jobs.
After our party initiated the call for supporting agriculture
and increasing the production of grains, it began to link
up with the P'ü-men, Jen-I, and Pu-t'ou communes, thus setting
up its system for the support of agriculture. After serious
studies, it was known that the industrial foundations of
these communes were very weak. The P'ü-men Farm Tool Factory
was the only commune factory among the three communes which
had one monkey wrench while the farm tool factories of the
other two communes did not have any simple tools for repair-
ing farm implements. Since there was such an urgent demand
for agricultural tools, the factory realized that its past
emphasis was wrong and immediately threw its weight on serv-
ing agricultural production.

According to current demand from agriculture, the Ho
Hsien Agricultural Machinery Factory has set up small farm
tools as its main emphasis for its production plan in this
year. However, it was not sure about the number and types
of tools which farmers really need, so it organized a study
group to go to the six communes of P'ü-men, Jen-I, Hsin-t'u,
Sha-t'ian, Kung-hui, and Ta-p'ing for a thorough investigation. According to this study, P'u-men and Jen-i communes alone need 10,700 small farm tools. Among them, hoes and ploughs are most in demand, and especially ploughs. Due to the differences in farm land, farm systems, crops, and farming habits, different types of farm tools are needed. In order to make tools suitable for local conditions, it has chosen sample tools from different places and has made plans for future production.

When it was working to rapidly produce the tools needed for spring planting, it adopted the method of putting emphasis on one kind of tools. On the one hand, it devoted all its strength to the manufacture of ploughs, and on the other hand, it assigned all the equipment and personnel of its moulding machine room to make small farm tools. When the furnaces were too few, workers changed a portable stove into an open furnace and used old gasoline barrels as open furnaces, thus doubling production. During the period from January to 13 April, the factory produced more than 10,100 small farm tools, such as ploughs, hoes, etc., thus giving timely support to agriculture.

Grasp the Repair of Farm Tools

During the study of farms, the factory found two problems relating to the use of farm tools. First, sometimes, there was nobody who knew how to use a certain machine. For example, there was a ten horsepower gas engine at P'u-men Commune which was idle because nobody knew how to operate it. Secondly, there was a serious shortage in repair facilities. When the factory was studying the farm irrigation machines of eight communes, including Hsin-tu and Lien-t'ang, it discovered that 23 out of 33 irrigation machines needed repairs: two needed major repairs, one medium repairs, and twenty needed minor repairs. So it is obvious that hsien-owned farm tool factories not only must manufacture tools suitable for local needs, but also must offer maintenance and repair service to the communes. For those machines which required major repairs, they were taken to the factory for a thorough job. For those which could be handled on the spot, they were handled by a circular repair group which has been travelling among the communes in the hsien all year round. At the beginning of spring planting, two repair groups were organized to inspect all the pump stations at different communes and help with the repairs of all irrigation machines. Up to the middle of April, 18 of
the 23 damaged irrigation machines had been repaired. The
success was loudly praised by the masses.

There was another way to help communes on their repair
jobs. That was the training of repair personnel either
at the farm or by letting communes send a certain number of
trainees to learn repair techniques at the factory. The
factory trained 14 machinists and carpenters last year for
various communes. These technical personnel are now doing
repair jobs for their respective communes.

Establish a Base for Testing New Farm Tools

From the practical point of view, to manufacture new
farm tools is one of the major duties of the farm machinery
factories. Last year, there were many new farm tools made
by the factory which turned out to be unsuitable for practical
use. Later it united with the Ning-feng Production Team of
Pa-pu Commune and asked that team to use some new farm
tools as experiments. In the latter half of last year, they
tested a planting machine, a threshing machine, a light
plough, a plough for deep planting, and a harvester. Mem-
ers of the team considered the threshing machine very good
and capable of saving the labor of three persons with the
minimum of waste. This year they tested the light plough
at Ning-feng Production Team. After six tests and three
improvements, the plough is now considered satisfactory.
Advertisements

NANKING INDUSTRIAL CHEMICALS

Following is a translation of an advertisement in Kung-jen Jih-pao, 11 May 1961, page 47.

Increase the production of steel and grain by technical revolution!

Nanking Chemical Industrial Corporation

Subordinate units:


Principal products:

High-concentration sulfuric acid (104.5%), 98% sulfuriac acid, storage battery sulfuric acid, 98% nitric acid, liquid ammonia, ammonia solution, ammonia sulphate, ammonium nitrate, calcium metaphosphate, urea, insecticides (殺虫劑), yellow phosphorus, sodium fluosilicate, sodium nitrate, sodium nitrite, liquified sulfur dioxide, liquid carbon dioxide, yu-lo-t'ou-p'ing (虞洛頭頂), hydrogen ammonia carbonate, ammonia carbonate, hsi (氫), dry ice (solid carbon dioxide), phosphoric acid, phosphorus-content iron, ammonia chloride, sodium sulphate, oxygen, solid P2O5, mixed potassium and nitrogen. Fertilizer, sodium formic acid (碳氫酸鉀), hydrogen ammonia sulphide (氫硫氨化氫鈉), equipment for chemical machineries, high-pressure containers.

Address: Ta-ting Chen, Nanking
Telephine: 33132, 85141, 85142, 85146, 85148
Cable address: 6871
BRICK AND TILE-MANUFACTURING-MACHINES FROM HEILUNGIANG

Following is a translation of an advertisement in Kung-jen Jih-pao, Peiping, 14 May 1961, page 27.

The machinery Plant of the Mu-tan-chiang Bureau of Education offers the following principal products:

1. various types of brick-making machines
2. various types of tile-making machines.

Address: No. 28, T'ieh-tao Street, Mu-tan-chiang, Heilungkiang
Telephone: 3418

* * * * * * * 

MEDICINE FOR ANAEMIA

Following is a translation of an advertisement in Kung-jen Jih-pao, Peiping, 13 May 1961, page 427.

Liver B12 (sugar-coated tablets)
Tab. Hepatis et Vitaminae B12

Applications:

Virulent anaemia
Nutritional anaemia during pregnancy
Pernicious anaemia

Produced by the Ch'iao-kuang Pharmaceutical Factory, Canton
MUKDEN ELECTRICAL EQUIPMENT


The Radio Instruments Factory of Chi-hsien People's Commune, Ho-p'ing Ch'u, Mukden City, repairs and processes our products with punctual delivery.
Patronage is welcome.

List of products:
Sixty A. three-phase safety switches, various types of explosion-proof switches, frequency and voltage transformers, blowers, electric welders, industrial thermometers, antimony electrodes, calomel electrodes, platinum electrodes.

We repair various sizes of transformers

Address: No. 1, Li 24, Section 5, Ho-p'ing Street, Mukden

Telephone: 33713

10,424
A NEW LIVER DRUG


Chung-chiu-shih-suan-tan-chien (重酒石酸胆酸),
the newest medicine for treating illness of liver.

Applications:
Liver-fever, epidemic liver-fever and early stage of the hardening of the liver; a raw material for the pharmaceutical factories of tablet, capsules, sugar-coated tablets.

Produced by the Tientsin Hsin-hsin Pharmaceutical Factory

Address: No. 16 East Road, Tientsin

Telephone: Bureau 5-2763, 3455

Cable address: No. 114
Follwoing is the translation of two advertise-
ments in Kung-jen Jih-pao, Peiping, 18 May

In order to hasten the socialistic industrialization
of our country and raise the industrial technical level, we
have enlarged and expanded in order to meet with the require-
ments of industrial units. We are able to process the
following products for atomic research, electronic, wireless
and chemical industrial use. These products are of extremely
high quality. They may be used also for scientific technolog-
ical research. All products meet with specifications design-
ated by the state. The purchasing procedure is simple, and
we are able to deliver on time, according to the terms of the
contract.

We accept the following assignments for processing:

Rare Metals (including purification of rare metals)
Aluminum Foil Ribbons --0.005 and up x 70-150mm
Tungsten " "
Nickel " "
Titanium " "
Magnesium " "

High Quality Alloys
Chrome/Copper Alloy Foil, Ribbon, Sheets--0.005 & up x 70-500MM
" /silicon " " " "
" /aluminum " " " "
" /titanium " " " "
" /vanadium " " " "
Bismuth/copper " "
Chrome/Nickle/Silicon Alloy Foil, Ribbon, Sheets
" / " /titanium " " " "
" / : /vanadium " " " "
" /magnesium/aluminum" " " " "
" nickle/tin. " " " "
Iron/chrome/aluminum " " " "

-16-
Other Alloys  (Including various alloy ingots)
Copper/Zinc Alloy Foil, Ribbons, Sheets--0.005 and up x 500mm
Special Blue Copper " " "
Copper/Nickle Alloy Foil, Ribbon, Sheets " " "
Nickel Alloy " " "

Address: 28 Fish Market Street, West City District, Ying-k'ou
         City, Liaoning
Telephone: 7144
Cable Address: 5813

* * *

MU-TAN-CHIANG SHIH EDUCATION BUREAU MACHINE WORKS

Main Products:
Various Types and Models of Brick Making Machines
Various Types and Models of Tile Making Machinery

Factory Site: 28 Railway street, Mu-tan-chiang Shih, Heil-ung Liang
Telephone: 3418

10,417
DOMESTIC STATE OPERATED YINGKOW CONSOLIDATED CHEMICAL WORKS


In order to satisfy the demands of agriculture and industry for further promotion of the leap forward and for speeding up our country's socialistic reconstruction, this factory has produced the following types of chemicals. We have a complete stock and welcome your patronage.

<table>
<thead>
<tr>
<th>Name</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>Pure</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>Pure Industrial</td>
</tr>
<tr>
<td>Ammonium Chloride</td>
<td>Pure</td>
</tr>
<tr>
<td>Boric Acid</td>
<td>Pure</td>
</tr>
<tr>
<td>Sodium Nitrate</td>
<td>Pure</td>
</tr>
<tr>
<td>Metallic Antimony</td>
<td>Pure</td>
</tr>
<tr>
<td>Guanidine Sulphate</td>
<td>Pure</td>
</tr>
<tr>
<td>Sodium Perborate</td>
<td>Industrial</td>
</tr>
<tr>
<td>Ammonium Nitrate</td>
<td>Pure</td>
</tr>
<tr>
<td>Sodium Fluoride</td>
<td>Industrial</td>
</tr>
<tr>
<td>Silicon Dioxide</td>
<td>Pure</td>
</tr>
<tr>
<td>Barium Chloride</td>
<td>Industrial</td>
</tr>
<tr>
<td>Bismuth Carbonate</td>
<td>Industrial</td>
</tr>
<tr>
<td>Ammonium Nitrate</td>
<td>Pure</td>
</tr>
<tr>
<td>Sodium Nitrite</td>
<td>Pure</td>
</tr>
<tr>
<td>Potassium nitrate</td>
<td>Pure</td>
</tr>
<tr>
<td>Liquid Ammonia</td>
<td>Pure</td>
</tr>
<tr>
<td>Hypo</td>
<td>Pure</td>
</tr>
<tr>
<td>Manganese Sulphate</td>
<td>Pure</td>
</tr>
<tr>
<td>Ammonium Hydrocarbonate</td>
<td>Pure</td>
</tr>
<tr>
<td>Titanium Powder</td>
<td>Industrial</td>
</tr>
<tr>
<td>Magnesium Sulphate</td>
<td>Industrial</td>
</tr>
<tr>
<td>Manganese Oxide(Mn_2O_4)</td>
<td>Pure</td>
</tr>
<tr>
<td>Calcium Perphosphate</td>
<td>16%</td>
</tr>
</tbody>
</table>

Silver Nitrate

Address: 88 Yu-si Street, Front of Station Area, Ying-k'ou City, Liaoning
Telephones: Supply and Distribution: 5830 - 61hφ
Cable Address : 4θhφ
LEADING CADRES JOIN FACTORY AND STRENGTHEN INDUSTRIAL MANAGEMENT

Following is the translation of a news report by the Central Industrial and Commercial Administration in Kung-jen Jih-pao, Peiping, 17 May 1961 page 1.

Workers and employees of the casting machine room in the Civilian Casting Factory of Pao-kung People’s Commune of Shen-yang City have changed the backward situation in the production of small commodities by establishing pride among workers for the production of such goods and by actively promoting production in the factory. In the past, this factory produced only two kinds of small commodities and often failed to produce the expected amount. Now, 13 different goods are manufactured, often with new records in both quantity and low cost of production. According to our investigation, six of its products have reached the advanced standard both in quantity and quality among the manufacturers in the province of Liaoning.

Political Leadership and Ideology First

In the past, the major business of this factory was to do casting jobs for bigger factories while its production of small commodities counted for only 20 to 30% of its total production. This neglect of small commodities was because of high profit from those casting jobs for bigger factories in comparison with the small commodities. In the third season of last year, the party committee of that commune decided to give priority to the production of small commodities in that commune industry. Since then, the factory has changed its emphasis from taking casting jobs from bigger factories to manufacturing small commodities itself. At first, some people could not get used to such a change. Some cadres thought that profits from small commodities were too small and the production of small goods too unsteady. They still preferred casting jobs for bigger factories.
arrange production schedules, organize labor forces, coordinate working schedules, and balance the productivity of the group. In order to strengthen the work of the machine room, a special person in charge of ideological work was appointed to work with a technical cadre as his assistant. In addition to these reforms, both the receipt of raw materials and planning have been improved. Each individual worker is now assigned a certain responsibility and competitions are held between small groups. One apprentice, Chu Meng-t'ang (2612 1322 1016), has improved his rate of production of stoves from three to six or seven a day.
LEADERSHIP LEARNED FROM MINERS

Following is the translation of a news report by Ho-pi Mining Agency printed in Kung-jen Jih-pao, 18 May 1961, page 2.

Leadership at different levels of the Ho-pi Mining Agency have changed their attitude and strengthened their study of coal mines in order to increase coal production. Since last November, the production at Ho-pi coal Mine has been lagging. The major trouble was the lag of coal digging behind the collecting of coal. In order to remedy the situation, the party raised the slogan "dig coal first." After two months of hard work, this situation was improved, but it was still not completely remedied. At that moment, some leading cadres began to be afraid of difficulties and the masses showed discontent. Sensing trouble, the party immediately urged those cadres to change their attitude by joining in production, asking the advice of miners, and finding out the reasons for the failure. According to the party report, leaders at all levels have joined the front line of production and have strengthened their investigation and study work. A 46 member study team composed of chiefs of bureaus and sections in the agency was organized under the leadership of the agency chief and the chief engineer to visit various mines and learn from the workers. They have organized discussion meetings and initiated visits to workers asking their opinions about the production and administration of the mines. From the miners, they learned the major problem—the problem of transportation—which caused the obstacle blocking the smooth exit of coal. This problem had been talked about by people for a long time but had never been solved. The reason for the failure to solve this transportation problem was the failure on the part of leading cadres in distinguishing between regular procedures in coal production and key problems of current coal production. After they improved the problem of digging, they still considered digging as the key problem. In order to remedy this situation, those cadres decided to change their attitude, and within ten days they discovered and solved 58 key problems affecting the production of the mine. For example, the air conditioner...
at Ch' en-chia-chuang Mine was inadequate, and normal production was impossible. The mine agency immediately organized a labor force and installed a large air conditioner within 24 hours, thus solving a big key problem. After some veteran workers discovered the lack of lights in the mines as well as the lack of various kinds of drills, the leading cadres of the agency lost no time in sending them 23 lights, 48 drills, and two sets of electric drills. Worker Ch'en Chiu-sheng (7115 0046 3932) was so impressed, he said: "Now we have new lights and new drills. Our cadres have drastically changed their attitude. We must work harder to fulfill our mission." The Tse-chia digging team also improved its speed from 13 meters per day to 27 meters by solving the problem of drills and transport carts.

In order to do a good job of investigation and study, various mines also used the method of "triple cooperation." The No. 119 working shaft on the south wing of Chiao-ch' ang Mine had a sharp slope which was dangerous to the security of the workers. The assistant secretary of the party committee took some technicians to go down to the shaft, and he talked with some old workers who suggested ways to solve the problem. The productivity was increased from 50% to 70% for the sake of maintaining a regular check and study of the mine by leading cadres, rules were set up to establish the minimum time each cadre should spend in the shafts. For example, the agency chief and the chief engineer must spend no less than ten days in the shafts each month, the chief of each mine and the engineers must spend 20 days; and the chiefs of various digging districts must spend 25 days. A system of checking on the cadres' records of their participation in production was also established which would be used as a basis for annual ratings of each cadre.

The change of attitude on the part of cadres has changed the relationship between the cadres and the masses. It has stimulated the aggressiveness of the masses in production activities. After the leaders solved the water problem as well as the transportation problem of the No. 123 shaft at Ch'en-chia-chuang Mine, the workers all said: "The result of investigation and study has ceased the leadership to find us. Now all problems have been solved. We can work comfortably. The production of that shaft has since been increased because of the high morale, thus clearing its workers of the bad name resulting from failing to fulfill their quota in five consecutive months."
INCREASE IN LABOR EFFICIENCY AT LI-CHUANG COAL MINE


Miners and employees at Li-chuang coal Mine in Chiao-tso, Honan Province, have worked very hard under Party leadership and have maintained a steady increase in their labor productivity. At the end of the first season of this year, coal production was 10.48% higher than the quota given by the state without any increase in the labor force.

This mine was established in 1955, and its production began before the construction of the mine was completed. The condition at the mine is not any better than other older mines because of the great number of new workers and complicated geological makeup. In spite of these handicaps, the production at the mine has steadily increased. The labor efficiency was 0.763 tons per miner in January, 1.127 tons in February, and 1.218 tons in March, surpassing the record of quite a few old mines.

Going into shafts and Reasonably Organizing Labor Forces

The most important reason that his mine has succeeded in increasing its labor productivity and ensuring the completion of its mission is its scientific and reasonable organization as well as the planning of its labor force. Formerly, the planning of the labor force was based upon the production estimate made by the engineer planning section of the mine, and was not always practical. Sometimes the labor force was too large and sometimes too small. For example, the T'ung-hsiu district of the mine originally asked for 354 workers, but the labor force section gave them only 280 workers, and they actually needed 290 workers. Whenever the production was short of the quota, the production unit always excused themselves by blaming their inadequate labor forces. During the discussions at the
production meeting, production units always argued with the labor forces section, and former claiming and inadequate labor forces and the latter claiming too large a labor force. In order to remedy this situation, the party committee conducted a special investigation. It was discovered that the administration did not catch up with the needs of production, the employment of labor was not correct, and the attitude of those cadres working in the planning and labor sections was not right. Those cadres were instructed to correct their attitude, working methods, and business administration in order to ensure the completion of their task without increasing the labor force. Consequently, the cadres and employees from those sections all left their offices and joined the production in the mine. They carried out discussions with chiefs of production units, technicians, and workers, settling the problem of labor forces on the spot, either increasing or reducing them, and ensuring a reasonable use of the labor force at the mine.

For example, there have been six workers working at the elevator of Route No. 1 in the mine, and each trip four coal carts were pulled out. After a study on the spot, it was discovered that our workers could do the job if only two coal carts were pulled out each time, thus saving the labor of two workers and still ensuring the smooth operation of the job. There was another example. The electrical engineering section has always wanted to increase its labor force in charge of mercury, but the labor forces section has always refused to grant permission. After careful study of the practical situation, eight workers were transferred to that section from non-productive units and good results were achieved. Since the labor force is now organized according to the practical situation, no waste in the labor force is in existence and the full potential of each worker is now fully utilized, thus ending the long tension at the mine caused by poor distribution of the labor force.

During the reallocation of the labor force, the mine carried out the principle of treating agriculture as the foundation of our economy by squeezing laborers out of the mine force and sending them to support agriculture and other newly established units. For the sake of solving the inadequacy in the labor force, an evaluation of the employment of laborers is made in the last ten days of each month, thus making an adjustment each month on the basis of labor performance in the first 20 days of the month, and ensuring the result of increasing efficiency without increase or with
very little increase in the labor force. Before making any
decision concerning the labor force, the following factors
are usually considered: the checking of missions, the
checking of efficiency, the checking of workers' on-duty
hours, the computation of mechanical power, the utilization
of working hours, the efficiency of equipment, the evalua-
tion of new reforms, the checking of working methods, and
the checking of the labor force. Based upon the above
factors, the goal of the next month, the expected efficiency,
the personnel needed, the plan for the first part of the
month, and the adjustment in the middle of the month, are
then decided. In January of this year, an improvement of
the supporting timbers was achieved; and the dining-halls
were reformed in February. In March, the Transportation
system was rearranged. Altogether, 152 workers were trans-
ferred from present production units and used to strengthen
four new digging units and one repair unit.

**Trying Everything Possible to Raise the Efficiency of Work-
ing Hours**

The full utilization of each working hour is the key
for the improvement in labor productivity at the mine.
In January, the efficiency in the utilization of working
hours was low and only five and half hours out of the
eight hours of each worker were spent in actual work, thus
resulting in poor performance. The party committee called
meetings between cadres and workers to find out the reasons.
After the study, a series of measures were taken. First,
a strict system for changing shifts was set up. In the past,
workers usually took one or two hours to find the tools,
the production methods, and the security measures at the
place of work. The special delays have now been corrected.
Secondly, the party committee has called several political
indoctrination meetings for the purpose of convincing the
workers and miners of the significance of increasing coal
production, informing them of the relationship between
fully utilizing working hours and the increase of produc-
tivity, and educating them as to the necessity of labor
discipline. After this indoctrination, both cadres and
workers started to work a few minutes after taking over
their shifts. At the same time, the leaders have tried
their very best to improve the working conditions at the
mine. For example, 3,007 meters of grips under shafts
have been repaired, thus offering better air-conditioning
and a more comfortable working atmosphere at the mine.
Naturally, the productivity was increased because of this improvement. Formally, workers had to wait more than two minutes after dynamiting a hole at the mine. Now they can start working right after the blast because the smoke can be cleared away promptly. Formerly, there were too many accidents relating to electric machines, sometimes causing a delay of one or two hours. Since February, 435 machines have been checked and repaired, and a system of periodic checks as well as responsible maintenance has been established reducing considerably the occurrence of accidents. During the mass movement for the utilization of working hours, workers and employees have tried to do everything possible to solve problems involving the use of working hours. For example, when the system of delivering food to the shaft was started, workers usually came out of their pits to wait for their share and caused a considerable waste of time. The administration immediately arranged to deliver food to each worker so as to save time and prevent waste.

**Strengthening Ideological Training and Ensuring a Better Leave System**

The leave system has a great deal to do with the productivity of workers. Since 80% of workers at the mine are new workers who have not learned labor discipline. The party has assumed the leadership to remedy this situation. After making a careful study on the spot, it was discovered that around big festivals, pay days, or serious changes in the weather, more workers would take leaves because there was no regular leave rotation system. Some workers even took leaves without proper authorization and some leaves were granted without proper justification. The masses have had very strong feelings against these malpractices. In order to remedy this situation, the party initiated an ideological training and political education movement urging the masses to improve their class consciousness and to discuss the problem of "working for whom." On the same basis, competitions were held among workers on the progress of their thinking, on their efforts exerted in daily work, on the use of their on-duty hours, and on their observance of discipline. The on-duty hours of each worker were emphasized in the annual promotion consideration, and problems relating to workers' on-duty hours were promptly solved in order to ensure more on-duty hours for each worker. At the same time, both an annual appraisal system and a rotating leave system have been adopted. At the end of each month, members of each unit
get together to make up the rotating leave plan for the next month. For example, 152 workers had leaves during the Chinese New Year under this rotation system. This rotation system not only ensures a high on duty rate of 95% per person but also gives workers enough rest. Since then, the on-duty rate has been very steady, always around 94.2%.

Improving Technology and Insisting on Reforms and the Adoption of Advanced Experiences

The party has considered the improvement in technology as a most important factor for the improvement of labor productivity. Consequently, the administration has insisted on holding four sessions for practical training in skills necessary for current production. At the same time, these training sessions are tied in with production so that the workers can use this training to solve their current problems. For example, the mine has always been bothered by damaged supporting timbers. Recently, discussions were held to study ways and means to improve the manufacturing and installation of these supports. Eventually, this problem was satisfactorily solved. In addition, a system of having veteran workers teach the inexperienced was introduced which has helped to improve labor productivity as well.

Last year, 75 major reforms were adopted. However, since the last season, several advanced experiences have not been continued thus adversely affecting the increase in labor productivity. In February, the party leadership held a meeting of veteran workers asking their opinions. Those workers considered the lack of experience on the part of new workers as the main reason why those advanced experiences were not continued. The leadership then organized workers to insist on the promotion of such advanced experiences. During this promotion of advanced experiences, a socialist labor contest was held. Since February, more than 40 kinds of advanced experiences have been adopted and broadened in their application, thus greatly improving the labor productivity at the mine. Workers of the mine have also insisted on continuous technological revolution. For example, after the cable in the transportation system was made 80 meters longer, the labor of 12 workers was saved and the efficiency of the transportation system at the mine was considerably improved.

10,417
ENCOURAGE WORKERS TO WORK MORE HOURS


The experiences learned at Li-chuang Mine in Chiao-tso, published by this paper today, have proved that high on-duty hours and full utilization of working hours are important factors for the improvement of production and the fulfillment of production plans. Although the conditions at the mine were not ideal, the workers there have improved their labor efficiency from 0.763 ton per person in January to 1.218 tons per person in March by increasing their on-duty hours and fully utilizing their working hours, thus achieving the record of 10.48% over the expected quota and completing their combat goal of increasing production without any increase in the labor force.

The increase in on-duty hours and the full utilization of working hours have great significance in the current economic situation. In order to carry out the policy of developing agriculture and producing a large quantity of grains, it is necessary for the industries to attain the goal of further development through the increase in productivity instead of through the increase in labor forces. Therefore, to increase the on-duty hours of workers and the full utilization of the workers' working hours are helpful in the improvement of labor productivity. This is very obvious. For example, an industry which has higher on-duty hours per worker has more labor power than an industry which has a lower rate of on-duty hours; and the former's production naturally should be larger than the latter's. The utilization of the workers' working hours has the same significance. For example, in a group of ten workers, if each worker spent six of his eight working hours actually working, the productivity of the whole group would be equivalent to that of a seven and half person group in which each worker worked a full eight hours. The loss in productivity for the former was 25%. Here we have proved that to have a higher rate of on-duty hours from workers and to utilize more effectively the workers' working hours will produce more for the state and bring about better economic results.
The most important factor in ensuring a higher rate of on-duty hours as well as full utilization of workers' working hours is to create the idea of "considering the mine as one's own home" or "considering the factory as one's own home" in the mind of the workers. The workers must be educated to have both their bodies and their souls in the mine or under the shaft or in the factory. In order to do this, it is necessary to have further strengthening in political education so that the workers or employees will understand the current situation, the party's policies, and the relationship between their own jobs and the building of socialism. They must build up a practical ideological system, must conquer thoughts that detract from labor, and must establish a high sense of responsibility in becoming a member of a great socialist country. They must honestly love their jobs and obey the orders of the party. Only by doing all these can any worker achieve the record of good miners, Liu Hsiang-t'uan (0491 4382 0957) and Ts'ai Mo-tzu (5591 1075 1311) whom this paper introduced to the public recently. These two miners, Liu and Ts'ai, for more than ten years have considered their mines as their home and have made a record of high on-duty hours and full utilization of every minute of their working hours.

We have learned from the experiences gained at Li-chuang Mine that there are many factors responsible for a low rate of on-duty hours among workers. Therefore, we must make a special study and eliminate those factors by solving many small problems and by adopting a few practical measures, such as an annual appraisal system, a rotation leave system, and a sound shift system. That equipment which performs poorly should be regularly checked and repaired. Any labor organization in a mine or a factory which causes the stopping or lagging of work adversely affects the utilization of the workers' working hours should be adjusted and reformed like the Li-chuang mine did recently. In other words, practical and effective measures should be taken to solve the practical problems in our daily work in industry.

In order to have a sound labor force, it is necessary to raise the rate of the workers' on-duty hours as well as to improve the utilization of their working hours. Taking coal mines as an example, if trails in the shafts are poor and the lights are dim, workers' on-duty hours and their utilization of working hours will certainly be affected. Since leadership at Li-chuang Mine realized this point and took measures to improve working conditions at the time, they have had great success in increasing productivity. From the good example of Li-chuang Mine, we can see the importance of...
improving working conditions so as to gradually improve the rate of the workers' on-duty hours and to better the utilization of their working hours.

The arrangement of the workers' livelihood is also very important in the improvement of the rate of the workers' on-duty hours and the full utilization of their working hours. Sometimes small problems might adversely affect very important missions. Therefore, on the part of the workers, they must think of their duties to their mines or factories first; but on the other hand, labor unions must work with the administrations to make proper arrangements for the improvement of the workers' livelihood so that workers' rate of on-duty hours can be raised and their working hours can be fully utilized.

In order to raise the workers' on-duty hours and to improve the utilization of their working hours, it is also necessary to maintain good labor discipline. If labor discipline is bad, it will result in frequent absences and bad morale. In a group of eight workers, if every worker is one hour late every day, it will be equivalent to the loss of one worker every day; and if one worker is absent daily, it is the equivalent of the loss of one worker as well. Therefore, every worker must observe our labor discipline. In a capitalistic society, labor discipline has to be maintained by hunger and sticks. In our socialistic society, labor discipline is maintained by the workers' own class consciousness. We are members of the great laboring class; we are leaders of our country and masters of our factories. Our labor is given to build socialism and our country. In other words, we are working for ourselves, not for anybody else. It is in our own interests to make a success out of our enterprises. We must observe strict labor discipline before we can have success in our production. Only by observing strict labor discipline can we raise our rate of on-duty hours and improve our utilization of our working hours as well as fulfill the plan made by our state.
THE DEVELOPMENT OF A MOVEMENT TO SAVE INDUSTRIAL MATERIALS AT SHANGHAI


Since May of this year, factories at Shanghai have initiated a movement for an increase in production and the saving of industrial materials. Workers in Shanghai have supported this movement enthusiastically by mass participation in socialist labor activities and competitions in order to repay Chairman Mao's close concern for their welfare.

At the end of April, the party committee of Shanghai issued an urgent appeal to all workers of Shanghai urging them to take advantage of the current situation and thoroughly carry out our party policies of consolidating, strengthening, and improving our industries by initiating an enthusiastic and practical competition among our socialist labor forces and by completing our state's plan for industry. On 1 May 1961, workers of Shanghai enjoyed a very happy labor holiday with their respected and beloved Chairman Mao. They were greatly moved and encouraged by the appeal from the party and the sincere concern from the leader so that all of them have decided to participate in the labor competitions with the highest morale and interest.

The Emphasis of This Competition was Decided by Practical Conditions

The main emphasis of this competition is to assure and improve the quality of products, to increase the variety of products, to increase the production of raw materials, and to cut down the waste of materials. On this basis, all factories and other production units at Shanghai have made careful studies on the practical situation in order to formulate more practical goals and standards for competitions among factories and competitions among production units within factories. Since the goals and standards are practical and realistic, the movement has been pushed at a very high
speed and with very good results. The cutting and stamping machine shop of Shanghai Electric Machinery Factory initiated a competition on the use of silicon steel. Worker Chang Sheng-fa (4545 3932 4099) has cooperated with other veteran workers to find some way in making silicon steel. They can produce enough for two 12,000 kw steam generators and material making fan-shaped fins used for four 440 kw large model electric power engines. The coil is the most important part of an electric engine. The coil machine shop of the factory has set the improvement of both quantity and quality of coils as the main emphasis of this competition, thus getting very good results. Workers in the rotary work section of the factory have tightened their working procedures so that the rate of damaged coils dropped from 6% to 0.2%. During the competition at the First National Cotton Factory, the quality of cotton yarn has reached 100% and the production of cotton cloth is 8.51% over the quota given by the state.

Promoting Studies and Technological Reforms

During the competitions, workers of all factories have worked very hard on making strides and promoting technological reforms in order to meet the actual needs of production. Workers of the heavy machine shop in the First Machine Section of the Second Shanghai Machinery Factory found the major reason for the 120 damaged locomotives reported in the last season of last year. They also discovered the key reason which caused the unsteadiness in quality of the stamped holes on those locomotives. Twenty-one reforms were suggested by workers to make sure that in the future those stamped holes on locomotives will be standardized, thus saving a lot of working hours for repairs. Workers in the steel refining workshop of Shanghai Steam Engine Factory, under the guidance of technician Ku Kuo-t'ao (7357 0948 3447), finally succeeded on 3 May 1961 in substituting a oil for resins in the manufacture of modes used to make high pressure engine doors.

Leading cadres of all factories have joined the front line of production to help the masses in solving their problems. After the party secretary, manager, and chief engineer of Shanghai Electrical engineering Factory discovered the planning of new products in the steam engine generator workshop, for this month was lagging, they immediately sent cadres to help that workshop to write eight plans for the production of new products. Under the promotion
of party leadership, all leading cadres of various factories, workshops, and offices have joined the front line of production in order to offer direction and help.
PREVENTIVE MEASURES TAKEN IN HANDLING PROBLEMS OF SUMMER RAINS


The mines and factories in the metallurgical system of T'ang-shan District have learned from their experiences gained last year to take preventive measures and make preparations against problems which might arise during this summer rainy season.

At the end of the spring season, mines and factories in T'ang-shan District began to make preparations for the coming summer rainy season, while at the same time carrying on their production work. As usual, the party leaders took the lead in organizing special agencies at different levels to take charge of these preparations and to give the masses instructions on the significance of these preparations. Opinions and suggestions have been widely solicited from the masses, and practical measures have been formulated on this mass basis.

On the preparations for the handling of problems in the coming summer rainy season, all factories have adopted the principle of thriftiness by making use of the improving the available facilities. For example, the present insulating facilities, fans, insulating planks, watering facilities, and showers have been checked and modified. The drains, ditches, and roads in the T'and-shan Steel Works have been thoroughly repaired and put in good order. Thirty-eight new measures, including air-conditioning, insulating masks, protection against thunder, and the protection of electrical equipment, have been adopted, while a lot of other measures are being considered.

* * *

All mines and factories of the Lung-yen Steel
Company of Hopeh have carefully checked their summer equipment and have made good preparations against possible problems which might arise this summer season.

Those mines and factories in the company began in March of this year to check their summer equipment electric fans, air-conditioning equipment, and electric power machines, which were loaned out for other uses, have been returned. Measures for the mitigation of heat, such as the construction of awnings, windows, atomizers, showers, water-tanks, and different insulating facilities, have been adopted in all the refining workshops in the factories of the company. Physical examinations have been given to workers of the First and the Second Steel Works who must work under high temperatures. Those workers who have heart diseases and high blood pressure were transferred to other suitable jobs. Working hours for the summer season have been adjusted and a shorter shift has been adopted, thus giving workers enough rest after heavy work.

During the period in which preparations against summer rains were made, workers have worked very hard with the spirit of self-help to effect as many technological reforms as possible. Workers in the Second Steel Works have succeeded in conquering the shortage of material by repairing old air-conditioning equipment. Workers of the First Steel Works utilized ultra-violet rays to sterilize cold drinking water for their own use. At the same time, all factories and mines have tried to share with others their valuable experiences relating to measures against problems of the summer season.

* * *

All factories and enterprises in the city of Nan-ch'ung in Szechuan have completed their preparations for the coming summer season in order to protect the health of their workers.

After the party committee sent out appeals to all factories and other industrial enterprises, urging them to make necessary preparations for this summer, those factories and enterprises responded to this appeal enthusiastically. Special units were organized in factories to carry out this program. In all factories, such as Hsin-hua Chemicial Engineering Company and others, all air-conditioning facilities and all kinds of fans have been repaired. These kinds of cooling equipment have also been in use in both
the Shang-yu Machinery Factory and the Second Silk Manufac-
turing Factory. Physical examinations were given to workers
who must work under high temperatures, and those who were
physically unfit were transferred to more suitable jobs.
Working hours have been adjusted and cool drinks have been
constantlly in supply for the benefit of the workers.
USE INFERIOR COTTON TO SPIN GOOD YARNS AND WEAVE GOOD FABRICS


The workers of the Northwest No. 1 Cotton Textile Mill have been engaged in an investigation and study to improve the quality and output of cotton yarns and fabrics. Since the last part of February, the quality rates of the superior grade and the first grade yarns both reached 100%, while the average quality rate of the first class fabric produced from the machine reached the 96% level.

Last year, since Shensi Province had a natural disaster, its cotton harvest was not only reduced but the degree of ripeness was also inferior. This constituted a definite difficulty in textile industry to increase production and improve quality. Under the Party's guidance, the State-operated Northwest No. 1 Cotton Textile Mill overcame all the obstacles, striving to use inferior cotton to spin good yarns and weave good fabrics. In order to understand thoroughly the problem of improving quality, the secretary of the Party Committee in the mill and the manager of the mill assumed leadership, organized the cadres, technicians, and penetrated into the workshops, joining the workers in production, adopting methods such as: gathering reports, observing and conducting special topic discussions, and finally, analyzing defects in cotton fabrics from the last procedure up, one by one, in order to trace the weak links and to solve the problems. Then, starting from the control over raw cotton, one procedure after another, they organized the workers to study methods to overcome the various difficulties. After careful investigations, they discovered that there were six weak points in the coloring of the fabrics. Following this, they organized six special units, separately penetrating into various workshops, sections and to make studies one after another in order to find out the cause for the inferior quality. For instance, some workers believed that the color of the yarns and fabrics were not equal to those produced by the State-operated No. 2 Cotton Textile Mill and the principal reason was that the quality of their starch was not as good. But according to a step by step comparison study between the material and products of this mill and that of the State-operated No. 2 Cotton Textile Mill, done by the special color study unit, it was found that the starch used in this mill was not inferior than that of which used by the State operated No. 2 mill. The inferior quality of starch was due to the improper elimination
process of foreign matters and due to the improper filtering treatment. After the cause was known, the mill promoted the workers to make a thorough elimination of foreign matters and proper filtering of the starch. Then, they obtained a starch which was even whiter than that used by the State-operated No. 2 Cotton Textile Mill. Though the quality of the starch was better, the color of the fabric was still not as good as that of the State-operated No. 2 Cotton Textile Mill. The workers continued to look for the real cause. They made repeated studies on every step of the procedure, and finally, it was discovered that the real cause was due to improper filtering of starch. The workers thoroughly mastered the filtering process. Since then, the color of their fabrics matched that of the State-operated No. 2 mill. However, they found the color quality of the fabrics was still not as good. The workers made a further study on the yarns and found that the starch pipes were not clean, so the workers established a cleaning system and strengthened their inspection. After that, the color of their fabrics rose from lagging behind to surpassing that of the State-operated No. 2 Cotton Textile Mill. In addition, some of the other production goals of this mill have also reached the advanced level.
The Fou-hsin Central Mechanical Repair Factory mobilized the masses to do their utmost to conserve electricity and attained great results. In the first quarter of this year, the entire factory economized 400,000 kilowatt hours of electricity.

Since February, the Party Committee in this factory has adopted various methods, including explaining the situation, strengthening leadership, promoting technical reforms and technical revolution movement, to conserve electricity. Through situational education, the masses are enabled to understand that to conserve electricity is an important political and economic task. The Party Committee raised the slogan, "Use less electricity, produce more, to support a victory in coal mining". The workers promoted technical reforms, solving the long-term problem of electricity consumption which occurred in the electrical resistance on the electrical furnace belt. This attained a monthly economy of 120,000 kilowatt hours of electricity. The heat treatment unit in the metal workshop adopted the collective treatment of spare parts and the treatment by lots; they eliminated two 30-kilowatt high-temperature furnaces which saved 3,600 kilowatt hours of electricity per month. At the same time, the workers have also adopted a strong system for the reasonable use and inspection of power consumption, so that there would be one responsible person in charge of every electrical equipment. In the movement, the workers developed self-awareness in saving electricity and regarded power conservancy as their duty. Teng Chin-shan (.tencent), an old worker in No. 3 Workshop, in order to conserve electricity, every day on leaving work, checked the switch box to see if it was off and then turned off all the lights before going home.
EVERYBODY COOPERATES TO MAKE MORE STEEL BECOME USEFUL MATERIALS


In order to further raise the efficiency rate of the converters, the workers of the various converter workshops, rolling workshops, transportation, supply, technical production departments of the Changking Iron and Steel Company launched a "hundred converters" emulation contest. In the first part of April, the efficiency rate of the converters increased 18% over that of the last 10 days in March.

In March, in order to rapidly raise the quality of the steel produced from converters, the Party committee of the Changking Iron and Steel Company organized the workers of the various converters, rolling workshops, transportation, supply, and technical production departments to launch a 50-furnace "experimental steel" emulating contest. Each converter workshop smelted 50 furnaces of "experimental steel". Based on the results from the rolling shops, each furnace of steel was analyzed and compared for learning purposes. From the company down to the workshops, there were "three-coordination" units organized at every level. Through the masses' investigation and search for methods, production problems were discovered and many experiences were created, further formulated the standards for steel specifications and strengthened the various operation regulations and control systems, enabling the steel to attain a steady increase in quality.

In order to supplement the existing experiences and further raise the quality of steel, again at the end of March, under the Company's guidance, the various converter workshops, rolling workshops and the related departments launched a "100-furnace emulation contest." In this jointly cooperative competition, the various converter workshops continue to make strict implementation of the operation regulations, rendering the correct mechanical and physical properties of the metal and of the five chemical components: carbon, silicon, manganese, phosphorus, and sulphur, thus guaranteeing the steel rolling shops with an adequate supply of chemically perfect and structurally excellent steel ingots. At the same time, it requires the rolling shops, in the rolling process, to reduce wastes and low temperature steel products. The rolling workshops are asked to guarantee timely production, keep records correctly, mark the number of furnace accurately and make timely announcement of the result of the rolling of each furnace of steel, as a means to provide the various converter
workshops and technical production departments with information for
analysis and studies. The Company also requires the transportation,
supply, and technical production departments to take part in the "100-
furnace" steel emulation contest, make timely suggestions for better use
of alloy metals, raw materials and fuels, strengthen production technical
control and help the converter workshops with technical problems.

Since the beginning of the "100-furnace" steel emulation contest,
there has been a high tide formulated among the converter workshops and
steel rolling workshops. The various shifts, units, furnace teams inside
the various converter workshops have all launched a contest to establish
competitions for positions, and competitions to overcome difficulties.
Some even have organized "100-furnaces" technical demonstration corps,
using advanced workers as the backbone, to promote operational technical
demonstration. The various shifts and sections and furnace teams have
made mutual requests and supplied mutual informations. The smelting furnaces
guarantee to supply the converters with a fixed amount of high temperature
and low sulphur iron. The converters guarantee the supply of chemically
perfect high temperature molten steel for pouring, which in turn guarantees
that the steel ingots would be structurally excellent. The steel rolling
workshops, from the baking furnace to the fine producing section, have also
established close relations among themselves, mutually requesting and
guaranteeing, so that the number of the furnaces would be correctly recorded,
reducing losses and guaranteeing to provide timely information to the
related departments for analyses and studies.

In the emulation contest, the old workers lead the new workers,
the advanced lead the backward, and reserve the difficult jobs for them-
selves and let others take the easy tasks. Such is the communist attitude,
which has been greatly promoted here. Among the various procedures and
between the various shifts of workers, a mutual cooperation is born. Before
the next shift of workers take over the work, the out-going shift must fill
up the molten iron, make various preparations, and when the work is turned
over to the next shift, the out-going shift must tell the in-coming shift
how much molten iron needs to be filled, how much sulphur has left, and
what problems the next shift will have to watch for. After the next shift
takes over the work, it should see how well the former shift has done to
see if there is any unfinished work, such as the clearing of slags. The
old workers of the No. 1 Converter Workshop, after having participated in
the operational technical demonstration, not only have taken full responsi-

bility to educate the new workers with advanced techniques but also insisted
on the strict implementation of the regulations, so that they would become
examples for the new workers.

At the same time, the various workshops have also strengthened their
business administration and further strengthened their various control
systems. For instance, in order not to confuse the number of the furnaces
and to reduce the confusion among the furnaces at the various steel rolling
workshops, when the steel ingots reach a shop, they must be separated
into different piles, according to the number of the furnace. After the
cutting, the steel must also be grouped in accordance to the furnace. From
leaving the furnace as an ingot to the fine processing stage, each step must be closely linked with the others, and all information must be carefully recorded. When information concerning a certain furnace of steel is checked, all the necessary information can be obtained at once. When there is any steel returned to the furnace to be processed again, a separate number must be compiled so that investigation can be made easily. The technical production and supply departments have established a more complete control system for steel inspection and control. The technical production department provides the various converter workshops with timely information concerning their opinions with regard to the reasons for the high or low quality rate of steel and the conditions in the rolling process to help them discover further problems and improve their work performance.
Following is a translation of an article by T'ien Ching-ch'i (田景齊), a grinding worker and an all-nation advanced producer in the Ch'eng-tu Measuring and Cutting Tools Plant, in Kung-jen Jih-pao, Peiping, 21 April 1961, page 2.*

Our unit is responsible for the production of all the cutting instruments to meet the needs of the various workshops throughout the entire plant. Whether these instruments can be provided in time and whether their quality is good or bad, they have a direct effect on the fulfillment of the entire plant's production task. For the last several years, under the Party's guidance, all the comrades have exerted full revolutionary morale, and the production task has been well fulfilled and guaranteed the honor of being a "red flag" unit. But, on our road to progress, our development has not been a smooth one.

At the beginning of February this year, the factory requested our unit to complete a large number of inverted steel pliers (a new product) within 20 days to meet the needs of production in the workshops. But, there was a shortage of superior quality steel for the production of these inverted steel pliers. At the unit meeting, some people said, "It is not that we have not enough morale, but, without materials how can we fulfill the task?" Some others said, "A skillful daughter-in-law cannot cook a meal without rice, nor make a cake without flour. It is better to make it known to the superiors and we will wait until there is available material." But many comrades do not agree with these views and said, "In its long trek over the snow-capped mountains and crossing the grassy plains, the Red Army did not have rice nor cakes to eat, but it still attained final victory." I believed this view was correct. When we have no rice nor flour, we can use something else as a substitution. Because China attained continuous leap forward for three years, we now have a great number of lathes, which are twice as much as those in 1957. The various departments are in great need of superior quality steel. Such is a natural situation. Is it correct for us not to produce the inverted steel pliers, just because there is a shortage of superior quality steel? Being communists, we cannot be stopped in our progress by a small obstacle. We must do our best to fulfill our task as all the others do with theirs.

For several days, all the comrades for the entire unit tried hard to solve the material shortage problem. I also did my part. I remembered that once we used No. 55 carbonated steel for the processing of a certain
type of implement. After treatment, this steel material has a surface whose hardness meets the specifications, but its interior does not. I began to think if the surface can attain the hardness that meets specifications, why can't we work out a method to treat the interior so that it will also meet the specifications? I discussed the problem with the other comrades, and we decided to make an experiment. After several tests, the interior was still not hard enough. At this time, the secretary of the Party Branch, Mr. Lo, said to us, "After each experiment, we must summarize and find out where the problem lies and what the causes are, then, try out a means to counteract these causes." These few words gave us a great suggestion. When we have difficulties, we cannot solve them by mere enthusiasm. We must make an all-out analysis, find out the causes and overcome them in the factual way. Just like fighting the enemy, we must know his strength and that of our own in order to be victorious. Accordingly, our "three coordinations" unit made an over-all analysis and discovered the cause that when the steel is drenched, the cooling effect is from the surface to the center so the surface is harder than the interior. Then, we made a hole in the center of the inverted steel plier, so that the center and the surface are being drenched at the same time. After a test, it was found that the hardness of the interior was greatly increased. But this hardness still did not meet the blue-print requirements. After four tests, it was successful at last. The urgent production task was fulfilled in time.

Though the task was fulfilled, the demand for inverted steel pliers was very great and the supply of No. 55 steel material was short. After study and test, we brought out the damaged inverted steel pliers that the workshop made previously and processed them again. Their quality also met specifications. Up till now, we have recovered over one thousand damaged inverted steel pliers, and with a small amount of good steel, it will be sufficient to supply the entire plant for one year's use. Since the beginning this year, our units have overcome various difficulties, changed and substituted 47 types of steel materials, economizing 5 tons of steel for the State and fulfilling the production task of the first quarter 15 days ahead of schedule.

Under the above circumstances, we have realized that, at any time, when we are trying to fulfill a task, we will meet difficulties; the problem is what kind of attitude we should have, to submit to difficulty and retreat? Or shall we be bold enough to struggle and meet the difficulty head on? The comrades in our unit have said well, "Things are created by men, and roads are created by walking. Difficulty can scare the coward but not us workers." Under the Party's guidance, we workers are: the greater the difficulty, the greater will be our militancy, the greater will be our confidence and the more will be our methods.
THE VARIOUS MEANS TO ECONOMIZE MATERIALS


The day shift workers in the material cutting workshop of the Harbin China Standard Pencil Company value their materials as treasures and process their materials with the greatest skill. They are now able to use one cubic meter of timber to make from 240 grosses of pencils in the past to the present capacity of 270 grosses.

In the past, in the process of cutting materials, when they had a piece of timber which was one end larger than the other they usually cut off the larger end and threw it away. From the beginning of this year, the workers in this unit after a thorough study have adopted the method based on the slant surface of the timber to do a reasonable cutting. In this manner, from each cubic meter of timber, 30 more grosses of pencils are produced. Following this, the workers in this unit based on the condition that there is more hollowness in this type of timber, expanded the "analytic cutting" and the all-round selecting cutting method; thus, they raised the utilization rate of timber.

The workers in this unit also use the splints as cutting materials and carry out a steady cutting operation. The application of this method narrows the cutting opening by 0.6 millimeter. In one month's time, they have economized about 50 cubic meters of timber.

Skillful Use and Arrangement Economizes Steel Material

The workers of the material feeding unit in the odd products section, No. 9 workshop, Harbin Boiler Plant, have consolidated their ideas, and through the applications of skillful arrangement, reasonable substitution, better control and other types of material economy methods, have achieved success in boiler making. For instance, in applying skillful feeding method, in the making of the smooth platform surface of the furnace, they have raised the utility rate of steel plates from 95% to 98%. For the flame of the boiler surface, they use odd materials to substitute steel plates. This has not only solved the problem of steel shortage but also raised the quality of their boilers. When they made the supporting rack for the furnace, they learned the method of first making a sample from the Harbin Metal Structure Plant, enabling the steel material utility rate to rise from 85% to 98%. In addition, they also applied better cutting method, better control and many other economy methods to raise the steel
material utility rate. From January to March this year, they economized 27 tons of steel materials for the State.

Use Straight-Line Specifications for the Application of Materials

"Material is the treasure of treasures. Every bit of material must be carefully calculated and economized. For a large job, use less material. Use samples for cutting. Now, after having learned the ways of doing things, for small jobs, there is no need to request for new materials." These are the popular sayings in the material application unit, which is known as the "May 4" Unit, in the freight car workshop of the Harbin Vehicle Plant. In the past, this unit, through the applying of reasonable cutting method, economized a large quantity of steel materials for the State. This year, they have learned and expanded the "straight-line specification" experience; thus, their application of materials has become more scientific and reasonable. Within less than three months, they have economized 152 tons of steel materials for the State.

There are many good points in adopting the "straight-line specification" for the application of materials. Just take the end plates as an illustration, in the past, this unit used four plates on one end and eight plates for both ends. After the promotion of the "straight-line specification", they used three plates on one end and only six plates for both ends. This not only has economized steel materials, but also reduced 1,650 millimeters of welding and 3,300 millimeters of cutting work.

After this unit has applied the "straight-line specification", the steel utility rate has risen from the original 85% to 91%, realizing that large jobs apply for less materials and small jobs need no application for new materials.
THE COMPLETION OF A SMALL PRODUCTION LINE IN CH'ENG-TU RED BANNER IRON WORKS

Following is a translation of an article written by Chou Fang-jung (周芳炯) in Kung-jen Jih-pao, Peiping, 29 April 1961, page 1.

The foundry shop of the Ch'eng-tu Red Banner Iron Works has started its small casting production line after long period of trial manufacture. This is a native and foreign-method combined production line with more than 10 individual machines. The work flow is as the following:

The new or used sand is carried by a cloth-bag conveying machines to a sand mixing machine. After mixing, the sand passes through a sand grinding machine into a sifter. After that, it is carried by the conveying machine through a storing slot to enter a molding machine. After molding, the whole piece travels on a single-rail car to a pouring platform for metal pouring. After pouring, it is moved to a sand tumbler to drop sand off by vibration. After the separation of the used sand and the casting, the used sand is moved by the conveying belt to a sand storing slot for continued use.

By this repeated and cyclic process, the old casting method has been reformed. The workers, in referring to the old method, said, "the foundry workers squat on the ground for a thousand years' with their back against the ceiling and face toward the sand. Holding in their hands are the many shovels and trowels, toiling busily all their life." Now, the workers refer to this complete mechanized method as a process of sifting sand without the touch of hand, moving sand with a push of the button, molding by the machine, and the piling up of castings way up the ceiling." This production line not only releases the foundry workers from the heavy labor, but also greatly increases the working efficiency.

Only one and half months were spent in designing and carrying out the construction of this complete, fundamental production line, however, the solidification, improvement and the normal operation of the line took a whole year's struggle.

In the spring of last year, the city of Ch'eng-tu created a high tide of technical revolution. The various shops of the Red Banner Iron Works also produced great quantities of improved machine tools to double its production efficiency. However, the foundry shop lagged behind in its production.

To combat this passive situation, the shop dispatched the Party branch secretary Hsu Cheng-te (徐正德) and old workers Chou Ming te
(周明德) and Ts'eng Hsien-ming (曾顯明) to go to other places for new methods. They decided to combine the native and foreign methods in creating a small casting production line.

After the factory Party committee heard this message, the committee invited the related units immediately to hold a "three-combination" meeting in and out of the factory for repeated studies. The committee considered this innovation item as the principal content of the plant's technical revolution plan, and asked the workers to exert all their efforts in ensuring the success of the casting production line.

Under the enthusiastic support of the Party, the foundry shop adopted simultaneously the work of designing, studying and manufacturing. The shop was responsible for the making of machines, while small teams were formed to manufacture machine parts and individual workers were assigned jobs in the handling of tools. Thus after six weeks, the small casting production line was fundamentally completed.

After the test running of the small casting production line a conclusion was reached at the "three-combination" meeting that there were 27 concealed technical key points in need of further improvement. This is not rare because any creative innovation would go through a process of imperfection to perfection. However, after the solving of one group of key problems, another bunch of key problems appeared. Few comrades started waverimg. After the plant Party committee discovered this problem, it immediately organized the workers to study the literature on "How the Marxists Treat the New-Born Things", and repeatedly explained that only through the incessant overcoming of difficulties, could they achieve the victory finally. Thus, the workers' confidence was strengthened.

There started the second round of problem solving. The first one was to solve the problem of the canvas-bag conveying machine. When lifting the sand upward, the sand moved to the sides, and at the middle of the way, the sand was all gone. In solving this key problem, the old carpenter and Party member Ts'eng Hsien-ming stood by the conveying machine day and night until he finally found a solution to the problem. This is because the canvas bag on the conveying machine is light in weight and soft in quality. So, when moving the sand, the bag is not strong enough to prevent the sand from moving outward. Ts'eng made many slant wooden wheels under the canvas bag of the conveying machine to make it curve shaped at the middle so as to hold the sand better. However, another problem emerged. When the sand was brought to sand-mixing machine, the ground sand stuck together. An old worker Liu Hsiang-ch'eng (劉祥成), who was dispatched by the machine repair shop, solved this problem quickly, with the assistance of engineer Hsiao K'o-jung (萧克俊) in creating a sifting machine. In this manner, some problems were solved and some problems emerged, then there are new problems to be solved. At different times, many technical key problems were solved to gradually perfect this production line.

However, the air vibration molding machine had been a difficult problem without a proper solution. Molding is a principal work step. If there is no machine to replace manual molding, how can it be called the mechanization of casting?
While workers were all concerned with this problem the old carpenter Chou Ming-te said, "I will take this problem, everybody please help me." The factory Party committee immediately dispatched the shop Party branch secretary Hsu-Cheng-te, engineer Hsiao K'o-jung, and the workers of the machine repairing shop to help the old carpenter to speed up the manufacture of this machine.

At the "three-combination" meeting, Chou Ming-te revealed a sample model of the molding machine. Through study, engineers made supplements to perfect the manufacture plan. Then, work started. However, when the work order was sent to the various shops, the workers dared not to start working owing to no drawings. They asked the old carpenter for the drawings. He put hand on his forehead and said, "the drawings are here." He has just turned literate. How can he prepare the mechanical drawings? He went to one shop to explain about the specifications and requirements of a processing part, and went to another shop for another processing part. At last, the molding machine was completed.

After the experiment, everything was fine except that there was no vibrator for the purpose of removing the bottom of the molding box. Hammer still had to be used. The old carpenter made several experiments but all failed. However, he was not disappointed. He asked everybody if necessary in solving this problem. One day, at a meeting, the old carpenter mentioned this problem to the superintendent of the Tu-chiang Machinery Factory. The superintendent said, "I thought there is a vibrator in our factory." Chou immediately went to the Tu-chiang Factory some 100 li away to copy the vibrating machine for manufacture. The success of the imitation made the foundry workers throw away their hammers, shovels and trowels.

From trial manufacture to the repeated experiments and incessant improvements, solidification and advancing, it took almost a year. During this period, the factory Party committee grasped the situation from the beginning. In following the principle of improving the undesirable parts, removing the surplus, and simplifying those that can be simplified, the workers made three major reforms and improved a total of over 130 pieces of machines, including the elimination of one sand mixing machine, shortening of more than 30 meters of conveying belt, elimination of two big sand slots substituted by a sand sifter and the change of a foreign-method sand box into a native one. The whole structure has gradually become organized, and the functional relationship of machines between each other is getting balanced to a great extent.

At the beginning of this year, the factory Party committee resolved to make a finishing touch to solve completely the problems on the small casting production line. In its final phase, the old carpenter modified the canvas-belt conveying machine to save considerably the ground space used for production lines. Owing to the smaller ground space occupied, one sand lifting machine was added to displace the bucket-type lifting machine to make closer links between machine tools. The workers also incessantly discovered the weak points in solving more than 10 technical
key point problems, big and small. Thus, the small casting production line eventually started its production on 17 March.

The reforming process of this production line lively tells us that on the road to technical revolution, we have to struggle hard, to stick it through, and to overcome difficulties. Only then can we achieve the final victory.
STEEL PRODUCTION IN SHANGHAI ACHIEVES IMPROVEMENTS

Following is a translation of a news report in Kung-jen Jih-Fao, Peiping, 6 May 1961, page 1.

Various steel works in Shanghai have increased the standards of both quantity and quality in the refining of steel. They have not only ensured the standard of chemical composition in steel but also have improved the external and internal quality of the product, thus ensuring the excellence both in mechanical and physical qualities. In the past two months, defects such as impurities, blisters, shrinkage, etc. have been obviously reduced. The quality of steel plates, steel tubes, steel bars and steel wires have been greatly improved.

The steel works in Shanghai have achieved good results in the last three years by using pig iron of higher sulfur content for the refining of steel. Both the quantity and quality of the products have been greatly improved. Since February of last year, second grade steel has not been produced from open-hearth furnaces and quality rate of first grade steel has maintained the 97% level. Since April of last year third grade steel has not been produced from Bessemer furnaces. The average quality of last year's steel ingots has reached the 96.08% level of which 65.7% of the products were first grade steel. Following the development in our economy, the demand for higher quality of steel has been steadily increasing. The industries demand more steel not only steel with desirable chemical content but also steel with superior mechanical and physical qualities.

Since the beginning of this year, workers at various steel works of Shanghai have organized investigation groups to visit steel-rolling mills, ship-building industries, boiler factories, and electric machinery factories for the collection of opinions on steel products. They have received a great deal of education through these investigations. When workers of the Shanghai No. 1 Steel Plant visited the Hsin-hu Steel Works and the Shanghai No. 2 Steel Plant, they held a discussion with the workers there. They then discovered that during last year's production at the Shanghai No. 1 Steel Plant 2,000 tons of steel were lost due to occurrences of impurities and blisters in steel. In addition to visiting the consumer factories, workers of steel works in Shanghai have also compared their own products with those produced from other works, testing the mechanical qualities of steel and learning the techniques from their brother factories.
Workers of the steel works in Shanghai called discussion meetings to study the key problems of making steel of higher mechanical qualities. They have reached the conclusion that emphasis lies upon the pouring process and upon the management of their factories. One worker in charge of pouring in the No. 1 Bessemer Workshop, Shanghai No. 3 Steel Plant, said: "Formerly we thought that as long as the chemical content of steel is correct everything is all right. We did not know the impurities caused by careless pouring have caused such defects in the mechanical qualities of our steel." They also criticized the management for watching only the melting process but neglecting the pouring process. Now they have made great progress. For example, previously the steel plates produced in this workshop had the tendency of peeling thus causing cracking when rolled. Now, a higher temperature is applied to steel during its pouring process, iron oxide is wiped off from the container, and tar is applied over the lining of the ingot mold. To improve management in the No. 2 Bessemer workshop, the workers made these suggestions: establishing area responsibility system, assigning product inspectors, and promoting small group work in workshop. After these reforms, the number of accidents was lowered and the quality of steel was greatly improved.

Workers also take responsibility in studying the reasons of their weakness and made scientific study and analysis for the solving of problems. Workers in the third Bessemer workshop of the Shanghai No. 1 Steel Plant discovered the three main drawbacks in their products - shrinking, impurities, and bubbles. Technicians, workers and management worked together to solve these weaknesses. They discovered the reason for the shrinking was due to the poor control of pouring process. Then they designed certain measuring device to make sure that there would be enough molten steel in the container to prevent shrinking and the result was greatly improved. Since the beginning of this year, the workers in the open-hearth shop of this plant have tried to improve the quality of steel in making seamless steel tubes and made an over-all study of its production process. They discovered that the temperature used in producing the steel and de-oxidizing process were not correct. Various experiments were made on No. 2 open hearth and carefully recorded. After two months of hard work in trial and error they finally found a better solution in the deoxidizing process. Recently, the defects in steel to be used for seamless tubes have been obviously reduced in this workshop.

The steel works in Shanghai have made evaluations on their experience in order to help workers improve their skill. They are also installing new equipment for better control of their weak links and for improving mechanical qualities of steel products.
ACHIEVEMENTS OF THE KWEICHOW AUTOMOBILE PARTS FACTORY

Following is a translation of a news report in Kung-jen Jih-Pao, Peiping, 6 May 1961, page 27

The Kweichow Automobile Parts Factory has greatly developed its technical revolution, thus solidifying and improving the results of the reforms achieved over the past year.

The above factory has adopted more than 8,500 suggestions in the making of 75 pieces of simple tools and of more than 300 sets of machines for making molds. However, since some of the newly reformed machinery were produced but not put in actual production, while some advanced methods were being invented but not adopted, a lack of balance is seen in the present development of the technical reform movement. This has seriously affected new reforms on production. In order to remedy this situation, the Party leadership in this factory has decided to devote more energy in consolidating, broadening and improving the reforms achieved through last year. This would balance the different stages of unevenness in production and result in an increase in productivity.

The Party Committee of this factory first mobilized workers and employees to make a thorough study of past reforms on technology. They have listed all the past technological reforms and separated those which proved practical from those that are not suitable for practical applications. For those successful reforms, details are recorded in the working manuals, labor forces reorganized to fit the operations, and inspections arranged regularly, in order to prevent the return of the workers to the old and obsolete processes. Accordingly, 66 out of the 75 new simple tools made last year are currently assigned to working groups or individuals. Two new techniques have been added in the working manual and 32 new products invented last year are now in mass production. For those reforms which have proved not successful, efforts have been made to find the cause of the failures and to improve their performance. Should there be no chance of success, such reforms will be abolished or substituted by better or more practical reforms. The No. 1 Parts workshop made an upright lathe but failed to use it because of the machine's poor rotation movement. Since the beginning of this year, the whole workshop has considered this as the major project and has worked very hard to put it into operation. The upright lathe is now a key equipment of that factory. There are many other types of machinery such as hot sawing machine, spring hammer, plate hammer, and boring machine which are now showing good results because of continuous

- 55 -
improvements and experimentation. After the metal forging shop improved the 12 set of forging molds more than 4,000 chin of steel were saved this year and the efficiency of those molds was raised. Working processes have been corrected according to the principle of "adjusting the obsolete to the advanced", thus ensuring the development of advanced engineering processes and the improvement of productivity. The policy is to break through the weaker links in the whole process of production by grasping what is most necessary. To make an automobile valve requires altogether 18 engineering processes of which 12 processes were reformed last year leaving only six processes to be improved this year. The leadership of the factory, on one hand, has urged workers to find ways and means for the improvement of those six processes and, on the other hand, sent Party secretary Liu Chia-hsiu (刘炎秀) and engineering section leader Chu Chia-ch'ü (朱炎琪) to the Shao-yang Automobile Parts Factory in Hunan Province for acquiring new experience, thus finally achieving a breakthrough in those six processes and doubling the production of valves. Other comparatively weaker links such as casting, forging, and installing of parts as well as the management of workshops and sections in the factory have been thoroughly reformed and modernized.
THE EMULATION CAMPAIGN IN THE POWER INDUSTRY

Following is a translation of an article written by the All-China Water conservation and Electric Power Trade Union Committee, in Kung-jen Jih-pao, Peiping, 11 May 1961, page 27.

In the spring of 1958, the three electric power generation units of Peiping, Tientsin and Shanghai began a friendship emulation campaign to ensure a safe power supply. In the wake of this, the electric power units of Mukden, Anshan and Wu-han also entered the campaign in 1958 and 1960. In its five years, the friendship emulation campaign has received a hearty welcome from the mass of workers.

Owing to the similarity of production scale, equipment and work, the campaign has produced many benefits. Especially since the Big Leap Forward, the general line has added new vigor to the campaign. Every participating unit has deeply realized that the friendship campaign can sufficiently inspire the subjectivity of the mass of workers to better accomplish the production mission assigned by the party and state. The campaign can quickly and effectively propagate the advanced experiences. Thus the workers mutually learn and give support in solving the key problems of production. Moreover, the campaign can help an enterprise's leading cadre to broaden his view, eliminate negative self-satisfaction, improve work methods, promote internal competition, further develop the mass workers' collective thought and communistic attitude. The campaign also helps to accomplish unification and cooperation among the workers. The campaign completely reveals the superiority of the socialist system in our country and the cooperative and fraternal relationships which exist among the socialistic state enterprises.

The continual development of the friendship campaign as ensured by party leadership will thoroughly infiltrate into every sector of the campaign. Since the development of the campaign, party leadership has been ever strengthened. Especially since the Big Leap Forward, owing to the vigorous development of the mass movement, the party has grasped the ideological and political leadership of the campaign. First of all, the party incessantly educates the mass workers to exploit the spirit of "retaining the difficulties to oneself and rendering the conveniences to others," and of "learning from the advanced and helping the backward." Under the party they guard against incorrect thoughts of prides, self-satisfaction, condescension, selfishness and vanity. The principles of the socialist campaign, mutually learning, helping, advancing and cooperating have been concretely carried out. Stressed by party leader-
ship, the party's policy and its central mission have been concretely carried out. These emphasize the power production policy of safety, economy, more power and less consumption in developing the various activities of the campaign. The various party committees of the power generation units and the local electricity bureaus pay much attention to merit and comparison. Before every merit and comparison session, the party committee discusses and inspects, item by item, the various summaries. The leading cadre appointed by the party committee, take command of the meeting of merit and comparison. After the meeting the party committee listens to the reports of the delegation which make up the related departments and regulate the propagation of advanced experiences. Many units further convened workers' assemblies to transmit instructions. Because party leadership has thoroughly infiltrated into every sector of the campaign and into every activity of the campaign, the campaign is vigorous and concrete. It intimately combines political and economic work to ensure healthy development.

The current political situation and production mission had to be combined to regulate campaign conditions and to promote thought and production. At the beginning of the campaign, it was only for safety. Later on the campaign expanded to all phases. Under the guidance of the general line, it has been acknowledged that we must construct Socialism and reap greater, faster, better and more economical results. Based on the Party's central mission and production demands at different stages, we must emphasize the power production policy and continuously fulfill and regulate the contents of the campaign. For instance, following the vigorous development of the technical revolution, it became a factor of comparison. In another instance, the production increase and economy movement of grain and steel and the ensuring of a safe electricity supply for consumers of key steel and grain units were added as factors of the campaign. Recently, based on the spirit of the party's Ninth Central Committee of the Eighth Plenary All-China Congress, it was decided that support would be given to agriculture to satisfy the power demands of rural and urban industries and people's daily power needs. Intimately combining the characteristics of the electricity industry, they always consider safety comparisons and the elimination of the five worst accidents as the principal conditions of the merit and comparison campaign. The five worst accidents are a power breakdown of the whole electric station, an accident in an electric system, a breakdown accident of the principal equipment, an accident due to improper operation of the transmitting station, and an accident due to worker error. Since the friendship campaign correctly carries out the party's central mission and its electric production policy at the various stages, thought and production are both promoted.

The vigorously stressing of the summarizing of experience exchanges is an important aspect of the prolonged and extensively developed friendship campaign of the power bureaus. Through the years, they have greatly developed the activity of experience exchange. especially since the Big Leap Forward, following the extensive development
of the mass movement, experience exchanges have become more abundant and colorful, taking different forms of vigorous action. From technical experience exchanges to experience exchanges of ideological and political education, leadership methods, mass movements, enterprise management and the workers' daily lives, the workers have made extensive leaps forward. The form and method of experience exchanges, besides its utilization at merit and comparison meetings, also takes the forms of mutually visits, study, teaching, collectively study, and operational demonstration. The Tientsin Power Corporation sent 120 dispatch-workers in 1960 to learn experiences from the various fraternal units. Almost every month a delegative cell was sent to other units.

During the exchange of advanced experiences, the various units mutually learned, learned from the advanced and supplemented their shortcomings to incessantly fulfill advanced experiences. These were grouped into a series of systematic experiences. For instance, at the the experience exchange meeting of merit and comparison in the second quarter of 1960, the experiences of technical revolution were grouped into five series. These served as systematic knowledge to push the work of the various units. At the summary meetings and the merit and comparison session, the various units studied and determined the key points of the experience exchange of the next meeting. They divided responsibilities and to prepare a plan for the experience exchange. Since they have grasped the gist of the experience exchange, advanced experiences has borne fruit everywhere, incessantly solidifying and advancing. Since 1958, according to statistics, the Tientsin Power Corporation has learned more than 100 different experiences from fraternal units. The Anshan Power Bureau has learned more than 80 different experiences from the various units in 1960. Through the years, based on the main requirements of safety, economize an adequate power supply and less consumption, the mutual exchange of experience has continuously ensured safety, advanced the reliability of a safe power supply, lowered the loss of lines, exploited equipment potential, raised power supply capability, compensated for load, economized power, advanced mechanical automation and improved enterprise management. Therefore, the safety situation of the various units has been bettered year after year, with a 75 per cent decrease in accidents since the campaign began. Line loss has decreased considerably. For instance, the Tientsin Power Corporation had a decrease of line loss of 45.9% in 1960 when compared with 1956. The decrease for the Shanghai Power Corporation for the same period was 23.8%. The mechanization level has greatly advanced from 40% to the present 80%.

The campaign has extensively developed technical cooperation and mutual help. The technical cooperation has developed on the foundation of experience exchange and under the thought which considers the whole country as a single unit. It reveals the superiority of the socialist system. Through the years, technical materials, drawings, processing aids, collective study, mutual approval, and mutual man-power and materials have been utilized. For instance, at an experience
exchange meeting in the fourth quarter of 1960, technical topics were determined through mutual study and division of work. The first section was assigned the operation and management of the transformer station and a big closed network. Their task: raise the power output. Another section was assigned the job of inspection, repair and testing without shutting off power. These topics were separately sponsored by Peiping and Anshan Power Supply Bureaus, which have better technical foundations and conditions. Later, the various units sent technical personnel to participated in the study, approval, solidification, and expansion of the original experiences. As proved by practice, technical cooperation among the same category of enterprises can assemble the mass wisdom and thus sufficiently exploit the intelligence of technicians and workers. In this way they learn and supplement the work of others to advancing the present experiences. Through mutually discussing and studying the solution of key problems in facilitated. Thus the friendship emulation campaign to vigorously push forward production expands.

The campaign constantly propagates information and summarizes merit and comparison in a timely manner. Between bureaus and industries, the constant exchange of information and technical material mutually promotes understanding and mutually inspires one and all to study and push forward production.

Timely summary of merit and comparison is also an important aspect of the campaign. As proved by experience, at the merit and comparison meetings incorrect thoughts of pride of the advanced and envy of the backward are discouraged. At the same time, it is also incorrect to neglect the significance of merit and comparison and carelessness of study in the case of advanced experiences when we analyze the causes of lagging. At a meeting of merit and comparison they concluded through the mutual study, that the principal experiences of every unit should center on the existing problem as recorded in campaign publications, reports to higher levels and materials available to the mass worker. Experience exchange meetings are held in turn in the various units. Thus, a meeting of merit and comparison is actually an on-the-spot meeting of experience exchange, the purpose of which is to more extensively inspect the work of the sponsoring unit. Present work is accelerated in such circumstances.

The friendship emulation campaign among bureaus should be intimately combined with the internal campaigns of the enterprises. The friendship emulation campaign among the bureaus has to be based on internal competition within enterprises. Internal competitions has to be considered as the motive force if the friendship emulation campaign is to intimately combine the two in exploiting all potentials. After every meeting of merit and comparison, the various units should concretely apply the results of the friendship emulation campaign to the internal competition within the enterprise. They should make this the struggle target of all workers. Once the shop, pan (§/$I$) and tsu (§/II) carry out the competitive requirements of this unit, the requirements of the friendship emulation campaign among bureaus will also achieved. Before
each meeting of merit and comparison among the bureaus in the campaign, the starting point must be established. The section or shop can prepare material and initially summarize and introduce the experiences to the enterprise. Later, after exchange and advance experience meetings of the friendship campaign have been held, the experiences then can be listed as standards of the technical organization.

In the five years of the friendship emulation campaign there has been great success among the bureaus. In order to develop this campaign, further based on the experiences of the various bureaus, the following problems need attention:

(1) The party's thoughts leadership should be strengthened continuously to thoroughly develop criticism and self-criticism and further carry out the principles of the socialist campaign.

(2) There must be continuous emphasis on experience exchanges in order to focus on the key problems and concentrate on the study of important experiences. In this way we can solidify, expand and promote advanced experiences and systematically assemble the principal experiences.

(3) The leadership organizing the campaign has to be further strengthened to exploit more the potential of the friendship emulation campaign among the bureaus and has to contribute more and ensure the safely supply of power.
WORKERS' CONTINUATION SCHOOL OF SHANGHAI
FOURTH RADIO PLANT PROMOTES PRODUCT QUALITY

Following is a translation of an article by Ting Wei (丁偉)
In Kung-jen Jih-pao, Peiping, 12 May 1961, pagel.

In the conference room, two five-tube model-593 radios were placed on the desk. When the deputy school-master of the workers' continuation school of the Shanghai Fourth Radio Plant switched on one radio, those in the room heard lots of static which sounded like the rattling of machine guns, also broadcasting simultaneously were two or three broadcasting stations. If one patted the cabinet slightly the radio burst forth with storm-like sounds. Since the radio receivers were of low-quality, half of the plant products of last year were returned for repair. People called these rejects the "lady loafers". The other radio on the desk was entirely different. Even though one patted the radio case heavily the sound was still clear and soft. After comparing these two radios, the deputy school master told his fellow workers stories of continuation school and how it help promote product quality.

In September of last year, the Shanghai Fourth Radio Plant was established when six small factories were combined. The workers' continuation school was established afterwards. Most workers were transferred from textile mills. Though more than 100 workers were experienced workers from the K'ai-li Radio Plant, most workers had a low cultural and technical level. The first important task since the establishment of Shanghai Fourth Radio Plant was the repair of great numbers of Model-593 five-tube radios manufactured by the K'ai-li Radio Plant. This Radio has the nickname of "lady loafer." The quality problem was a source of confusion for the workers. However, at the continuation school's cultural classes only 45% of the workers were enrolled. The attendance rate was 50%. The teachers did not know radio technique and lacked teaching experience in continuation school. The full-time deputy school master had also transferred from other trade. When he realized that the basic policy of continuation school is to cooperate with production and serve central policy, he was inspired to study with the workers in developing technical education. He also helped workers to improving product quality. The party's main branch in the plant immediately decided to set aside two and half days a week to organize workers so that they might learn technique in the continuation school.

However, this was not easy. None of the teachers in the school understood radio technique. The technical books sold in the market did
not deal with the products. Besides teachers and text books, as a basis for radio education one needs at least to have graduated level from junior middle school. Most workers, however haven't even graduated from primary school. Thus the continuation school was confronted with many difficulties. Under the inspiration and concern by the party, the teachers inspired the workers' spirit to march firmly in the direction designated by the party. The teachers were incapable of teaching technical class, so more than 10 old workers and technicians were invited to the school as the part-time teachers. As for text books and teaching method, the policy here is based on the urgent need for production and a high technical level. They must conduct on-the-job training and help the workers acquire technical and theoretical knowledge. The "parts shop" is the principal production shop and is divided into pan (小组) according to work categories. In every pan, teachers brought products to explain the functions and operations needed in ensuring the quality. In each case after finishing a part of a lecture, a demonstration was conducted at once. The workers imitated the teacher. Finally, the manufactured part was subjected to instrumental testing. The main assemble shop is another principal production shop with higher technical requirements. The workers have a higher cultural level. However, there are still many workers at lower levels. The continuation school then divided the workers into three sections, high, medium and low to teach more of the basic theoretical knowledge. The workers were taught principles of wiring, the functions of individual parts and radio testing. In such situations, some technical terms and computational methods are unavoidable. The teachers illustrated these things in a very popular way. In the case of electric resistance, the comparison of water pipes is used in the lecture. A big pipe shows the quicker flowing of water and a small pipe shows a slower flow of water. For measuring and testing the quality of transformers, one needs a knowledge of senior middle school algebra, logarithm and exponents. However, the continuation school published a table of multiplication to help the workers with only a knowledge of addition, substraction, multiplication and division. Now they can learn how to measure and test electricity.

Why did the "lady loafer" simultaneously transmit several radio stations? It was because a part, a medium-frequency transformer, was of a low quality. Under the teachers' instruction, the workers repeatedly tested and worked. The teachers collected the best practical operational experiences for summarization and advancing. In this way they regulated scientific operational standards by going through the processes of practice, ideology, and practice again. Thus they repaired the insensitive selectivity of the medium-frequency transformer. Another key quality problem, interference, was also solved in this way. The cause of the interference was the low quality capacitor made with poor workmanship or incorrect welding during assemble. The teachers grasped this key point and repeatedly lectured on the principle of introducing practical operational experiences. The workers carefully inspected the quality of capacitors and rejected those which were unacceptable. Thus the
phenomena of loose welding and miss-welding were basically eliminated.

Because the plant leadership has paid great attention to quality, the workers' continuation school, emphasizing quality advancement, has developed a series of teaching activities. Since the resumption of production in March in the Shanghai Fourth Radio Plant, every radio receiver set has met the national standard. The phenomena of rejects and plant repair returns have been eliminated. Recently, in an electrical communication instrument criticism meeting of the Shanghai Industrial Bureau, the Model-593 radio of this plant was up-graded from the last one of the lowest quality to the second position of the highest quality. The scientific and technical level of the workers has been universally advanced. Women worker Hsia Lan-ying (夏蘭英) of the main assembly shop was only capable; in the past, of connecting wiring according to diagram. Now she has grasped certain technical radio principles and has been promoted to the position of testing worker.

The workers have come to realized that cultural knowledge is required for the mastering of technique, so learning subjectivity has risen higher and higher. The workers' enrollment and attendance rates have doubled this year as compared with last year. The teachers also have realized by themselves that only by intimately cooperating with production and serving the central policy can the workers' education have vigor. This semester, they have not only properly arranged the classes of politics, technique, and culture, but, based on the demands of shop production, have regulated the concrete contents of technical education.
ARTIFICIAL WOOL QUALITY QUICKLY IMPROVES IN SHANGHAI

Following is a translation of an article by Hsu T'ao (徐涛) in Kung-jen Jih-pao, Peking, 12 May 1961, page 17.

The workers' continuation school of the Shanghai Synthetic Fiber Experimental Factory has organized workers and technicians to conduct scientific research activities in order to quickly solve key production points and advance the quality of cellulose triacetate fiber ( tela烯 ) artificial wool. This factory is the only unit in our country to produce such artificial wool fiber. This success has great significance for the increase of high-quality wool textiles and the promotion of our synthetic fiber industry. In February of this year the factory experimentally manufactured more than half a ton of cellulose triacetate fiber, but all of it was unacceptable. In March more than three tons were produced, but more than three-fourths of this was unacceptable. In April, the workers fulfilled the production target of 8.3 tons of fiber four days ahead of schedule with an acceptance rate of 97.1%.

The utilization of complicated cellulose triacetate compounds in making artificial wool is a new technique with a history of only seven or eight years. This is the first experimental product since the establishment of the Shanghai Synthetic Fiber Experimental Factory in 1958. There were many specifications but the product gradually met quality requirements. However, a key problem that remained unsolved was the ejecting by the machine of shining "silk" and not the curly "wool". Therefore, though there were great quantities of raw materials in the warehouses and huge purchasing orders from many textile plants, the factory could not start production formally. In March of this year, after the beginning of the academic year in the workers' continuation school, this key production point was considered the principal bottleneck by the general party branch. They then developed a series of teaching activities to deal with this problem. In the field of political education, particularly attention has been paid this factory. The workers have been lectured on the significance of the successful manufacture of artificial wool. The classes, divided into different sections, received the related technical information in supplementary texts. For example, one ton of artificial wool corresponds to the output of 2,000 sheep and also equals the yield of a 60 mou cotton field. Based on these fundamental figures, the mathematics teacher formulated a series of computation problems. Thus, the workers' will to struggle has been inspired to lay a firm ideological foundation in order to break key technical bottlenecks.
In technical education, the workers' continuation school, basing its actions on the production characteristics of this factory, has emphasized scientific research. Therefore, after the beginning of semester, they established technical cadre classes to teach the experienced workers and technicians how to study with cadre in solving key problems.

The technicians of the dry and wet spinning shop of this cellulose-triacetate fiber factory had conducted previously many technical experiments when studying with cadres and workers. However, the "three-combination" was not so successful. Some technicians relied mainly on foreign information in seeking methods and submitting topics to be followed by workers. For this reason, some technical measures did not hit the bull's eye. The workers' continuation school organized scientific study to inspire the workers' subjectivity. Pien Jen-chung (_dispatcher), a student of secondary vocational class of the factory continuation school, and Wan Cheng-kuo (dispatcher), a student of a special class at the factory continuation school, are two production section leaders. Basing their actions on extended practice and inspection, they raised a problem: "Why does the filament, when ejected from the machine, have two curly ends like wool?" They demanded a full explanation of the principle involved so that they could then grasp the rules for making this occasional phenomenon a universal phenomenon. This problem inspired the technicians. The shop engineering technicians studied deeply. They acknowledged the fact that in forming wool-type fibers when ejected from the machine, the filaments ejected from the nozzles should be unsymmetrical. The problem was how to get unsymmetrical ejection? As the technicians continued the study, Pien Jen-chung and the workers in his section solved this problem by practice. They discovered that the ejected filaments are straightened with the same tension on two sides like an equilateral triangle. They have an orderly arrangement of the internal molecules. Hence, no matter how the filaments are extend, their surface is always straight and smooth. In breaking this symmetrical equilateral triangle, the Pien Jen-chung section let the filaments be ejected at an inclined angle. The nozzles are also set at an inclined angle. Thus, two sides of the filaments are of different length, with different tensions, causing an unordered arrangement of the internal molecules. Thus the ejected filaments are like curly wool. After the initial success in experimentation by this section, the workers' continuation school immediately cooperated with the shop to organize the workers into different sections. Based on respective experimental situations they developed technical debates to mutually supplement and multiply the experiences. At the final stage, engineers lectured to the technical class and summarized the debates in order to advance theory. From the beginning of the experiments to the discovery of the best angle of ejection and its implementation according to operational standards, it was only about ten days. The unsolved quality problem of more than two years standing in cellulose triacetate fiber production was quickly solved. The dry and wet spinning shop has also leaped from the status of a backward unit in the factory to become a red banner shop. The workers jubilantly sing:
"The working spirit has to be inspired for production and education. The three-combination policy should be applied to advance quality. In achieving high quality and the honor of the red banner education is irreplaceable."
NAN-NING UMBRELLA FACTORY EXPANDS PRODUCTION IN OVERCOMING RAW MATERIAL SHORTAGE

Following is a translation of an article in Kung-jen Jih-pao, Peiping, 13 May 1961, page 2.

In Kwangsi Chuang Autonomous Region the workers of Nan-ning Pen-chi Umbrella Factory have solved the problem of raw material and supply scarcity and have vigorously boosted production.

At the beginning of this year, the Pen-chi Umbrella Factory was confronted with a shortage of raw materials. At that time some cadres had no confidence in production. They wanted to change the product and the leadership. Thus the production quotas of January and February were not fulfilled and there was a loss of capital.

To deal with this kind of thought, the party branch separately convened membership meetings of the Party, League and mass workers to study the spirit of the report of the Ninth Central Committee of the Eighth Plenary All-China Party Congress to interpret the current situation. Through discussions, the spirit of the cadres and workers was entirely refreshed at every level. They decided to overcome the shortage of raw materials. They selected the coarser No. 3 iron wire from scrap materials. The iron wire used for making umbrella frames is No. 1. No. 1 wire is thinner and the small wire drawing machine in the factory can only use up to No. 8 wire. A bigger wire drawing machine had lain in disuse for a long time. The umbrella frame shop superintendent and several technicians fixed up the machine. The next day this machine plunged into production and raised the daily output of umbrella frames from 12 gross to 49, 51 and 53 gross. From the scrap corner workers patiently picked up miscellaneous iron wires and sheets of different hardness and length for processing according to specifications. In the case of hard iron wire difficult to draw, the iron wire was heated first before drawing. Thick iron sheets were heated and hammered thinner. Softer iron sheets were heated and annealed to increase hardness. Twisted iron wire were hammered straight before being fed into the drawing machine. Thus, the production of umbrella frames gradually increased. Further, they purchased used and worn-out umbrellas to repair and maintained umbrella-frame production at the level of 30 to 40 gross. By 24th April cloth umbrella production had reached 195.06% of monthly production to turn loss into gain.
For the convenience of customers, the factory established a cloth umbrella repair division. Workers inspected the quality of factory-produced cloth umbrellas and discovered that parts manufacture and assembly workmanship were not so good, thus the lower quality. They then patiently studied, improved and advanced the quality of cloth umbrella. In April the rate of acceptable cloth umbrellas was maintained at 99.98%.

The workers further increased --- on the basis of the condition of technical equipment and used and scrap materials --- the production of small articles urgently demanded by the masses. The Chao Feng-lien (趙鳳連) pan (工) of the parts shop heard that the Wu Mei-chen (吳美貞) pan punched 293 leather belt fasteners everyday, above the usual 100. Chao immediately convened a pan meeting for study. Why did the others produce more in the same period of time? The principal cause was the working spirit. After finding out the causes, the Chao Feng-lien pan greatly was inspired by its working spirit to adopt Fan Li-lan's (范麗蘭) quick manufacturing method. This consisted of not stopping the machine and of utilizing the eight-hour work shift in order to increase the daily output of leather-belt fasteners to 477 pieces. According to the statistics of April 24th, the workers utilized odd and waste materials in producing 5,033 leather-belt fasteners and 5,558 miscellaneous small articles. They increased product variety from two types in January and February to 23.
YUNG-LI CHIU-TA-KU CHEMICAL PLANT
INCREASES SODA ASH PRODUCTION

Following is a translation of an article by Cheng K'ai-yu (鄭凱愚), Correspondence Section, T'ang-ku Ch'u Party Committee, in Kung-chen Jih-pao, 14 May 1961, page 1.

In the movement to increase and economize production, the Yung-li Chiu-ta-ku Chemical Plant in Tientsin has concentrated on the key points of production and developed a "short distance" emulation campaign to increase soda ash production. This year the key soda ash production problems of raw material supply, equipment inspection and maintenance and in-plant transportation have been solved. The average daily output in February was higher than that of January by 19.92%. The output of March was higher by 48.2% than that of February and the daily output of April was higher by 30.77% than that covering the first quarter of this year. The consumption of important raw materials and supplies also has dropped month by month, with ammonia consumption dropping by 30.62% from January to February, 44.22% from February to March, and 10.76% from March to April 20th. Product quality now meets state standards.

At the beginning of this year production at this plant met with some difficulties. Equipment needed repair. However, there was a shortage of the necessary materials and supplies. Of the raw materials, limestone, especially was in short supply. Loading, unloading and transportation in the plant were also operated near full capacity. Confronting these difficulties, some cadre feared the difficulties. Thus, low production, high consumption and many equipment accidents were the results. In turning to this situation, the party's plant committee lectured to the mass workers to explain the importance of soda ash production in the national economy. The committee called on all plant workers to lower raw material consumption and increase the production of soda ash. After initially inspiring the mass workers, the plant party committee -- basing its actions on the practical production situation -- organized a "short distance" emulation campaign.

The "short distance" emulation campaign centers around the principal points of the different production stages and stimulates the masses to solve these problems. In the beginning of the campaign the plant's leading cadres went through the various shops. In conversation with new and old workers and technicians, they conducted systematic investigations and studied the workers' thought, the supply of raw materials and the
equipment. Key problems in plant production were arranged to make clear the target of the "short distance" emulation campaign. When the campaign is about over, the new situation in production is utilized through conversation and investigation, to find out the new and principal contradictions. Thus the target of the next "short distance" emulation campaign is formulated. Every time the "short distance" emulation campaign follows closely the principal key problems of production.

During the formulation of the target in every "short distance" emulation campaign, production and production preparations are carried out. In the first "short distance" emulation campaign, soda ash production increased to a new level, an increase of 34% in three steps. At that time many key pieces of equipment developed mechanical troubles. The plant leadership then shifted the emphasis of the campaign from high production to inspection and repair of equipment. To overcome the parts shortage, they first developed a "short distance" emulation campaign for the collection of scrap steel and iron to be manufactured into parts. In only five days' time, collected more than 900 tons of scrap steel and manufactured more than 1,100 parts. They exceeded the quota. Then the "short distance" emulation campaign of inspection and repair of equipment developed. When the inspection and repair of equipment were about over, the "short distance" emulation campaign -- principally for the storing of limestone -- was developed to accumulate supplies for high production. At that time the campaign policy shifted to high production. Through the campaign, soda ash production increased 30% over the original figure. During the campaign, -- basing their actions on the variations of actual conditions -- sometimes emphasize high production and sometimes low consumption. Thus, everyone in practice competed simultaneously in both production and its preparations. They also competed for high production and low consumption, making the campaign intimately coordinated sector by sector and inspiring the workers' spirit.

In the "short distance" emulation campaign, the workers received sufficient stimulation of their cooperative spirit of Communism and thus solved key problems. In the "three-step soda ash production" campaign, the unloading of limestone was insufficient to meet production demands. The various shops immediately dispatched workers to unload 100 cars a day. This was a target established to more than triple unloading efficiency. The heavy alkali shop is the principal division to produce soda ash. In order to support the shop in accomplishing the campaign target of increasing the soda ash production, the steel and iron shop dispatched able-bodied workers to help the alkali shop handle raw material reaction. Moreover, electricians and carpenters, led by the secretary of the party branch were dispatched to help with the maintenance work of raw material reaction. The caustic soda shop also supported the soda ash line to meet its every demand by dispatching personnel carrying tools that would help accomplish the mission.

Utilizing the "short distance" emulation campaign, all plant workers have further developed various kinds of labor emulation campaigns.
On four fronts of production — raw material supply, inspection and repair of equipment and the worker’s daily life — the campaign has developed. In the production shops there have developed pan (革) and tsu (革) campaigns. The responsible workers of equipment inspection and repair have developed a coordination campaign between work categories. A campaign has also developed in mess halls. Thus, the interlocking of various campaigns strengthened the various departments and work stages to ensure the achievement of the targets of the "short distance" emulation campaigns.

In developing the "short distance" emulation campaign, this plant has further paid attention to management reform. The campaign promotes management reform and further strengthens it. For instance, in the campaign to decrease ammonia consumption, so that the workers would grasp the consumption problem, the inventory and computation of ammonia consumption every ten days was changed. Results were published daily. At the same time, the work in the analysis room of the shop has been strengthened. There has been an increase of more than 10 technical analysis indexes and an increase in the frequency of partial indexes to let the operation workers grasp the variable situations of the technical indexes and, thereby properly control ammonia consumption. The advancing if this management work is beneficial to the solidification of the campaign.

At present, in preparing rain proofing for the rainy season to ensure normal production, there has developed a "short distance" emulation campaign centering on rainproofing.
ANSHAN STEEL MILL'S ELECTRICAL REPAIR FACTORY DEVELOPS 'FIVE GOODS' FAMILY EMULATION CAMPAIGN

Following is a translation of an article by Sun Wen-i (孫万一) in Kung-jen Jih-pao, Peiping, 16 May 1961, page 27.

In stressing thought education, the party committee of the Electrical Machinery Repair Factory of the Anshan Steel Mill has thoroughly executed the policy of extensively developing the "five goods" family campaign within and without the factory to promote production.

The party committee of this factory has learned from the experiences of the "five goods" emulation campaign of the No. 10 blast furnace in the iron making plant. In unifying the leadership of the workers' and family dependents' emulation campaign, it was decided that the "five goods" emulation campaign should be led by the factory and executed by the party shop branch. Moreover, the family dependents' "five goods" emulation campaign has been considered the principal reference for the "five goods" emulation campaigns of shop, pan (飯) and tsu (住) and for individuals who are to emphasize the "five goods" emulation campaign among family dependents.

Under the leadership of the party factory committee the various party branches organized work sections to enter into residential area to conduct extensive investigations. It was discovered in the course of the investigation that some family dependents didn't pay sufficient attention to workers who had not adjusted their lives or united with their neighbors. Therefore the various party branches had the cadres and members of the party and League help family dependents in advancing their awareness to solve concrete problems. Moreover, a meeting of workers and family dependents was convened for lectures on the domestic and international situation. This education provided mutual benefits individually and collectively, current and long term. The glorious story of worker Wang Pao-shan (王寶山) and his wife Su Mei (蘇梅), the Red Duo (紅禿), was told as being representatives of the "five goods" campaign. The cadres further helped dependents to establish the rules of the "five goods" family. After the dependents of 19 households of the processing section of the processing shop returned from the meeting, 15 households established rules for the husband and wife as well as mother and daughter-in-law, emulation campaign to inspire the working spirit of dependents.
Intimately combining the workers' and dependents' emulation campaigns, the factory has inspired workers and dependents to adopt methods of self-criticism, mass criticism and competition and has added grading by the party's shop branch of workers' production attitudes to the "five goods" campaign of the dependents. This is in addition to examining dependents' criticism and competition in the workers' "five goods" campaign. This has promoted mutual encouragement and help between husband and wife. Thus, workers promote the work of dependents and some dependents promote the advancement of the workers. Take the example of Ma Ch'ing-ming (馬承明), a worker in the electrical communication shop. He basically had the qualifications of a "five goods" vanguard worker. However, owing to the improper living plan of his wife, Ma often quarreled with his wife about mass opinion. Ma told his wife about public reaction and helped her to lay down the rules of the "five goods" campaign. His wife promised to carry out a planned budget to support Ma so that he might compete for the title of "five goods" vanguard worker. Afterwards, there was no more quarreling between Ma and his wife. In the past, worker Chin Te-yin (金德信) was not very good in production. Chin's wife knew of the matter, so she convened a family meeting with Chin and his brother to advance Chin's awareness. Afterwards, Chin struggled hard and led the masses to collect electrical parts, and was selected by the masses as a "five goods" vanguard worker. Chin's family was also named a "five goods" family.

Owing to the extensive development of the "five goods" family emulation campaign, not only do many husbands help their wives and wives help their husbands -- a new custom in many "five goods" families -- but husband-and-wife vanguard workers now work with diligence and economy.
IMPROVING THE QUALITY OF PRODUCTS IS OUR
POSITIVE POLICY

Following is the translation of a feature article
by Chi Fang-ch‘eng (4764 2455 2052) in Kung-jen

After three years of the great leap forward, our party
and state have raised the quality of our products to the
present important position. In the eighth session of the
Ninth National Party Congress, it was decided that in the
building of heavy industry in 1961 the emphasis should not
be on the scale of the enterprise but the quality of produc-
tion as well as the speed of its development. We should
build on the present victorious foundation and follow the
principle of consolidating, strengthening, and improving
our present gains. What we mean by improvement actually
concerns the quality of our products. The Party and the
State both have their justification for this emphasis on
the quality of our production.

First, let us talk about a bigger issue. The raise
in quality of our products has a great deal to do with the
realization of our industrialization. If we are going to
have industrialized socialism, everybody should realize this
point. However, there is one point which probably has not
been realized by all, i.e., we are now living in the sixth
decade of the 20th century, the age of rapid development of
industrial technology. The characteristic of this century
is its higher demand for industrialization. Not only must
we increase our production several times in quantity, but
also we must improve the quality of our products. If we
only emphasize the increase in quantity but neglect the im-
provement of quality, we will not be able to accomplish our
mission of making China a great socialistic state with
modern industry, modern agriculture, and modern science, as
well as a modern culture.

In order to improve the quality of our production, we
have to urge our industries and enterprises to adopt the
highest possible standards for the evaluation of their
products. They must keep working in order to catch up with
the highest quality products and should not limit their efforts to catching up with average products. Our Party Central Committee expects us to catch up with the highest standard in the whole world. This is the strong desire of the laboring class in our country. In fact, we have already produced goods of the highest quality. If we continue our efforts we can produce even more goods of high quality, thus raising the level of our industrialization.

Next, let us talk about cutting down the scale of new basic heavy industry. The raising of quality concerns the consolidation and development of the success achieved during our three years of great leap forward. During the past three years of great leap forward, our industrial production was doubled or tripled by creating large varieties of products. Of course, the quality of some products has also been improved. What we need now is to consolidate our gains. We must start from the quality and consolidate our gains. We must start from the quality and consolidate those products of higher quality. Therefore, on the one hand, we are laying the foundation for a future leap forward in quantity, and on the other hand, we can reduce the waste of raw materials, thus improving the efficiency of our production.

In order to consolidate the achievements of the past three years, we have to ask our industries and enterprises to start a careful inspection of their products. They are expected to make prompt evaluations of their valuable experiments. For those products of high quality, they must work harder to attain even higher quality. For those products of lower standards, they must hurry to make them catch up with the high standards. Also, the quality must be stabilized. In every enterprise, there must be a health system of inspection and examination before the goods are accepted. The mass movement for technological reforms and technological revolution must be further promoted in order to keep up the improvement in the quality of production.

In other words, the present emphasis on the quality of production is to satisfy the demands of our socialistic industrialization as well as the actual condition of our great leap forward in the past three years. To emphasize the quality of our products is now a positive policy. Once this policy is realized, our industrial production will be elevated to a new level. We must have adequate understanding on the positive side of this policy and also must carry out this policy in our activities.

There are some misunderstandings and misconceptions which should be corrected. Someone said: "To emphasize
quality means stopping our leap forward." This is an erroneous idea. They think that only an increase in quantity can be considered a leap forward. Actually our great leap forward is not limited to increases in quantity. A great leap forward means a high speed development in our industry, and industrial production involves both quantity and quality. Both a rapid increase in quantity and a rapid increase in quality are considered achievement of a great leap forward. Although in the past three years we have tried our best to increase both the quantity and quality of our products, it seems that the increase in the quantity of goods has been more outstanding. Now, in order to ensure the continuous increase in quantity, we must make outstanding achievements in the quality of our production. To improve the quality of goods is not any easier than the increase in quantity. On the contrary, the job will be more complicated and difficult. We must make an extra effort in order to succeed. Therefore, to improve the quality of goods is still a policy in our great leap forward movement.

Someone said: "To improve quality necessarily cuts down the quantity of production." We must carefully analyze this view. Generally speaking, to improve quality not only will not cut down the quantity, but on the contrary, will increase it. Whenever we talk about a certain quantity, we always have a certain quality in mind. For example, when we talk about one ton of cast iron, we mean one ton of iron which contains less than 8% sulfur. Any iron which contains more than 8% sulfur is not usable. If we formerly produced 100 tons of cast iron, of which only 70 tons were up to the standard, we got only 70 tons of usable iron. If we produce the same amount now and improve the quality so that we have 90 tons of good cast iron, do you think we have lowered the quantity of production? Actually, we have increased the quantity by 20 tons. Of course, quality is inseparable from quantity. If we arbitrarily reduce the quantity in order to improve quality, it is wrong too. What our Central Party committee means about improving quality is to improve the quality of products which we have been able to produce in quantity. Among different industries, the demands for the improvement in quality might be different, but every enterprise, as well as every worker, must assume a positive attitude to improve the quality of production on the basis of maintaining the quantity already achieved.

There are some people who claim that, "It doesn't matter if the quality of a certain product is a little inferior. We can use it anyway." This is a very wrong idea. Although you can use goods of inferior quality, the results
will not be the same. Some goods will last five or six years while some only last two or three years or even one to two years. Goods of lower quality will cause people to suffer loss. How can you consider it as unimportant? If the products are for industrial uses, the consequences will be even more serious. Poor products will cause troubles to engineering projects and make the state suffer losses. People who hold this kind of wrong idea certainly have no sense of responsibility toward society and the state. If this wrong idea is not eliminated, there will be no hope for any improvement in the quality of production.

Reputation is both important for a person and a product. The quality of a product determines its reputation. It is obvious that everybody loves brand name goods and detests inferior goods. Actually, the reputation of a product is the reputation of the enterprise and the workers who produced it. When a product is criticized, the workers and the factory are the ones who are criticized. Therefore, it is very natural for workers to feel proud when their products are praised and feel ashamed when they are criticized.

After three years of great leap forward, we have already acquired a lot of experience in production. Now, it is not only necessary but also possible for us to improve the quality of our production. As long as we can follow our party policy of emphasizing quality, we can be able to carry out a great leap forward in the quality of our production.
T'AIIYUAN SCRAP CORPORATION DEVELOPS NEW USES FOR SCRAP

Following is a translation of an article by Chao Shih-jung (趙世崇) in Kung-jen Jih-pao, Peiping, 16 May 1961, page 2.

Under party leadership all workers of the T'aiyuan Scrap Material Corporation have vigorously initiated an emulation campaign to collect, process and repair scrap materials in order to find material for industry's expanding production. By the end of April the workers of this company had collected and purchased 1,554 tons of heavy-industry raw material, including 2,643 tons of scrap steel, iron, copper, zinc and lead and 1,911 tons of light-industry raw material, including refuse paper, cotton and rubber. The company utilized the collected scrap in processing 23,250 small commodities.

The collection of scrap material and its repair has opened a new source of raw material for small commodity production. Most of the raw material for making hobnailied boots for the 21 hsien, ch'uan and commune supply centers has been supplied by this corporation. In the first four months of this year, the corporation supplied to the various hobnailied boots supply centers with 1,580 used rubber tires and 3,333 kilograms of scrap rubber in the form of shoe heels and soles. In the first month of this year, this company supplied 5,560 kilograms of waste oily yarn (油髒纖維) to the various street factories and communes. It supplied 4,800 bottles of various sizes and 500 kilograms of small medicine bottles to 22 units. These were used in blending seasoning, food, medicine and stationery and met the urgent needs of these units.

This company further supplied 49,000 kilograms of scrap steel to the commune-operated industries and repair factories of the Shuang-t'ao, Chu-lun and Ho-p'ing Communes. According to the statistics of the Chu-lun Commune, 581 pieces of agricultural implements were produced from scrap steel and iron. These include mattocks, iron solder, harrows and sickles and such civilian hardwares as choppers, ladles, spatula and buckets. This company further supplied 668 tons of refuse paper to the paper mills of Chin-ssu and Wan-pai-lin.

At the same time they collected scrap materials, the workers of this corporation overcome difficulties of technique and equipment and utilized scrap material for processing. Three months ago this company
Only had two processing units for oil extraction and paper bag manufac-
ture. Now there are a total of 11 processing units, including
those for forging, sheet metal, baking furnaces, and boots.
Product variety has been increased to more than 50 from the original
21. They have produced 23,258 small articles, including mattocks,
hoe blades, bucket, spatula and paper bags.
PROTECT THE ELECTRIC CARRIER FOR BETTER TRANSPORTATION

Following is the translation of four articles, the first three by Li Tao-hsing (李道星) and the last by Ho Tai-wen (霍台文), in Kung-jen Jih-pao, Peiping, 20 April 1961.

Zhou Ping-chun (周炳君) Learns to Repair Electric Carrier

Zhou Ping-chun is an electric carrier operator in the No. 3 Mining District of the Pen-ch'i-ts'ai-ts'un Coal Mine. For six years he has been an electric carrier operator and has met no serious accidents; thus, he is the safety worker throughout the whole mine.

One day, his carrier suddenly stopped. Coincidentally, the mechanic, Wang Yu-Ch'en (王玉辰), was away on a sick leave. He was much troubled, but fortunately, another mechanic came to his rescue and repaired it for him. After this, Zhou Ping-chun blamed himself for not being able to do any repair work while still being an operator. When his mechanic Wang Yu-ch'en returned to work, he said to Wang Yu-ch'en, "Ah Wang, I have to make contact with you, and take you as my tutor." Starting from that day, Zhou Ping-chun faithfully learned the repair technique from Wang Yu-ch'en. Each day, he brought his own pliers and screw drivers to work. He also brought along other repair materials. One time, he heard the noise of his carrier was not normal, so he stopped his carrier immediately. He discovered the opening on the carrier was blocked by a wooden block and the rear wheel was stuck up with coal. With several other workers, he repaired the carrier in a few minutes and avoided an accident.

Love His Carrier as a Warrior Loves His Horse

Chu Yu-shan (朱玉山) is the leader of the maintenance unit in the transportation and repair department of the T'ien-t'sun Coal Mine, Shantung Province. He loves his electric carrier as a warrior loves his horse. One day, after he finished work and returned home and when he was about to go to bed, he suddenly remembered that the wooden board behind the back wheel of the motor was being worn-out, and if it was not changed immediately, it would be broken and an accident would happen. So, he went back to the mining area and made an inspection. The board was wearing out so thin that it could be broken very soon, so he changed a new board and an accident was avoided. He often said to other people, "The electric
carrier is the throat of our mine, through which several thousand tons of coal are carried out every day. We cannot neglect its protection. We miners depend on it to contribute our share for the construction of socialism."

The "Five-Hard Working" Electric Carrier Operator

Chang Shao-yu (张兆友) is the well-known "five-hard working" electric carrier operator in the Hsi-an Mine, under the Liao-yuan Mining Bureau. Because of his seriousness in learning, he developed a series of operational methods by "listening to the noise and looking at the motion". The so-called "five-hard working" methods are: hard working eyes (constant observation over the motion of the electric carrier), hard working ears, (listening to the sound of the motor), hard working hands (busy inspection and repair and cleaning the surrounding environments), hard working legs (rotation inspection) and hard working mouth (calling out safety signals before starting the motor and making contacts with the other operators). In applying these methods, he usually stands by watching the operation of the electric carrier, listening to its sound, and he is able to discern if there is any trouble and what kind of trouble it would be. One time, when he heard the sound of the motor was abnormal and he was able to discern the trouble immediately that it might be caused by a broken gliding board. He began to inspect along the chain and actually found out that both the hook and the gliding board were broken. He repaired them and an accident was avoided.

The Electric Carrier

The electric carrier is also called the transportation machine. It is one of the important transportation implements in coal mining production. In the mining area, the miners dig the coal and load it onto the carrier, which moves the coal out of the mine and loads it directly onto the coal cars.

Before the Liberation, the foreign imperialists and the bureaucratic capitalist class exploited China's mines and never cared for what happened to the miners. In those days, only in certain individual mines, there was an electric carrier as an ornament, while the greater number of mines never did have a carrier. Most of the coal transportation work was done by workers who carried coal baskets on their back and climbed out of the mine. This was a very strenuous work, particularly in an uneven and rugged shaft without any light. After the Liberation, because the Party Committee took good care of the workers, wherever it was possible, all the mines used carriers. This has been a good thing to the miners, who now regard them as their companions and protect them dearly.

The form of an electric carrier is similar to that of a "dragon bone water wheel" used in the rural areas. It is an automatic transportation equipment that has a series of trough-shape containers. In the center of each trough, there is a device that can contact a revolving chain,
which moves the trough forward and carries the coal out of the mine.

At present, the electric carriers used by the various mines in China are made in China. Based on the various mining conditions, there are four types of carriers: heavy electric carrier, thin layer coal carrier, common model electric carrier, and light electric carrier. These electric carriers have good functions and are durable and have a very high working efficiency. Though China has produced a great number of electric carriers, the needs in rapid development of coal production are still not satisfied. Therefore, we must protect the electric carriers so that their life will be prolonged to make more contribution to the production of coal.
TECHNICAL REFORMS IN THE CHING-CHING NO. 2 COAL MINE

Following is a translation of a news report in Kung-jen Jih-Pao, Peiping, 6 May 1961, page 2.

Since the beginning of this year, miners of the Ching-ching No. 2 Coal Mine, Hopeh Province, have achieved great technical improvements in the handling of coal transportation, loading, and equipment. They have greatly increased the coal output as a result.

The Ching-ching No. 2 Coal Mine is an old mine with more than 50 years of history. Due to long use and years of exploitation under the capitalists, the underground mine is currently in very bad shape with too much unused space in the mine and too much heavy pressure from the supporting lumber. Such conditions have ruled out the use of modern mining equipment. A very large labor force is required to dig the coal as well to transport it to the surface, thus affecting adversely labor efficiency and productivity. In the past, there had been occasional reform movement for improving technical processes used in the mine but there was little result. This year, the Party leadership has called several meetings and conferences of workers and employees to study the reasons of past failures. According to workers' opinion, it was due to the lack of practical spirit as well as the inadequate leadership that the mine has so far failed in its effort to carry out successful reforms. In addition to these reasons, the putting through of untested experience and the lack of solution in handling difficulties were two other reasons responsible for the failures. For example, when the use of coal-loading machines were being promoted, at first it was very smooth that most production teams had used the machines within three days. However, due to the failure of settling practical problems in time, the whole project was eventually suspended.

After the reasons for failures were known, the leadership at the mine immediately made evaluations of past experience and organized cadres to go down into the mine. These cadres have been working together with miners in studying the problems and adopting a practical attitude towards technical reforms. The most difficult problem lies in transportation for the coal layers are situated way below the surface ground. In the past, someone tried to do something about it, but so far there has been no success. The assistant manager of the mine, Chang Ching-fang (張錦芳), recently took some technicians down to the mine to study the situation. Based from his practical experience, he decided to use transporting machines as substitutes for labor. Due to the lack of material, they had to hunt
through junk yards at the mine for necessary parts and eventually succeeded in making some transporting machines by modifying other old machines and available parts. Based upon the nature of a four-layer mine, they made a transporting machine which can transport lumber, equipment, and coal. The conquering of the difficulties incurred in a four-layer mine not only has improved the transporting efficiency four times but also has succeeded in saving the work of 24 laborers.

The success of making this transporting machine has convinced the workers of the mine that technical reforms can be promoted as long as they grasp the practical situation, thus greatly improving their confidence and to join the fight for more reforms. Since March of this year, the workers have discovered that 62 electric drills needed new gear wheels. In view of the shortage of parts and the lack of time to order parts from other manufacturers, the electrical engineering section of the mine started making new gear wheels from available material, thus ensuring the use of electric drills without delay.

During the technical reform movement, the leadership at the mine has been aware of the practical situation and adopted themselves to it. If a certain measure is good for the whole mine, they would not hesitate to promote it to all. If a measure is good for only one section or one part of the mine, they would not make use of it in other part or section. For example, when they made the three-way transporting machine for level-ground mine such as the four-layer coal mine, they did not use the same vehicle for other types of mine. The No. 101 coal excavating team was formerly in charge of the air tunnel section in the mine, but once when they were assigned to transporting duty in another section, their old equipment were no more suitable for the new situation. These equipment were then transported to another section for better use. The result of handling such equipment was quite satisfactory.
SHANTUNG WANG-SHE-JEN IRON MINE
INCREASES PRODUCTION OF HIGH GRADE IRON ORE

Following is a translation of an article written by Ch'iu Heng-chin (仇衡金) in Kung-jen Jih-pao, Peiping, 14 May 1961, page 2.

In the Wang-she-jen Iron Mine of Tsinan in Shantung Province, the workers are imbued completely with the working spirit and are conducting in their sections (工作组) a "six goods" emulation campaign centering on high production and quality excellence. The subjectivity of the mass workers has been inspired and they are producing more ore. In the first 25 days of April, 102.4% of the ore production quota for the month was fulfilled. The iron content of the ore rose 1.3% over that of March. Moreover, the cost of ore production also has been considerably decreased.

After exceeding the production quotas of January and February of this year production workers were confronted with the ore of various mines and an insufficient supply of some materials. In April the party's mine committee organized the cadre and workers to thoroughly study the instructions of provincial and city party committees. Through the discussion of problems they all realized that by inspiring the working spirit any difficulty can be overcome. Based on extensive discussion of the production plan of April, the section formulated a "six goods" emulation campaign centering on high production, excellent quality and low consumption. The "six goods" are good thoughts, good production management, good cooperation, good living and health, good safety and good technical innovations.

During the section emulation campaign, all workers of the mine formulated a concrete emulation plan. In the campaign everybody looked for competitors, and every section looked for competing units with which to compete vigorously. At present, 23 of the 36 production contingents of the mine have, in competing, exceeded their ore production quotas. For instance between the 10th and 20th Wu Hsing-pao (吳興寶) Mining Pan (采区) of the second work ch'u (工段) saw that the first pan had exceeded the pan production quota, so they immediately convened a meeting to study the key problem of insufficient mine cars in the pan. At the meeting the workers decided to repair the old mine cars. Next day this pan repaired four old mine cars, increasing the number of cars available in the pan to 10. At the same time, they followed "three don't move" system: don't move a car if it is not full, don't move cars singly, don't move cars if they are unsafe. Thus, the result attained
by full cars, longer trains and rapid transport was the exceeding by 3% of the pan production quota.

In the emulation campaign of the sections, the workers of the mine emphasized key production points and greatly developed technical innovations. For every work ch'u and every machine, plans for reform have been formulated. From the 1st to the 25th of April, 27 major technical innovations were carried out. These solved many key production problems. For example, the workers of the first work ch'u remodeled the railless mine car and changed it into a rail mine car, increasing the load average from seven to ten tons.
HOW DID THE CHIAO-HSI COAL MINE SETTLE THE PROBLEM OF COAL TRANSPORT CARTS

Following is the translation of one study report and two short related comments in Kung-ien Jih-pao, 18 May 1961, page 2.

The condition of coal transport carts at Chiao-hsi Mine is not any better than that of other mines in the country. Some carts have been in use since 1954 and 1957, and there are all types of makes. From an operational point of view, each cart has to make eight round trips a day. In some districts, waterpower is used to dig coal. Consequently, there is more water and mud in the pit, which causes more damage to coal carts. However, the Chiao-hsi Mine has been able to keep the damage rate of coal carts under 6.1%, thus maintaining normal operation of its mine railways. How did it do it?

Find Causes of Damages Through Production

During the period from October last year to January this year, the railways at the mine were very busy. The damage rate on coal carts was 40 carts per day. Even though the number of workers assigned to do repair work on carts was increased to more than 30 persons, they still could not handle the jobs. When workers had to hurry their repair jobs, they neglected the quality of repairs. Consequently, coal carts which were not properly repaired were damaged more easily and a vicious circle was formed, thus affecting the production at the mine. In order to solve this problem, the party made a substantial study. The party cadres themselves came to the shafts to find out the actual situation. They examined the damaged carts to see what was wrong. After these investigations, they discovered three major forms of damages. First, the wheels of the carts usually broke off. Each day there were ten to 12 carts which lost their wheels. Secondly, the ball bearings on the carts were prone to be damaged. Some bearings were damaged only one month after being installed. Thirdly, some carts often lost the triangular covers so that even three to four people could not push
them. The cadres then talked with veteran repair workers and miners about these problems. Some repair workers said that miners did not take good care of coal carts. Sometimes two out of three screws on the triangular cover were lost and nobody paid any attention to it. When the wheels broke off the carts, nobody bothered to bring them out of the shaft. The more damaged carts there were, the worse the quality of repairs became. The miners complained about the quality of repairs. They said that some repaired carts broke down too soon. If they kept moving damaged carts out of the shaft, they could not keep the production going. After the cadres found out the causes of the high rate of damage to the coal carts, they realized that a system of individual responsibility must be established. Without such a system of responsibility. Furthermore, there had been not no liaison between them even though they had had so much to do with each other.

Find Solutions from the Masses

After all this study and discussion, the party committee of the mine arranged with the management and workers to create a six-point program of maintenance: inspection, checking before taking over a shift, repairs, control of parts, section chief's responsibility, and duty personnel responsibility. Under this program, the responsibility is very clear and measures are practical and reliable. According to the regulations, the damaged carts must be repaired the same day. Each repaired cart was given a number and the worker in charge must write down the time spent on repairs before it is checked and accepted by an inspector. If a repaired cart breaks down again within 15 days, the reasons must be determined. Under this system, each worker will feel more responsibility toward the carts he repairs. At the same time a fine inspection system established. For example, worker Ho Wan-lung (0149 5502 7893) did not pay much attention to the quality of his repairs in the past. Now, after the cart he repaired broke down within five days, he was criticized and the cart was returned to him for another repair. Since, then, the quality of his repair jobs has been greatly improved.

With prevention of damages in mind, the Party has set up an inspection system. Repair personnel are sent to the entrance of each shaft so they can repair any minor damage on the spot. The procedure governing inspection has been changed too. In the past, if one wheel broke off, only that wheel was repaired. Now, even if only one wheel is broken,
all four wheels are checked.

The planning of repairs has been strengthened. The chief of the repair section must arrange a plan to have three shifts each day responsible for repair jobs. The chief of each shift will assign jobs to each individual worker at the beginning of the day, then he must check the assignments from time to time, rejecting those jobs which are below standard. Since all these regulations were made by everybody concerned, it is easy to have them carried out. The workers have tried very hard to maintain the quality of their repairs. For example, workers have found a way to make the front end of coal carts more durable and last more than six months.

Solve Practical Problems Practically

For those problems which cannot be solved by rules and regulations, practical measures were taken to cope with the situation. The party committee of the mine has been working on the problem of reasonable use of technical manpower and the lack of ball bearings as well as other materials by holding discussions and meetings.

In regard to the use of technical power, technicians or skilled workers are assigned to be solely responsible for the jobs they alone are capable of doing. Since the responsibility is very clear, every technician has taken initiative in finding better ways to repair the part for which he is solely responsible, thus raising the technical standard of repair jobs. Formerly, one worker could hardly repair one damaged cart in one shift, and now he can easily finish repairing one and half to two carts each shift. Workers have also taken the initiative in coordinating with the coal transport repair district to strengthen maintenance work. Because of these improvements, the damage rate for coal carts is now lowered to around ten carts a day.

In regard to the lack of materials and parts, a principle of self-help was established. In the past, workers usually waited for their superior to send them parts or materials for repairs. After study and discussion, they have decided to handle the problems themselves. For example, since the No. 6210 ball bearings are too small and not durable, they decided to use No. 6310 bearings. Due to the shortage of this kind of bearings, workers got out all the damaged No. 6310 bearings and repaired them for current use. Whenever they discovered any damaged axles, they promptly repaired them. So far, they have repaired more than 250 carts, and most of them have been in use for two or three months without being
Everybody Takes Good Care of Mine Railways

The key to ensure the good condition of coal carts is to have everybody take good care of mine railways. The party committee of the mine has urged everybody to love coal carts giving them repair whenever it is necessary as well as taking all necessary preventive measures. Since it is muddy in the shafts, all carts are lubricated and cleaned once a month. The miners have been very careful in handling the coal carts. Whenever there is any need for repair, the cart is promptly sent out of the shaft. The repair section has adopted the miners' suggestions and improved the method of installing ball bearings. Now coal carts are easy to push, and the bearings used on coal carts last much longer.

* * *

COAL CARTS FOR COAL MINES

By Ho Tai-wen (6320 0108 2429)

The mine cart, or coal cart, is the major form of transportation to be used in mines.

Although the construction of coal carts is not very complicated, it has its unique history of development. Formerly, baskets were used to transport coal out of the mine. Sometimes wooden cases were also used. Later four wooden wheels were attached to the bottom of each wooden case in order to save labor. Baskets were made of bamboo, which could not be attached to wheels. Both cases and baskets were clumsy and heavy and very difficult for the miners to push or to carry on their back. Then bigger wooden cases with iron wheels running on rails were invented. Due to the high resistance and small loading capacity, such wooden carts could not satisfy the needs of modern industry.

The coal carts we are now using are modern with a large capacity and high maneuverability. A little more than ten kilograms of strength should be enough to push a one-ton cart. For long distances, carts usually are connected so as to be towed by a locomotive. Its efficiency is even higher.
IMPROVE OLD COAL CARTS IN ORDER TO IMPROVE TRANSPORTATION

Workers at An-shan Iron Mine have improved their ore carts, thus solving a key problem of their transportation. The ore carts they formerly used had a small capacity, high center of gravity, poor stability, and high vibrations. Because of these reasons, the ball bearings on the carts were prone to be damaged. Consequently, this lag in ore carts affected the maximum use of electric drills at the mine. Cadres and technicians of the mine have made several serious studies of the problem and finally found a good solution. They lowered the height of the cart by 250 mm and moved the supporting points outward. They added two new supporting points to the carts and made the cart one third larger. They also installed an automatic unloading device to the carts, thus improving them without adding too many new parts.
THE PREVENTION OF ACCIDENTS AT A-KAN-CHENG
COAL MINE IN LAN-CHOU

Following is the translation of a news report in

During the period of competition for a double leap for-
ward movement, the A-kan-cheng Coal Mine of Lan-chou strength-
ened its workers' security training by setting up sound security
regulations, thus insuring safety in its production.

In its pursuit of safety in production, the mine has
emphasized safety regulations which were established accord-
ing to lessons learned from past accidents. They have separate-
ly revived the system of meeting before taking over a shift,
the system of handing over a shift, the system of checking
the shafts, the system of checking the quality of engineer-
ing projects, a system of a combined report on the checking
of gas, and the system governing the handling of accidents.
In order to make every worker understand the security regu-
lations, the mine has printed the "Temporary Regulations
Governing Safety in Coal Mines" published by the Ministry
of Coal Industry and has distributed them to every worker for
discussions and study. In addition to this, it has combined
the investigation and handling of accidents with the educa-
tion of workers by giving workers examples of accidents in
order to improve their understanding of the seriousness of
each violation of safety regulations.

In the process of establishing safety regulations, the
leaders have set themselves up as good examples by initia-
ting a general checking of safety in the mine and 'encourag-
ing workers to make suggestions on safety measures, thus
resulting in the solving of quite a few old problems on
safety. For examples, the Hsin-ts'Unewan air-conditioning
tunnel, No. 1605 transportation road, and tunnels at both
Chuan-tzu-kou and No.1 District of Shih-men, which needed
repairs badly, have all been repaired. All
these worn out electric engineering equipment have been
thoroughly checked.

During the checking of electrical engineering equipment,
a rotation system was adopted in order to avoid interference
with production. The mine has organized training of its personnel for their safe use of electrical engineering equipment as well as a general check-up of all important equipment at the mine. Through this check-up system, the big transmitter station and all the high voltage lines which were installed in 1957 were thoroughly checked and repaired. A regular maintenance system has also been established.

For the sake of thoroughly carrying out all the safety regulations as a means to ensure safe production at the mine, all units of the mine have singeled out the application of such regulations, as well as carrying out safe production, as the major item in the competition sponsored by the administration. At the same time, the agency responsible for safety checks initiated six competitions on the discovery of problems the solving of problems, the application of safety regulations, the application of regulations to actual conditions, contact with the masses, and the regular collective reports to superiors on safety matters. The workers were satisfied, saying: “These competitions are really good. They cut down accidents and improve production. This new industrial safety program has improved our fighting spirit and our confidence in production.”

* * *

The Chu-t'ou-wo Shaft of Lien-t'ang Mine in Lien-yang, Kwangtung, has realized the goal of safety production by sincerely depending on the masses and by correctly carrying out policies for safety as well as other related safety regulations. Since its establishment in 1958 until April of this year, the mine has never had any serious accident, and the rate of minor accidents has been steadily reduced. For the past three years, it has consistently produced more coal than the quota assigned to it.

This Chu-t'ou-wo Sloping Shaft was established through the remodeling of an old coal pit which has a lot of gas in it. The supporting planks in the shaft were worn out and 95% of the workers were new in the trade. Therefore, at first, some people did not have confidence in safe production. However, the majority of miners all believed that if the mine depended on them and they thoroughly carried out safety regulations and policies, it would be possible for the shaft to achieve the goal of safe production.

In order to ensure safety in the shaft, the leaders initiated a mass safety movement. A committee for safe
Production was established under the chairmanship of the party secretary, and special sections in charge of air-conditioning, dynamiting, maintenance, and safety checking were organized. Each production unit at the shaft elected a security officer in charge of carrying out safety regulations, reporting current situations, suggesting safety measures, and leading the mass safety movement. At the same time, an ideological indoctrination movement was initiated to educate personnel of all levels. Every Thursday a lecture on safety was given and a large-scale propaganda movement, including the use of papers, bulletins, slogans, and broadcasts, was promoted in order to publicize the significance of safe production. The shaft has also initiated a campaign against accidents. Whenever an accident occurs, it not only is handled seriously, but also investigated thoroughly in order to learn valuable lessons. A test on safety knowledge among workers and employees was held to find out how much they knew about safety regulations and measures. It is through these measures that the shaft has succeeded in winning the confidence and support of its workers on safety matters and policies. In addition, competitions on safety were held among all production units of the shaft. Moreover, those production units have improved their labor productivity through technological reforms. They have adopted various measures to improve the air-conditioning facilities at the shaft. Since last September, ten out of 13 production units of the shaft have not had any accidents.

The shaft has paid serious attention to the quality of its engineering projects in order to ensure the safety of its miners. The leadership has assigned leaders of all units to check the construction at the shaft. Any new engineering project is carefully checked before it is accepted. Pits in the shaft have been constantly checked by maintenance squads for timely repairs, thus ensuring the safety among workers as well as the prevention of accidents.

For the sake of remedying the weaknesses relating to old supporting timbers and excessive gas in the shaft, special maintenance units were organized to reduce the pressure on those timbers and repair the air tunnels. The amount of gas in the shaft has to be checked four times in each eight hours. If excessive gas is discovered, more air-conditioning equipment will be installed in order to ensure that the amount of gas in the air is well below 0.5%.
SPEEDING UP MINING TECHNICAL REFORMS


The Fu-chuang Coal Mines of the Shantung Lin-yl Mining Administration is stubbornly pushing the simultaneous usage of foreign and native equipment, depending upon the powers of the masses for self-rejuvenation, and incessantly improving its equipment and mining methods. It has changed the feature of small-scale native mining, and changed this mine from using an entirely native style into a semi-mechanized or an entirely mechanized one. Production capacity has been increased immensely.

This mine was developed from one with a single pit into one which is now a small-scale mining complex. Since 1959, they have been paying attention to technical reform activities.

Based on the policy of first native then foreign and simultaneous advancement of the domestic with the foreign styles of mining, the workers and staff have replaced manpowered grinders and man-pulled coal baskets with a system of mechanized equipment, including elevators, transports, and pumping and ventilation equipment.

Through these technical reforms and technological revolutionary activities they have experimented with the manufacture of native electric pulleys, native hauling boxes, native crank axles, native rails, native coal carts, native pumps, native drills, native mine lamps, and native conveyor belts. They have made 17 different types and a total of 2700-odd pieces of production tools and equipment.

The electric pulley, conveyor system, and coal cages, on which Party Secretary Chung Chih (6945 5347) and the workers did research, were successful and were able to increase work efficiency by over three-fold. The electric pulley system was able to save the work of 14 workers.

Chief Liu Yu (0491 3768) of the Machine Electrification Section, together with technicians and workers, did research and used a kerosene drum with a motor and fins added to it to make a ventilator. This solved the ventilation
problems of five aspects of their work and assured the regular smooth operation of production activities.

Up to the present moment, the entire mine has laid out a total of 11,000 meters of native rails, made 1372 native coal carts, increased the number of electric pulleys to 15, manufactured a total of 12 hauling boxes and dump cages, and made over 660 native mine lamps.

They have now achieved total electrification of pulley elevators for the principal mine pits, total transportation on rails, and the mechanization of pumping and ventilation equipment.

Because of this incessant improvement of tools, equipment, and methods, they have been able to achieve successive raising of the level of production. According to statistics, the total coal mined in 1960 was 44.1% higher than 1959. The mining cost per ton was lowered 26% and the mine timber consumption rate per 1,000 tons was reduced from the original 20.1 cubic meters to 6.8.

There was a further increase in the total coal production of 11% for the first quarter of this year over the figure for the same period of last year. The workers are in the midst of hard struggles for the over-fulfillment of the production quota of the second quarter.

10,418
Transportation

CHANG K'OU-TS'AI ENGINE CREW CONSERVE COAL FOR FIVE YEARS


In the Harbin Railroad Mechanical Section, the Chang K'ou-ts'ai engine crew of the No. 891 train has established the ideology to love coal as they love grain. They have done their utmost to overcome difficulties and promote the economy of coal on train engines. During the last five years, these crews conserved 1,640 tons of coal for the State. By the use of this amount of coal, a train hauling 2,300 tons of freight, can run a journey of 320,000 kilometers. Since 1958, these crew members have been judged as an advanced coal saving unit of the entire railroad bureau and section.

Far Sight and Careful Handling

Five years ago, the Chang K'ou-ts'ai engine crew accepted the assignment to run the engine on No. 891 train. Chang K'ou-ts'ai (陳可才) the engineer, and nine other members of the crew knew only the ideology of "haul - ore, run fast, safety and on time", but never paid any attention to the consumption of coal. One day, the Chang K'ou-ts'ai engine crew reported for work. Because the crew were not skillful in making the fire, they could not make sufficient steam. As a result, the train was stopped on the way. The three members who were working on that shift cleared the furnace and put in a great quantity of coal. They worked hard for two hours, and the engine was started again. When they reached the destination, there was only 750 kilograms of coal left. Upon calculation, the train had consumed 6 tons of coal in this trip.

After this incident, the leader of the train crews, Wang K'o-min, (王可民) an old engineer, discussed the matter with this crew. He earnestly explained to them, "Coal is dug from underground. It requires much labor to transport it here. For the trip of 125 kilometers, you have wasted 6 tons of coal. If you were to run the train down to Canton, a whole train of coal would be wastefully consumed." He also told them, "Coal is the food for socialist construction. If there is no coal, no steel can be smelted; without steel, there will be no train, no automobile, no tractors."

Wang K'o-min spoke of these problems, which made this group of young men felt ashamed of themselves. They were educated by this old worker on
the economy of coal and they were determined to conserve coal as they had conserved grain. Because they had no experience, they went up to the Chang Yun-p'eng engine crew, the sharp worker unit for coal economy in the entire section, to learn experience from them. Gradually, they learned the advanced coal saving experience by frequently poking the furnace and regular adding of water, by constant clearing of the furnace and feeding of coal. But their achievement in coal economy was still behind that of the Chang Yun-p'eng crew, then, what was the reason? One day, in their off-hour, Chang K'o-ts'ai together with his assistant engineer and a furnace attendant again visited Chang Yun-p'eng's train. They were determined to learn the coal saving experience from the old engineer Chang Yun-p'eng (张云鹏) himself. At first, the old engineer Chang Yun-p'eng was seated in the driver's seat, with one hand holding the throttle, eyes looking ahead and running the train in full speed. Then, as the train continued its full course, the old engineer left the seat and let the assistant engineer take over. He looked at the pressure gauge, inspected the steam equipment, opened the furnace door; looked how the coal was burning, then he picked up the shovel and turned the ashes over and looked. Though he did not say anything, the furnace attendant nodded his head in consent. When the train arrived at Shuang-ch'eng-pao station, the furnace attendant quickly emptied the ashes. Several crew members hurriedly picked out bits of coal from the ashes and threw them back to the coal trunk. While Chang Yun-p'eng was picking out the coal bits, he explained to them, "Every piece of coal is the State's wealth. Economy must start from the small places. The accumulation of small bits will become large things." After seeing all these, Chang K'o-ts'ai and his companions were deeply moved. Change K'o-ts'ai excitedly said, "This time I have learned the secret of coal economy from tutor Chang Yun-p'eng." From then on, in every trip, they applied various methods and carefully conserved every bit of coal, and created the record of conserving about 30 tons of coal per month.

Understand the Conditions on the Road, Make Subjective Moves

Not very long ago, the No. 891 train was sent to run on the Eastern line. The Eastern line is a single track line, so the train has to wait on the side tracks several times in a trip. The line is built in a mountainous region, crossing many steep mountain slopes and winding roads. Accordingly, some people believe that it is unlikely for any train on this line not to waste coal, let alone conserving coal.

After the No. 891 train was sent to run on this line, its crew tried many methods to conserve coal, but by the end of the month, they could economize only half as much as they did on the southern line. At this time there was a new member in the crew, who thought that the other trains had to waste coal, yet their train had economized, so they should feel satisfied. Chang K'o-ts'ai did not agree and he said, "The bad road does constitute a difficulty, but since we can economize some coal, why can't we economize more?" In order to economize more coal, Chang K'o-ts'ai
made several visits to master more experience. Yang Nai-ch'ün, an old engineer, who heard of this, came to call on Chang K'o-ts'ai and taught him some experience about coal economy. He enthusiastically said, "In order to conserve coal, just know how to burn coal is not enough, you must understand the conditions along the line." On hearing this, Chang K'o-ts'ai said, "You are right. If I know well the degree of every slope, the length of every curve, I can subjectively add or reduce the speed, and add coal and water at the proper time, then we will be able to conserve more coal." Since then, every time when these crew were on the road, they observed the steepness of every slope, the curves, the bridges and all the other conditions on the road. They made marks at places where they had to add coal and water. As a result, not till two months' time, they understood all the conditions along the line and they improved their coal burning technique. Finally they overcame the difficulty of poor road condition. The amount of coal saved increased year by year. In 1958, coal economized amounted to 132.82 tons, and in 1959, it rose to 168.26 tons.

Solving the Problem of Inferior Coal

In April last year, the Chang K'o-ts'ai engine crew met the difficulty of getting a large amount of inferior coal. At the time, the achievement in coal economy was low throughout the section. One shift of the No. 891 train wasted 7 tons of coal. The whole month the entire crew saved for the State only 9.6 tons of coal, equivalent to one fifth of the amount economized in March. On account of this, all the members of the crew became worried. While they were trying to find new ways, they discussed their problems; while they were burning the coal, they summarized their experiences. One time, when the train reached Mou-tan-chiang, because the great coal consumption problem was not yet solved, the crew did not rest and held a discussion in their dormitory. But, after a half day discussion, they arrived at no conclusions. As they were much depressed, an old worker at the back spoke up, "Don't forget, there is much knowledge in burning coal." As a matter of fact, this old worker was a well-known coal saving engineer in the Mou-tan-chiang section. When he heard the crew discussing this problem, he interrupted the meeting and helped them to analyze the quality of coal. He said, "The engine requires a fast burning fire, the stronger the better. The inferior coal has more stones in it and there are more holes in it. If too much coal is used, the fire will be put out by the weight of the coal, so you have to clear the furnace; thus waste is the result." Following the old worker's explanation, the crew became enlightened. They made repeated tests and finally acquired the technique of how to use inferior coal. Since then, they paid more attention to the quality of the various types of coal. They studied the various types of coal produced in different areas. They made repeated tests while on duty to observe burning conditions of the various types of coal; thus they attained the knowledge of the burning condition of various types of coal. Under the conditions of burning inferior coal, during last year, they were able to conserve 248 tons of coal, an increase of 80 tons over that of 1959.
The Pen-ch'í Office of the Mukden Railroad Bureau has stressed the work of utilization, expansion and maintenance of loading and unloading sliding equipment in solidifying and advancing the technical revolution. Since this year, every railroad stations has utilized sliding equipment in loading and unloading more than 165,000 tons of cargo occupying 64% of the total bulk cargo. This has raised the equipment utilization rate by 32% to greatly improve efficiency.

In meeting the demands of transportation, the Pen-ch'í Railroad Office last year built loading and unloading sliding equipment with 40 sliding stations and platforms, low cargo positions and platform slots. Moreover, great quantities of equipment and machine were remodeled. This year, in sufficiently exploiting the potentials of equipment and machines, the railroad office, based on the instructions of the Pen-ch'í municipal committee and the party's railroad bureau committee, has stressed the expansion, solidification and advance of new equipment and machines. First, they have combined the movements of car cherishing, road cherishing, equipment cherishing, and cargo cherishing to establish at every stations inspection and approval sections for loading and unloading equipment. Here they will check and inspect the newly-built sliding equipment. After inspection of 259 conveying machines and other equipment 111 sets were discovered to be imperative. The principal cause was that some workers improperly preserved and insufficiently cherished the new machines, also, equipment had not been repaired after wearing out. Some people did not like to utilize equipment because of poor mechanical condition. Therefore, each station stressed the thought education to workers and expanded the advanced experience of the utilization of new machines and equipment by a loading and unloading section of Pen-ch'í Station. The various principal stations dispatched experienced technical workers familiar with loading and unloading to repair the equipment daily. Moreover, systems of management, utilization and shift-relief were established to ensure the good condition of the new equipment. Certain workers were made for the utilization and preservation. Since the establishment of the special repair section by the Pen-ch'í station, these experienced technical workers have done repair work everyday and taught maintenance technique to workers.
engaged in loading and unloading. This year they have repaired more than 90 new machines and pieces of equipment to greatly raise the utilization rate.

Some new machines and equipment are lower in quality, and are heavy, bulky and inconvenient to operate. The railroad office had the workers to overhaul and repair according to the needs of each locality. In Pen-ch'i there is a 12-meter conveying machine. This big machine always had to be carried by seven or eight workers, so the workers did not like to use it. After an overhaul, two sliding pulleys, a cable winding drum and handles were installed. Now it is convenient to operate and has eliminated the need for five or six workers. Because of simultaneous inspection and repair by every station, the sliding efficiency factor of loading and unloading has been raised from four to \( \frac{4}{4} \).

In exploiting the sliding potential of the equipment, every station of this railroad office has intimately cooperated with the various plants and mines to expand cargo variety and to use the sliding method of loading and unloading. During the technical revolution at Pen-ch'i Station, two sliding-slope slots were built. In the beginning, only clay and lime were loaded by this machine. However, through a study of plants and mines, loading cargoes have expanded to include peat, coke and many bulky cargoes, thus raising the daily loading capacity from more than 30 tons to more than 90 tons.
SUCCESS IN REFINING IRON WITH ANTHRACITE COAL

Following is a translation of a new report in Kung-chen Jih-pao, 18 May 1951, page 2.

The workers of the Hung-hsien Iron Works of Szechuan have succeeded in refining iron with anthracite coal, which was generally believed as impossible to use in an imported upright furnace of 33 cubic meters. Ordinarily, anthracite could be used to refine iron only in smaller upright furnaces. This success was due to the spirit of scientific analysis on the part of those workers as well as their continuous experiments.

The Hung-hsien Iron Works were established in 1958 during the great campaign in promoting the production of iron and steel. In the past, it used only coke to refine steel. However, the nearest source of coke is more than 100 kilometers from the factory. Of course, the cost of transporting coke is high, and there has always been the danger of a shortage of coke. On the other hand, anthracite coal is abundant in Hung-hsien. It was because of the lack of confidence on the part of the cadres in using anthracite coal in imported upright furnaces of 33 cubic meters that it was never used. Due to the shortage of coke, a new imported upright 33 cubic meter furnace has never been put into operation. The cast iron production quota was raised this year, and the need for more fuels was increased proportionally. The use of anthracite in the refining of iron has become the key for assuring the success of our mission.

According to the instructions from above, the party leadership at Hung-hsien has called several meetings for the purpose of educating the cadres as to the political and economical significance of using anthracite coal in the refining of iron. They have figured out the saving in cost and the development of their iron works if they succeed in using anthracite coal to refine iron. It not only will solve the problem of fuel in the future development of the iron works, but will also save a lot of manpower as well as material relating to the acquiring of coke. It will also give support to agriculture and the national economy. Besides, the use
of anthracite coal will greatly cut down the cost of refined iron, because the transportation of coke is three times as much as that of anthracite. The party has predicted the difficulties confronting the use of anthracite coal and has insisted on following the principle of conducting experiments with the spirit of scientific analysis and with a practical attitude.

For the sake of gaining experience, workers of the ironworks first used the No. 2 imported upright furnace to test the use of anthracite coal. They found five guiding principles: (1) Iron ores and anthracite coal must be carefully selected according to certain standards. (2) The supply line at the rear of the furnace must be suitably lowered to a level lower than was the case when coke was used. (3) One more exit for ashes must be added in order to get more air into the furnace. (4) More iron ore must be supplied to the furnace at the rate of five furnaces instead of only four for each shift. (5) The depth of the exit for iron must be adjusted. They have prepared a complete manual on the use of anthracite coal for refining iron to be distributed to other workers, thus resulting in an increase in quality and a lowering of costs.
TECHNOCAL TRAINING MOVEMENT DEVELOPED AT
CHUNGKING OIL PAINT FACTORY

Following is the translation of a news report in

The mass movement for technical training initiated at
Chungking Oil Paint Factory in March has been very successful.
Two out of three old workers from the oil refining section
of No. 1 workshop have learned the theories governing the com-
position of paints. Nineteen apprentices who formerly were
not able to work independently have mastered the technique
for handling two or three products. The efficiency of the
whole section on the refining of oil has reached 100%, and 16
big reforms have been carried out.

Study Thoroughly And Develop Technical Training

Since the beginning of this year, the rate of qualified
oil paints and printing inks has risen from 70% to 90%.
This was brought about by the movement for improving the quality
of production. However, both the quantity and quality of the
refined oil had not been stabilized, thus affecting the
quantity and quality of the finished products. What was the
reason for this instability? The Party, the management,
workers, and the cadres of the Communist Youth Corps all
came to the spot to hunt for the answer. They discovered
that among 22 workers, only one technician and two veteran
workers knew all the necessary skills required for the refin-
ing of oil. The rest were new workers who joined the factory
in 1958. Those new workers knew nothing about the necessary
thickness of the oil or the required temperature. There-
fore, those old workers had to come to the factory at night
in addition to working in the daytime. Otherwise, the oil
was either too thin or too thick.

After this cause of failure was discovered, someone
suggested the transfer of a few technicians to the oil-re-
fining section as reinforcements. However, after investiga-
tion, only five out of the 23 technicians in the factory

- 105 -
were on the job, while the rest were either out for outside jobs or on special assignments. Therefore, no technicians could be spared.

Under these circumstances, the party realized that the most urgent need for the factory was the improvement of the workers' technical knowledge. No improvement in either quantity or quality of products could be realized unless the technical level of the workers was raised first. Consequently, a movement for the promotion of technical training among the workers was initiated by the Party leaders.

Three Guiding Principles on the Training of Technical Personnel

(1) Anyone who knew something about oil refining was assigned to serve as a teacher, thus solving the problem of the teacher shortage. Everybody at the factory made a plan for learning. The apprentices pledged to finish learning all the techniques for production in one month, and the old workers promised to learn the theories and chemical formula of all types of paint oils. Contracts were signed between veteran workers and apprentices guaranteeing the completion of their learning plans. Apprentices were students while at the same time serving as teachers for some workers. For example, apprentice Wang Te-yin (3769 1795 6892) was widely admired for his lecture on observing oils.

(2) One must first learn the thing most needed for the performance of his current duties. During the course of learning, the main emphasis was on the necessary technique for production, while theories were taught only as supplementary knowledge. Instructors must write their own lectures instead of following the old practice of lecturing about chemical theories which are hard to understand and very boring. After nine lectures were held in the oil-refining section, all the apprentices learned how to work independently. They also learned to get rid of water in the paints, thus eliminating a serious defect.

(3) All lectures are held during the breaks in working hours in order to save time and avoid wasting valuable working time. Two lectures are given each week in which both technical terms, including chemical percentages, etc., and cultural items are combined. Old workers also visit bachelor apprentices in their dormitories telling their own experiences and forming a close teacher-student
relationship. Furthermore, old workers teach apprentices whenever there is a chance to do so. For example, when one of the meters was not working, old worker Ch'en Pao-fu (7115 1405 1381) promptly taught one apprentice Ch'en Ching-wen (7115 2529 2429) how to repair it.

Once the problems of teachers, teaching material, and teaching time were settled, the technical training for workers naturally became a success, thus setting good examples for the whole factory.

**Learning and Working Simultaneously**

During this learning process, workers, and employees have used their newly acquired knowledge to promote technical reforms, and at the same time they have consolidated their technical knowledge through these reforms. This union of knowledge and application has brought about a new tide of technological revolution. Thus far, the workers have learned 16 new methods relating to oil refining, while in all previous attempts, they failed to learn because of the lack of technical training.
Following is the translation of a news item in Kung-jen Jih-pao, Peiping, 24 May 1961, page 2.

The Shansi Ta-yang Steel Works, centering their energy on transport problems, are actively pushing technical reforms in the mines. They have achieved noticeable results. Although there has been a reduction from 280 to 150 in the labor force, this has been accompanied by a doubling of production, thus lowering the ore costs and increasing by several months supply the surplus of ore that is ready for smelting in the upright furnaces.

The reconstruction at the mines took place in two steps. The first consisted of building the native rails between the mines and the steel-works. They made use of local material to seek self-powered rejuvenation.

Under the adverse conditions of lack of material, manpower, and technical knowledge, they were able to adequately stir up the masses in the manufacture of native measuring sticks and marker poles in order to survey the layout. They cast their own iron rails and made their own spikes, rivets, and bolts. They backed their own bricks locally, and used ash and clinkers to replace pebbles for the road beds in order to increase the work power.

They were even able to take away over 200 men from the production lines to form special road building brigades to build the railway. In the midst of all this work, they were still able to inaugurate round-robin and individual versus individual contests.

In four months, they were able to complete over two kilometers of double track rail lines. Using 20 men to push the ore carts each day to replace 250 iron wheeled horse carts, they were able to save over 4,000 yuan in hauling expenses.

The second step concerned the firm grasping of the improvements in the three linked problems of digging, underground transportation, and raising of the elevators in the
mine shafts. Through technical reforms and technological revolution activities they were able to switch from man-powered slab digging to hydraulic burrowing. They dug deep holes to start successive detonations in order to loosen the ore.

They installed over 250 meters of rail lines in order to substitute rail carts for man-powered hauling. They substituted animal-powered pulleys for man-powered axle type shaft elevators. Recently, they even replaced the former with a steam engine and a half-ton winch.

In these ways, they were able to improve labor conditions, lessen the intensity of the workers' labor, and increase efficiency of work.
WIND-DRIVEN MACHINERY SHOP BLOOMS

Following is the translation of a news item by Lu Chao-jui (6424 0340 3843) in Kung-ien Jih-pao, Peiping, 24 May 1961, page 2

The first workshop of the Tsi-nan Wind-propelled Machine Factory is rushing its workshop small group activities and has achieved outstanding results in its production efforts. Although there had been a reduction in staff and workers this year, resulting in added burdens for those still working there, they were still able to reach their quantitative and qualitative production goals for the months of January to April 27 days ahead of schedule. They were able to maintain their reputation in the factory for being the red banner unit.

Workshop No. 1 consists of No. 1, No. 2, lathe, and press-stamping sections. The party committee at the workshop is busy grasping the ideological activities of the sections. Each week they collect data on the thought situation, assembling and analyzing ideological tendencies. For instance, in the first ten days of March, they discovered that certain workers and positive elements were stirring up lax tendencies. There was the danger of not being able to finish their production tasks.

The committee quickly took steps to assemble party workers, Youth Corps members, and Positive Element Club members, and through widespread ideological activity was able to fulfill the production tasks for March 12 days ahead of schedule.

The committee also assisted the small groups in promoting individual ideological activity. From the top to the bottom they fixed their objectives. Through a division of labor, the group leaders, Party and Youth Corps members, and positive elements visited the masses. They made friends and chatted with the people in order to understand their ideology and were able to solve their problems at the right time.

The party committee regularly emphasizes nurturing and raising the quality of leadership material. There are three
methods that they have adopted for this. One method is to give separate instruction for each task. Each time a new task is assigned, the committee assembles the leadership material to take part in an enlarged conference, so that these people might know what is what and take a step ahead of all the others. Then it will call a joint conference of the leaders of the Party, factory executives, unions, and Youth Corps to give clear directions as to what is required, show them the key points, and assign concrete methods.

Another method is to allow the free flow of experiences within the small groups. Aside from organizing the groups in learning from the experiences of the progressive groups according to the decisions of the Party, it also adopted the "four leaders" work system of the Fu Chia-ts'ai (0265 1367.6299) Small Group which calls for collective leadership. Using this as an example, they raised the level of efficiency of the "four leaders" of the various groups.

Still another method is based on the different conditions at different times. The leadership material discovers certain universal problems. The groups are then organized for concentrated study of relative documents, after which, the work of the small groups is reorganized.

For instance, in the early part of March it was discovered that certain leaders were not tightly grasping the production position. It was pointed out to them that not grasping a problem tight enough was the same as not grasping it at all. There was one group that was supposed to complete the maintenance and repair of the equipment by 6 March, but it was not until 12 March that the task was completed. There was real danger that the work of all the groups would be delayed by this. After the workshop had organized concentrated study, the leaders of this group were able to really grasp the production problem and complete the assigned task on time.

The four sections of this workshop have been promoting contest activities ever since last year. They regularly hold contests between the small group. The main events last year were production-management contests and technique exhibition contests. This year they are promoting the "Eight Superiority" contest (superiority in carrying out the party's policies, learning, production, quality, safety and sanitation, proper management of livelihood, reforms, and thrift). They also hold bi-weekly contests to see that there are no imperfect products.

The way in which they carry out these contests is to divide the small groups into battle units. Each month was divided into three battle periods. Seven days were used
for each "war" and three days were consumed for repairs, maintenance, and preparations. They were able to make each period follow the last immediately upon completion, and in developing these contests by leaps and bounds.

Simultaneously with the carrying out of these contests, they were able to proceed with technical reforms, promote the important links of progressive experience, and proclaim to the entire body of workers, "We will learn from whoever is progressive and reform wherever we are lagging behind," and "Everyone will participate in rejuvenation; we must show reform everywhere." They were able to double the degree of mechanization in the workshop.

Because the Fu Chia-t'ei Small Group took special pains with technical revolution, they are now working on 1963 projects. In the first quarter of this year, the results of evaluation showed that three of the four sections in this workshop were adjudged as "progressive" and only one as an "ordinary" section.
II. GENERAL

A REBORN ANCIENT CITY, URUMCHI

Following is a translation of an article by reporter Shih Man (石曼) in Kung-jen Jih-pao, Peiping, 13 April 1961, page 2.

Anybody who has heard the song, "Sinkiang Is A Good Place," who has seen the dance and the operas of Sinkiang, and who has talked to a traveller from Sinkiang, will dream about the gigantic T'ien Shan, the oases in the vast desert, the flocks of cattle and sheep on the endless steppe, the ancient cities glowing with the glory of youth, and its diligent, courageous, vigorous, and vicious people.

One day in the early spring, with the same vivid dream, we left Peiping where the peach flowers were still blooming. We passed Pao-tou, Yin-Ch'uan, Lanchow, the high peaks of Liu-P'an Shan, and Chia-yu-kuan to come to Urumchi, the capital of the Sinkiang Uighur Autonomous Region.

Upon starting the trip, friends told us that it is heavily snowing in Sinkiang even in March and April, and advised us to take more clothes along. We brought with us fur overcoats, cotton boots, and all necessary winter clothing. Unexpectedly, when our airplane landed at Urumchi, it was bright sunshine with mild breeze and the weather is fine for wearing a cotton coat. Our host told us that the lowest temperature in Urumchi is 34 degrees centigrade below zero but actually the cold climate occurs very infrequently. The present temperature is eight degrees centigrade which is about the same temperature in Peiping some 20 days after. Recently, spring plowing has been started in the suburban areas. So, our fur overcoats, and cotton boots will just be a burden on our trip.

On the way from the airport to the city, our host explained to us that Urumchi is situated just below the high T'ien Shan on its south and connected with the Daungarian Basin on its north. It is the political, economical, and cultural center of the autonomous region. The city was built in 176 AD with a history of over 1,700 years. Though it is very ancient, its rebirth only came after the Liberation.

It is true. The history of Urumchi is just the same as its builders, the working masses, with a series of hardships. We don't have to repeat the ancient story. Only scores of years ago, the name of Urumchi was changed to Tihwa. This was an insult to the minorities. At that time, the city area of Urumchi only occupied 110 square kilometers lined with dirty and narrow streets. We can see the situation then from a folk song, "The streets are filled with sandy earth on sunny days, the mud is
three ch'ih deep on rainy days to drown the donkey and horse. It is not surprising to see them drown." The whole city had only a short distance of asphalt road then. It was located at the entrance of the old administrative office with a length of only several ch'ih from north to south and several chang from east to west. It was an obstacle because the traffic was restricted there. Very few buildings in the city were higher than two stories. The stores near the south gate look like two stories, but they are actually a layer of wall around the street. The T'ien Shan Hotel was built at that time. What kind of building it is? After many years of construction in spending so much money, the building was finally completed. After the Liberation, the experts discovered that the building would collapse if in every room of this building there are put a table, a bed, and a man to live in. There was a comparatively beautiful scenic spot, the Bright Garden (Min-yuan) in the city, but it was occupied by the father-in-law of Sheng Shih-ts'ai (盛世綸). The working masses were not allowed to enter the garden and were even forbidden to go closer to take a look...

Then the Liberation came. Everything was changed. Urumchi has regained its name. The asphalt roads crisscross throughout the city area. Furthermore, there is a 250-kilometer asphalt highway to Tu-shan-tze. The buildings with three stories and up are everywhere and expanding extensively to the suburban areas. In the past, besides the few houses on the west bank of the Urumchi River, it was all desert. Now, the eight-story K'un-lun Guest House has been erected there. The Sinkiang Medical College is situated beside the building. Before long, this area will become the center of the whole city. In the city, the old main administrative office has been transformed into a ceremony reviewing platform. Beside the platform, there is the People's Theater with a rich nationality style. This spacious area is good for holiday relaxations. The T'ien-shan Hotel was rebuilt and renamed into T'ien-shan Mansion at four stories high. Here is held the heroes' meeting of the industries, capital constructions, and transportation of the whole region. In the past, the whole city had only one college of politics and law with over 100 students. Now, there are altogether 12 higher-education institutes including the Sinkiang university. The city area has been expanded from 110 square kilometers into 700 square kilometers. Owing to the incessant advance of politics, economy, and culture, the city population has increased from 80,000 to over 700,000.

Like other places in Sinkiang, there live in Urumchi 13 fraternal nationalities. They are Han Race, Manchus, Mongols, Noslems, Uighurs, Siboes, Ta-hu-erh, Kazakhs, Kirghiz, Russians, Tatars, Taszhiks, and Uzbekis. In the past, owing to the oppression and instigation of the ruling class, there existed among the different nationalities the misunderstandings and hatred. After the Liberation, the Party's talented nationality policy has changed hatred into the brotherly friendship among the 13 nationalities. By now, the different organizations have their cadres of all nationalities, and the different schools have their teachers and students of all nationalities. In factories, the minority workers are

- 114 -
generally 20% to 40% of the total. They have begun to acquire higher and higher technical knowledge through the help of Han workers. There are circulated in Sinkiang the languages of Han, Uighurs, Kazakhs, Moslems, Mongols, and Russians, however, the most popular language is Uighurs, spoken by majority of them. Therefore, at meetings held in Urumchi, two kinds of languages, Han and Uighurs are used. So, these meetings usually last a long time, however, the chairman always asks the speaker to condense his speech as short as possible.

The original meaning of Urumchi is the beautiful ranch. Now, Urumchi is more beautiful than ever. The beautiful ranch cannot represent the beautiful appearance of Urumchi. Aside from the city constructions, the ever increasing industrial constructions have added vigor to Urumchi's beauty. In the past period of over 200 years, in Urumchi there were only six semi-handicraft factories of earthware, soap making, and match making. In the 11 years following the Liberation, there came up the steel and iron mills, coal mines, and Ch'i-i Textile Mill with 100,000 spindles. Totally, there are altogether more than 200 factories in the city. Scores of different daily necessities can be completely manufactured here. What a big leap forward it is!

The Urumchi River flows through the city. This is a witness of history. Comparing the "two" cities of Urumchi before and after the Liberation, one poor and one rich. One is dirty and one is beautiful. The beautiful landscape is created by the heroic people. Chairman Mao and the Communist Party are founders of the beautiful Urumchi, and the Construction Corps is the initial founder of the new Urumchi. Then there came the first office building of Ch'i-i Textile Mill, the first blast furnace of Pa-i Steel Mill, the first open-surface mine of Liu-tao-wan Coal Mine, the first lathe of October Machinery Plant ..., and every street in the city; there was the sweat of the soldiers of the construction corps. The heroes of the constructions of Urumchi are now assembling in the T'ien-shan Mansion for discussion of this year's construction work. The heroes including the digging contingent leader K'o-li-mu-pa-i-fu (克力木巴甫) who simultaneously has advanced mining and digging three years in a row, Ting Hsing-mei (丁春梅) and his partners whose fame lies in raising the utilization coefficient of the nine-cubic meter blast furnace from 0.4 to 4.3, Tu Yin-wa (吐音瓦), the safety record holder of power plant boiler operation, 2,200 days without an accident. They inherited the challenging and struggling revolutionary spirit of the forerunners following closely the direction of the Party to unite all nationalities of Sinkiang for a socialist Urumchi.

Standing on top of K'un-lun Guest House and looking westward, there stands a new railroad station getting ready to serve trains from the east. It has been the dream of the people of Sinkiang for scores of years. Now the dream will come true as the track laying work is approaching the city within tens of kilometers. When it is ready, the train from the capital of People's Republic will bring to the Sinkiang people the various supports. Also from here, the products that will flow to motherland include grains from Tarim Basin and Dzungarian Basin, crude oil from Karamai, wool and mineral products from T'ien Shan, Altai Shan, and K'un-lun Shan, grapes from Turfan, apples from I-li, pears from K'u-le-erh, big-head fish from Baghrash Kol ...

Tomorrow Urumchi will be more beautiful.
"Kashgar is a good place in Sinkiang. You have to go to Kashgar when you are here." The impressive introduction made by the comrades of Urumchi helped us make up our mind to go down south.

Kashgar is the biggest city in southern Sinkiang at a distance of 1,500 kilometers away from Urumchi. In the past, by riding on horseback, the trip would last over 40 days. Now with highway, it takes one week by automobile. While trying to see places in a short period, we decided to take commercial airplane. It is much warmer in southern Sinkiang than the north, so all the fur overcoats were left behind in Urumchi as we started the trip light.

After the airplane took off for half an hour, the plane climbed over an elevation of over 3,000 meters. We were flying over the T'ien Shan. It was a beautiful sunny day with mild wind. Looking out from the airplane window, the numerous peaks of the T'ien Shan Range were covered by the snow which has been there by tens of thousands of years. The peaks of T'ien Shan are perpetually silvery white regardless of the chilly winters or the warm summers. Between the ridges, there are the numerous glaciers, which irrigate the vast lands lying south and north where crops are growing. In Sinkiang, the amount of snowing every year is everybody's concern, since a big snow means the start of a bumper crop in the following year.

The widest span across T'ien Shan is over 200 kilometers and the narrowest is over 20 kilometers. Half an hour is needed to fly over its ridges to enter southern Sinkiang. Before our airplane, there lies a vast plain of the Tarim Basin. Sinkiang's biggest desert, the T'a-k'o-la-ma-kan desert, is situated in the basin. The total area of Sinkiang's desert land is about ten times as big as Chekiang Province. My dear readers, you may think that Sinkiang may be all desert. No, the entire area of Sinkiang is as big as 17 Chekiang Province. Wherever the melting snow water flows, the lives breed and grow. In the desert there are many cases. Not long before, a geological survey group of the Academia Sinica entered the big desert. They discovered there some villages and people. It was said, that there exist in the desert the virgin forests. In our era, it is very possible to turn the desert into rich farmland.
Along the northern boundary of Tarim Basin, the airplane was
approaching Kashgar after flying hours to the southwest.

Kashgar had a history even older than that of Urumchi. The legend
said that as early as in the fourth century before Christ, this place had
roads leading to everywhere with many caravans and travellers. The city
wall was built of green pottery bricks. The Turks call the pottery brick
"K'o-shi", and carvings as "Ni-ko-erh". So, the name of Kashgar was thus
originated. For a period of more than 2,000 years, Kashgar was confronted
with warfare and floods, but the city had been rebuilt again and again,
each time by the tough Uighurs. There are also 13 different nationalities
here but the Uighurs occupy 90% of the entire population. From the ancient
time up to now, the Uighurs always consider Kashgar their political,
economical, and cultural center.

As any other places in southern Sinkiang, Kashgar has rich
resources bestowed by nature. It has a mild climate and the Kashgar River
surrounds and passes the city. There are dense woods all over the city,
the rich mineral products in the suburban areas, and the well-developed
agriculture everywhere. Owing to irrigation by the melting snow water,
drought is seldom resulting a comparatively steady yield. Last year,
there was little snowing on Tien Shan, oddly for years, however, the mou
unit yield of wheat was still at 500 chin to sufficiently supply the local
population. But before 1949, the poverty and hardships of the Kashgar
people were as long as the history of the city. There was not a single
modern factory in the city with only two simple and crude handicraft works
with totally 72 workers. Among the 30,000 city population, there were
over 3,000 beggars. More than 3,000 families were not housed and the people
were hungry and cold without enough foodstuff and clothing. The Liberation
brought to the city unlimited vigor. Within the ten year period, under
the Party's leadership, there have completed 420,000 square meters of
construction, equalling 28 times of the total construction of 20 years before
the Liberation. Unemployment is actually non-existent, and the income of
the people has showed a considerable increase. Among the more than 17,000
households in the whole city, over 10,000 households have savings. In many
houses, there are radio receivers and bicycles. The streets are more than
doubled the width than that before the Liberation with the roadside willows
pointing to the sky. The light green and light blue doors and windows, the
light yellow pillars, and the brown steps make one feel cozy. In the
southern part of the city, there is a newly constructed park of hundreds
of mou. There now lies the biggest department store of southern Sinkiang
at the downtown Kashgar. A stadium with a capacity of 10,000 seats has
been erected. The Ai-ti-t'i Mosque is also situated in the city center.
Once a week on the day of festival "Pa-cha", the people ride on donkeys
with camel-pulled iron-wheel carts coming from the country sides. Kashgar
has abundantly produced clothes, caps, leather boots, musical instruments,
for a period of hundreds of years. However, before the Liberation, the sales
were slow with little production and few varieties. By now, the varieties
of leather boots have been increased from 5 or 6 kinds before to over 100
kinds, and colored caps from 5 or 6 kinds to 22 kinds. These goods have been
sold to as far as Uzbek Republic of the USSR. Aside from these goods,
great quantities of local-produced agricultural implements, fruit jams, and many daily necessities can be seen in the city market. These goods are produced by the many newly-completed factories and mines for the people of Kashgar. Now, there are agricultural implement plants, machinery plants, metallurgy plants, power plants, printing presses... totaling more than 20 modern plants. In the suburbs a 80,000-spindle textile mill is now under construction, with 30,000 spindles already been installed and over 10,000 spindles currently in operation. The first batch of K'un-lun Brand white bleached cloth has been in the Kashgar market. The equipment of this mill and the workers, Party cadres, political personnel, and technicians are from every corner of the country. This is the result of an unified struggle of the people throughout the country with the people of Kashgar. This is the crystallization of the intimate co-operation of the people of the various nationalities bringing to the people of Kashgar with more beautiful and colorful living.

When we arrived at the guest house, a sliced Ha-mi melon was laid on the table. The host apologized, "you come here not at the fruit season. I only can find one Ha-mi melon. Please just taste it." Impressed by the attitude of the host, we ate the melon with gratitude. The melon was as crisp and sweet as honey. The comrades of Kashgar told us, "the best Ha-mi melon is grown at Shan-shan. Only there, does the real Ha-mi melon, the sweetest grow. They are also planted in other places, however, they are transplanted with the quality far inferior to that of Shan-shan. This melon has been preserved since last year. The peasants hung it up with a string to keep the original flavor. We are sorry that you come to the city of melon and fruits with tasting only a last-year melon. If you come here in July or August, it is much better. The cherry is on the market in June with small seed and large fruit. In July there is the red peach though small but juicy and sweet. After July, all kinds of melons and fruits are ripe. Nobody has ever counted how many varieties. But it can be said, excepting tropical fruits like banana, there are all kinds of northern area fruits including peach, plum, grape, pomegranate, fig, walnut, and apricot. Since our present transportation is mainly for construction purposes and some fruits are perishable over long distance, in the fruit season one kilogram of grapes is sold at 1.4 Yuen, and .20 Yuen of apricots is enough to feed anybody. Come here again in July or August. At that time, besides the melon and fruits, the whole city is covered in green with cold breeze outdoor. The weather is not hotter than Peiping."

The moon starts to rise from the east wall, and the small birds on the tall willows are silent. The breeze is lightly blowing and the soft night is so tenderly scented with a mild fragrance. At a distance, the vigorous and long songs of Uighurs can be heard. This is the fifth time we heard the song in four days. The city with willows and grapes in every house! The city of song and dance! The city of galloping horses traversing thousands of miles a day! Oh! we are reluctant to leave Kashgar.
NEW SITUATION IN SSU-YUAN CONTINGENT AFTER THE DISCIPLINE REGULATING MOVEMENT

Following is a translation of an article written by the Ping-chiang Correspondence Reporting Section in Kung-jen Jih-pao, Peiping, 14 April 1961, page 317

It is spring along the banks of Mi-lo River adorned with the early wheat plants and yellow vegetable flowers. The Ssu-yuan Contingent of San-yang Commune in Ping-chiang Hsien, Hunan Province, has concluded the discipline regulating work. The masses and cadres have acquired correct working spirit for the spring planting. Peasants are busily engaged transporting manure and driving oxen in the vast fields.

One Footprint for Each Step

Through the discipline regulating movement, cadres' attitudes have become more concrete and penetrating. Each of the eight contingent cadres has been assigned a production brigade to participate in and lead the production. They have the same status as the ordinary commune members regarding the observance of a point grading system in work. In the beginning, when contingent cadres were first assigned to the production brigades, some members feared that these cadres were not accustomed to labor. Some members said, "a cadre is assigned to our brigade. Who knows how many production inspections he will make a day?" However, things have been developed unexpectedly. For instance, the deputy contingent leader T'ang Tung-shu (唐東書) led the laborers and also worked hard himself in becoming a good worker when he was first assigned to the brigade. In the 70 days' period from 1 January to 10 March, with the exception of five days of spring festival holidays during which he participated in meetings at the commune and the contingent, T'ang worked everyday with a total of 610 points of work record. Since then, the brigade members have changed their viewpoint and they want T'ang to stay. Every time on hearing the transfer of cadres, the members would go everywhere to find it out.

The contingent cadres participate concretely in labor. Moreover, they further thoroughly execute the Party's policy of forming "one footprint for each step."

During the spring festival holidays, a contingent custodian spoke to the Party branch secretary Ch'en I-sheng (陳義生) that the spring planting was near and that they needed to repair some of their farm tools.
The custodian conferred with another contingent about trading fish for bamboo. Ch'en did not agree and said, "some of the fish breeding ponds have been allotted to the production brigades, and some have been assigned to the brigades for production. There is no more fish to exchange for bamboo." The custodian reasoned with him further, however, Ch'en did not approve of his plan. Ch'en patiently explained, "the fish are bred by the production brigade. If we go there to catch fish, the Party's policy will be violated. There is an ancient saying, 'the more fire beneath the pan, the more steam will come out from the pan.' Only when we thoroughly execute the Party's policy, can we overcome problems even more difficult to handle than bamboo." The conversation was overheard by the commune members. They all said, "the cadres execute so thoroughly the Party's policy, that we must do better in production." The members were all deeply impressed, and voluntarily brought out the scrap and used materials to sell to the brigade. Some members watched on the streets in town, and each time, when a fuel peddler came to the market, they bought from the peddler tree trunks for use as material to substitute bamboo. Thus, the problem was quickly solved. The whole brigade has purchased and repaired more than 780 pieces of big and small farm tools for spring planting.

Speak Only After Investigation

After the discipline and commune regulating movement, the contingent cadres have paid much attention to investigation and study. Before coming to a meeting, each cadre would apply the method of "analyzing sparrow" to extensively investigate the production brigade. Then a study meeting will follow.

Sometime earlier, in meeting the raw material demands of the national industrial construction, the commune Party committee made proposal to the Sau-yuan Contingent to plant jute and sugar cane crops. At that time, the various production brigades were considering a "three-fixation" plan, so the Party branch decided to grasp the situation first through collecting opinions from the masses before making any necessary arrangements.

That day, the Party branch commissar Hung Tse-jen (洪世仁) went to the sixth production brigade to study the soil quality of the field. A meeting was held to seek opinions from the brigade cadres and old peasants. The old peasant Hung Tao-sheng (洪陶生) said, "all the members think of eating more grain and planting more grain. It is good. However, some practical conditions still have to be considered. For instance, the sandy field on the river bank is no good. Last year, the plantation of sweet potato was mostly ruined during the drought with a yield of only a few hundred chin per mou. In the year before last, the sugar cane plant had a yield of over 6,000 chin per mou." Moreover, the old peasant led the Party branch secretary to the river bank to have a look. On the second meeting of the Party branch, Hung Tse-jen reported the situation of this brigade. Every Party branch commissar brought out situations in other units for comparison, analysis and study, so the whole situation was well understood by all. At last, decision was made to convince the river bank

- 120 -
brigades the significance of planting more economic crops to support the national industrial construction. The proposal was made to the brigades regarding proper planting economic crops to suit the local soil characteristics. On the principle of suitability to the different soil characteristics, the brigades on the river bank properly planted jute and other economic crops.

There are More People Concerned With Production

The reform of the cadres' attitudes to extensively contact the masses and rely on them, has greatly initiated the subjectivity of the masses to be master of production. Just as the Party branch secretary Ch'en I-sheng said, "now, there are more people concerned with production."

One day in early March, Ch'en went to the ninth production brigade to inspect production. Old member Hung Hua-sheng (洪華聲) told him, "Secretary Ch'en, everybody thinks of overfilling the 'three-fixation' quota, however, the thought worries me." Hung is an old hand with over 40 years of plantation experience. In the past, he only engaged in production without caring for other things. However, now the cadres often ask for his opinions and have appointed him an adviser. He is very glad about this and now he takes care of everything in production. Secretary Ch'en asked him what he was worrying about. He said, "it is a good plan. However, when June and July come, we cannot take care of both rice and sweet potato."

This brigade has planted lots of sweet potato, and 33 mou of its land is devoted to the planting of the "Nan-t'e-hao" variety of dry rice crop according to plan. Thus, when time goes by, the members will not be able to take care of both wet and dry paddy fields at the same time. Hung continued, "the original plan has not considered this point. If we can plant less "Nan-t'e-hao" rice and substitute it by planting "Liu-yang" rice much of the seasonal plantation rush work can be avoided. As a result a part of the labor force can be spared for sweet potato." Ch'en accepted this opinion as correct, and he told the brigade leader to convene a commune members discussion meeting immediately. The members agreed concurrently and considered the opinion as rational. Hung was very excited, and said, "the plan is now satisfactory, so we have to double our efforts to engage production."

All of the over 200 households of the contingent have accepted the "five-care agreement as a working policy. Everybody struggles for overfulfillment of labor quota in competing for the honor to become a "five-care" member.

All these happenings have led people to the belief that the discipline and commune regulating movement here has achieved fruitful results.
ON THE PROMOTION OF EDUCATION WITH HIGH MORALE

Following is a translation of an article by Li Ch'ih (李哲) Deputy Chairman of the Kirin Provincial Labor Union, in Kung-jen Jih-pao, Peiping, 19 April 1961, page 3.

Since last year, the spare-time education program in Kirin Province has been growing rapidly. The results of the promotion of education are great. Last year, over 190,000 became literate or semi-literate. Literacy rate in this province rose from the 77% in 1959 to the current 90% level. More than 38,000 workers have graduated from the various types of spare-time schools (including short-term training classes). The rapid rise of workers cultural has further promoted production.

Based on production demand, we earnestly promote education as a means of learning for experience. To adapt education to production needs is to coordinate the contents, methods and time of learning with production. Many of the mining and factory enterprises are now striving toward this goal. For instance, one dye stuff factory realized that its workers were unable to read working manuals in a foreign language. The factory then conducted 13 consecutive foreign language training classes, thus solved a problem in machine installation. Many workers had difficulties in operating new equipment or acquiring new skills. Accordingly, factory workers were organized to learn production techniques and regulations concerning technical operation. While many of the enterprises are now coming forward to start regular productions, cadres are often selected from the ranks of workers. These recent cadres often maintain a relative low cultural level and have little administrative experiences in modern production work. Many factories now organize their cadres to attain a cultural level equal to that of a "junior high school education", helping improve their technical knowledge and gain mastery in enterprise control. Their learning time is arranged in accordance with the busy or leisurely time schedule encountered in production and is on a seasonal basis. During summer and autumn seasons, when production gets busy, there would be three learning sessions per week and each session lasts an hour, usually scheduled in the morning, just before the starting of work. In the spring and winter seasons when production is relatively normal, there would be four learning sessions in each week and each session lasts one and a half hours, arranged after work. This educational method is beneficial to production and also meets the needs of the workers' desire for learning. The more the workers learn, the higher their morale will become, thus a regular educational program is a must in production.

- 122 -
Based on the workers' actual production and living conditions to make different arrangements, a desirable factor in the promotion of education has come into being. The goal of spare-time education is to educate the workers, whose cultural and technical levels are not always the same, whose busy and leisure hours vary, working shifts differ, and whose living conditions and family responsibilities can all be different. To organize the workers to learning, both actual conditions and individual differences should be considered so as to attain satisfactory results. The Kirin Mechanical Section of the Kirin Railway Bureau had not paid enough attention to this factor in its past educational program, and poor results occurred. Take the old workers' special class as an illustration. At the beginning, there were 31 workers participating in the study but only 15 continued the study while the other 16 did not. This year, when they started the class, they paid attention to this problem and organized the workers into either an advanced or a backward class. Some of the workers who found that they had difficulties in learning at the beginning were asked to use the slow method by merely reading a limited amount of books and newspapers.

In factories and mines, besides production, political movements are encouraged regularly. When a political movement is launched, there will be a contradiction between this and the spare-time educational program. Education must be coordinated with the progress of the political movement. If the coordination is well managed, education will attain good results. For instance, in the socialist educational movement workers' time schedule is rather tight, many units have made temporary arrangements for spare-time education by reducing the four study sessions per week to two sessions each week. Based on the needs of the workers, they have increased teaching material to make up for the short hours. Some units have incorporated socialist education into their study program so that their classes have become the training ground for socialist education. In this manner, political movement and spare-time education have solved a contradictory problem and the two are now merged to attain better results in education.

Since spring this year, workers education program is met with a promising situation. After the New Year's holidays, most of the factories and mines have resumed their classes. After having adjusted their classes and class hours and supplemented their contents for learning, their educational program has become strengthened. However, in this Province the task in workers' education is still great. We must acquire higher morale to carry out the following activities:

First of all, we must adopt the principle of dividing the workers into different classes and groups, providing opportunity to all workers who have the ability to learn. Those who can learn fast will not learn slowly; those who can learn more will not learn just a little; those who can learn early will not learn late; those who can learn collectively will not learn separately. All those steps that can be accomplished through efforts will be actively performed to attain satisfactory results. Even with those who have difficulties in learning now, new conditions will be created for them to learn. It is a good thing to organize the workers to
learn. But not every worker can realize this fact. We must strengthen
the organizational and ideological activities and consolidate the
experiences in learning, so that we may establish a good example in
educating and encouraging the workers to develop self-awareness for learning.

Secondly, we must further implement the principle of the three
 coordinations between the political, technical and cultural educations.
Following the development of industrial production, the number of new
workers has been doubled, so that there is an urgent need for workers
technical education. To promote technical education well is an effective
means to solve the prevailing problems in production. This is our urgent
task. But we cannot just look at the present; because we have to look
far ahead to raise workers cultural learning. Since last winter, many
units have held fast to political education and incorporated it into
their study program, by inserting one political session for every one or
two weeks. This is a good idea, which must be continued in the future.

Thirdly, we must continue to eradicate the remaining illiteracy
problem and shall not stop at where we are. If we stop now, it will not
only prevent the illiterate workers from becoming literate but at the
same time, it is possible for those who have recently become literate to
relapse into illiteracy again. Then, all our previous efforts will be
spent in vain. At present, the remaining illiterate workers are spotted
in small numbers. Though it is relatively hard to sweep out illiteracy,
their number is small; if the leaders have a strong determination and
through arousing the masses and depending on the masses, this problem will
be solved within one or two years. The literacy movement must be
practical and factual. If more learning can be arranged, it must be so
arranged. If more cannot be arranged, learning must not be stopped. The
conditions among the illiterate workers are varied, the policy of carrying
out the easy one first and the hard one later and of dividing workers into
different classes and different groups must be fully implemented.
THE APPLICATION OF MAO TSE-TUNG'S IDEOLOGY IN PRODUCTION

Following is the translation of a feature article published by the labor union of the Lao-chou Railways District in Kung-jen Jih-pao, Peiping, 20 May 1961, page 3.

(Editor's comment) The 694th Youth Operator Section of the Yu-men Machinery branch has realized good result in its learning of Mao Tse-tung's ideology. From this article, we can see the power of Chairman Mao's ideology in the strengthening of the workers' minds and in the generating of enormous material strength. Chairman Mao has advocated a practical attitude, flexibility, a combination of knowledge and application, and the consolidation of theory and study. His methods are effective. In order to promote the learning of Chairman Mao's works, we hereby publish this article as a reference for our fellow workers.

* * *

The 694th Youth Operator Section of Yu-men Machinery Branch is not only the champion of safety of the whole branch, but also the forerunner among all working units of the railways and the promoter for the learning Chairman Mao's works.

When this youth operator section was established in December 1959, its locomotives had approached the time for a check at the maintenance shop and the technical level of its personnel was not very high. Most employees in the section had served only three months to a half year at the railways and the average age was 23 years. However, in the past year, the cars under its care have safety travelled 97,400 kilometers, have carried 23,950 tons of freight above the quota, have saved 81,605 tons of coal, and have achieved a record of 85.4% of their arrivals at destinations being on time. It has become the champion of all the operator sections in the branch.
Under the unfavorable condition of having poor locomotives and inexperienced personnel, how could the section accomplish its mission so brilliantly? The main reason for its success is its close following of party leadership by combining the current situation with party missions and by learning Chairman Mao's works for the strengthening of the intellect of the members. Since March 1960, members of the section have studied more than ten of Chairman Mao's articles, including "Theory on Application," "An investigation report on the Farmers' Movement in Hunan," "To Serve the People," "The Strategic Problems of China's Revolutionary War," "Carry on the Revolution to the End," and others.

To Conquer Chien-shan coal

When the section began to use Chien-shan coal (a kind of inferior coal), the result was very bad because the members of the section had not learned the characteristics of the coal. Whenever the train had to climb a high slope, the locomotives usually failed to produce the necessary power because of the inferior quality of the coal. Some members were very discouraged, and said: "I have never before seen this kind of devil coal," and "If the coal is poor, let us take a smaller load. As long as we do not have accidents, we are lucky." In order to remedy this situation, members of the section began to study Chairman Mao's "Theory on Application." Chairman Mao said: "If people want to win victories in their work, they must make their thinking conform to the rules of the circumstances. Otherwise they will fail in their application." After several discussion on Chairman Mao’s writings, members of the section have consolidated their confidence in conquering the poor qualities of Chien-shan coal. Through practical applications and tests, they have gradually mastered the characteristics of the coal. It was discovered that the coal has a high stone content, a high melting point, short flames, and light weight. They have also discovered the political and economic significance of the use of Chien-shan coal, because the saving in cost will contribute a lot to the reconstruction of the state. This recognition has further enhanced their confidence in fighting to conquer the inferior qualities of the coal.

Eventually, they discovered the following experiences in using Chien-Shan coal: First, they must mix the coal and start the fire much earlier than is the case when other type of coal are used. Secondly, they must be more diligent in adding the coal to the furnace and in shaking it. Thirdly,
they must handle it differently according to different conditions. Lastly, they must start the locomotive more slowly. After learning the ways to handle the coal, they have been able to carry large loads and arrive at their destinations on time without any accidents. Their success in using Chien-shan coal has opened a new opportunity for the whole railway.

Exchange "War Horses" and Advance Hand in Hand

During the movement for trying to surpass the achievements of the 694th Section last November, some people in the Yu-men Machinery Branch complained "The achievements of the 694th section were entirely due to the quality of its locomotives. If the members of that section were operating our locomotives, they would not get anywhere." So that section adopted the party policy of "yielding to others the honor, taking on any difficult job, learning from the advanced, and helping the weak" by exchanging locomotives with the 159th Section. At the very beginning, the difficulties were so many that some members of the 694th section became discouraged, and said: "Once you changed horses and could not get used to them. You better get your old horses back." Then after the members carefully studied Chairman Mao's strategic and tactical doctrines of "strategically ignoring difficulties and tactically paying attention to difficulties," they established the confidence to conquer such difficulties.

Under the guidance of Chairman Mao's ideology, they have made necessary studied of the nature of locomotive and discovered some common troubles with locomotives such as the necessity for minor repairs and lubrication, poor combustion, etc. They also adopted Chairman Mao's doctrine of "concentrating one's major forces to fight for the annihilation of the enemy" and succeeded in correcting all the weaknesses of the locomotives received from the 195th Section, thus eliminating all causes for past accidents and achieving the goal of safety, lowering the cost of coal, and arriving on time. The exchange of locomotives between these two sections has proved the success of curing both the weak locomotives and weak operators, thus making the 694th Section the Champion of whole Yu-men Machinery Branch.

Achievement in Safety and Arriving on Time

In February, when the Party initiated the movement for having the trains operate safely and arrive on time,
the 694th Section immediately answered this call and reviewed what was said in Chairman Mao's "The Strategic Problems of China's Revolutionary War," such as: "Without preparation, we would be forced into a passive position. You would not be sure to win victory if you were forced into a battle," and "Concentrate your forces to annihilate your enemy." Then they concentrated their attention on improving the quality of locomotive as well as making studies of the poor quality of certain kinds of coal. Eventually, they found three remedies: Firstly, when they hand over the shift to another group, they give their successors a good briefing of the job to be done in order to avoid delay and confusion. Secondly, those who are going to take over a shift must have enough rest and have enough preparation, such as lubricating the locomotives and starting the fires, etc. Thirdly, during periods of tight schedules, all off-duty personnel come to help with the operation in order to prevent possible accidents and late arrivals. Consequently, the efficiency in freight transportation for the month has reached 100%, and there have been more than 23,000 kilograms of coal saved. The section has received 32 commendations and won the championship on both safety and arriving on time. They even relied upon Chairman Mao's "Doctrine of Continuous Revolution and Development of Stages in Revolution" in sending collective suggestions to sections 1563, 1172, and 136 relating to safe operation, arrival on time, surpassing the quota, and saving coal.

Taking Good Care of Fellow Workers

Members of the 694th Section learned from the following teachings of Chairman Mao: "Unity within the party and unity among the people are our guarantee of victory," and "To maintain unity, we must continue our revolution." Consequently, they realized that they must unite the 12 comrades in the section before they could do a good job on the locomotives and fulfill the glorious mission given by the party. How could they effect this unity? In addition to strengthening studies and developing criticism and self-criticism on the basis of a common revolutionary enterprise, they have learned from Chairman Mao's essay on "Showing Concern for the Masses' Livelihood and Paying Attention to Working Methods" the necessity for taking good care of their comrades' livelihood, including clothing, food, housing, and transportation. When they were on duty, they did their planning together and helped their colleagues in their preparation and work.
When they had leisure time, they talked and studied together. Whenever they received any reward money, they kept a part of the money in the section for emergency assistance to their co-workers. Once an operator, Wang Kuei-ts'ai (3769 6311 2624) lost his wages on his way to Hang-i. The section offered to use the emergency fund to help him. Although he did not accept this offer, he was so moved that he declared that he would work harder in the future. Fireman Lu Ping-chang (7120 1627 4545) felt very low in morale because of family financial difficulties. After the section gave him some help, he did a fine job again. Because members of the section have been helping one another, they are as close as brothers and always maintain a high fighting spirit in their work.
IV. SOCIOLOGICAL

A DUALISTIC APPROACH IN TREATMENT OF CHRONIC DISEASES

Following is a translation of a feature article in Kung-jen Jih-Pao, Peiping, 6 May 1961, page 1.

A dualistic approach has been developed that combines medicine and physical exercises jointly for treatment of chronic diseases. The coming together of health work and physical education which includes the Taoist breathing exercise, the "T'ai Chi" 太極, meaning the source of existence in Taoism/calisthenics, and health-preserving drills has been viewed as an important achievement of our day. This approach has been promoted in hospitals, clinics, and factory and mining enterprises. Patients who have suffered long and serious illness as well as those who have suffered from chronic diseases are now organized into different groups to accept group treatment. Some are receiving treatment during absence from work and some using after-work hours to receive treatment. Usually one month is sufficient to achieve good result.

In Ch'ang-chun City there are 94 units who have adopted this combination method for curing diseases. A total of 46.8% of patients with chronic diseases were cured and 50.2% of them showed good improvements. Fourteen persons in the Shanghai Lathe Factory received this kind of treatment during after-work hours and 55.1% of them have their ulcer completely cured and 38.2% of them have shown good result. One employee of that factory had a very serious intestine infection which gave him a lot of trouble even after a long term of treatment by medicine alone. Since June of 1960, he has participated in this combination treatment and his pain has stopped. Now he can eat two bowls of rice each meal.

Due to fast recoveries, patients are now able to get back to work and resume production. This helps modify their pessimistic outlook of life which is caused by ill health, and enables them to regain their happiness of feeling well once again. Prior to July 1960, productivity of the Harbin Flax Textile Mill was drastically lowered because of the many kinds of chronic diseases among workers. In order to fight this situation, three groups using the new combination method of treatment were organized between July 1960 and February 1961. Each group received only one month of such treatment and the majority of patients were recovered, with 79% of them returned to work. Therefore the working efficiency of that factory in December was up by 9.92% than that of July 1960. The working efficiency of group I of the No. 2 Weaving workshop in the Shanghai Yang-Fu Cotton Textile Printing and Dyeing Mill, in February 1961, was up 8% than that of
August 1960. The 52-year-old female worker Hsieh A-rh (孫炎) had suffered stomach trouble for 20 years because of exploitation by the capitalist owners. She used to work more than ten hours a day without adequate food since she was 12 years old. Now, her life has been completely changed but due to stomach trouble she must often ask for leaves. After she was cured of her disease by this combination treatment, she said excitedly: "The old society gave me this illness but the Party and Chairman Mao cured my disease. I have to live longer in order to contribute something to our Party."

The promotion of this combination method has been under the leadership of our Party committees at all levels, together with close cooperation from the Communist Youth Corps, the Labor Union and various medical departments. Groups were organized according to number of patients and types of diseases and Party units in charge of the combination treatment were set up within the main organization. Some even organize committees to give political education so that patients would be able to manage their own problems and solve their own difficulties. They have trained many cadres from sports lovers and medical personnel. This not only will promote the new treatment but also will create favorable conditions for the development of physical education among people.

At first, this new treatment was not readily accepted by the patients. Some patients, because of long illness, did not have confidence in recovery, nor had they any confidence in this combination method. A strong leadership has been offered in different places in order to urge patients to participate in this new treatment. Discussion groups and lectures have been held to explain to the patients the current necessity of our state and society as well as to give scientific knowledge to the masses. Examples of success on the part of other patients have been widely publicized in order to increase the confidence of the masses in this new combination treatment.

Many units have achieved a good result in promoting people's interest in physical education through this movement of combination treatment. Some workers have even continued their exercises, the Taoist breathing method, and the "t'ai-chi" calisthenics after they recovered from their chronic diseases.