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ARCHITECTURAL JOURNAL

AUTHOR: None

ORG: Capital Construction Group of Shaoshan Revolutionary Committee

TITLE: "Shaoshan in Construction"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77
pp 1-11

TEXT OF ENGLISH ABSTRACT: Shaoshan is the native place of our great leader and teacher Chairman Mao Tse-tung. Chairman Mao's old home is situated here in a beautiful natural environment, which is surrounded by hills covered with luxuriant pine trees and bamboo groves. This sunny, rustic house was heavily destroyed in 1929 by the Kuomintang reactionaries. Since liberation, the Shaoshan people have carefully repaired it once again to restore its original appearance.

To meet the needs of the people of all nationalities in our country, the Overseas Chinese and the international friends to pay their respects to Chairman Mao's old home and learn his great revolutionary practice, an exhibition hall was erected in 1964 at the foot of the Yinfeng Mountain, about half a kilometer from Chairman Mao's old home. Since its completion, the exhibition hall has received more than 20 million visits from worker, peasant and soldier masses.

[continuation of CHIEN-CHU HSUEH-PAO No 1, Mar 77 pp 1-11]

The exhibition hall covers a total floor area of about 5,000 square meters. It is planned with some courtyards full of traditional features by utilizing the changing levels of the site. Fourteen exhibition rooms are arranged around the courtyards which are different both in size and form. Gray tile pitched roof gives the building a local character; white walls and cream colonnade harmonize with the natural surroundings.

To afford visitors to Shaoshan transport and service facilities, a railway station and a group of public buildings have been built at the foot of the Clear-brooklet Mountain about 5 km from Chairman Mao's old home. The design of the station achieves both modesty and monumentality. Walking out of the station, visitors can pay their respects to the large full-length statue of Chairman Mao in youth standing high on the top of the hill right opposite the building. Extending eastwards and westwards from the station along the highway is a group of public buildings, including a department store, bookshop, post office, restaurant, etc. These light-colored buildings are arranged to follow the slope of the ground aiming at the creation of visual variety in the street layout.

The Shaoshan Hotel is located among the pines on Yinfeng Mountain. Natural scenery and greenery render this three-story building more cheerful and tranquil. In addition, a hospital with some 150 beds and serving 200 outpatients every day was erected in 1970.

[continuation of CHIEN-CHU HSUEH-PAO No 1, Mar 77 pp 1-11]

Since the cultural revolution, the Shaoshan people have constructed the Shaoshan irrigation region and established factories producing farm machines, fertilizers, cotton textiles, televisions, souvenir articles, etc. In selecting the sites, wasteland or slopes instead of farmland are utilized, and the factories are also accessible to public communications.

AUTHOR: None

ORG: Kweichow Provincial Architectural Design Institute

TITLE: "The Design of Concrete Hollow Block Buildings"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77 pp 26-29

TEXT OF ENGLISH ABSTRACT: Since the cultural revolution, Kweichow province has erected more than 200,000 square meters of concrete hollow block buildings at Kueiyang, Tuyun, K'aili and other cities. Practice has proved that the hollow block of this kind is a good wall material which is light in weight and has high strength, thus cutting the building cost and facilitating the construction work. It is beneficial to gradually carry out the method of prefabrication in the building industry. Moreover, in the mountainous Kweichow province, the use of locally available materials to make concrete hollow blocks so as to gradually replace clay bricks is of especial importance in saving farmland and aiding agriculture.

The 18-cm-thick hollow block can basically meet the requirements of structural strength and thermal insulation of five-storied residential buildings. The height of the block is 80 cm, which is suitable for residential buildings with a height of 2.8 meters from floor to floor.

[continuation of CHIEN-CHU HSUEH-PAO No 1, Mar 77 pp 26-29]

The hollow block comes in seven lengths, varying from a minimum of 30 cm to a maximum of 150 cm. These blocks can be appropriately arranged to fit in well with the module system adopted in the plan parameter of residential buildings.

AUTHOR: None

ORG: Hunan Provincial Architectural Design Institute

TITLE: "Tunnel-type Brick Circular Granary"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77 pp 30-31

TEXT OF ENGLISH ABSTRACT: China has won good harvests for 15 years running. Under this excellent situation, a great quantity of granaries are needed in the broad countryside. The technicians of the Hunan Provincial Architectural Design Institute, along with the veteran workers, through investigations have worked out a new scheme in which a group of brick circular granaries are planned on the outer side with a large void in the center. This void is used as granary too, and the outer granaries are utilized as its bearing walls. This scheme not only increases the capacity, but also saves building materials.

Each circular granary has a roof of brick spherical shell. To solve the problem of dust rising over the upper part of the central granary when feeding it with grain, an effective measure is taken by separating the conveyor belt corridor by means of wooden partitions from the other parts.

[continuation of CHIEN-CHU HSUEH-PAO No 1, 1977 pp 30-31]

The bottom of the circular granary is usually made of reinforced concrete in the form of an inverted spherical cone. In the new scheme, brick arch tunnel is used for the conveyor corridor, thus both reducing the height of the granary and saving building materials.

AUTHOR: None

ORG: Szechuan Provincial Industrial Buildings Design Institute

TITLE: "A 5,000-Seat Stadium for Night Use"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77 pp 39-41

TEXT OF ENGLISH ABSTRACT: A stadium accommodating 5,000 spectators for night use was set up in the sports park of Chengtu, Szechuan province, in 1975. It has become an important place for holding mass rallies as well as cultural and physical activities in the urban districts.

According to the actual conditions of the site and functional requirements, the stadium has a circular plan with an outer diameter of 58 meters and an inner diameter of 34 meters. It covers a total floor area of 4,517 square meters. The arena, measuring 34 meters in length and 22 meters in width, can be used for basketball and volleyball games, gymnastics and acrobatics as well as mass rallies.

The stadium has a longitudinal aisle, with eight exits around it, which has a total width of 16.8 meters and enables the spectators to disperse quickly.

[continuation of CHIEN-CHU HSUEH-PAO No 1, Mar 77 pp 39-41]

The stand is of prefabricated reinforced concrete framed structure. To achieve more floor area, a cantilevered access gallery is planned on the outer side, which can also be used as a resting place for the spectators. The elevations of the building are so designed as to reflect the local character of South China, thus gaining an open and light architectural effect.

The arena is lighted with 500- and 1,000-watt iodine and tungsten lamps, having an illumination level of 300-500 lux. The lighting fixtures are suspended from the cables a distance of 10.5 meters above the ground. The access gallery is illuminated with common fluorescent lamps.

AUTHOR: TU Kung-ch'en [2629 2162 6591]
CH'EN Ming-ta [7115 2494 6671]

ORG: None

TITLE: "Achievements in Statics of the Northern Sung Dynasty As Seen from 'Codes of Construction'"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77 pp 42-46

TEXT OF ENGLISH ABSTRACT: "Codes of Construction" is a book of technical regulations concerning the use of building materials and construction of wooden structures published by the feudal royal government of the Northern Sung dynasty. The compiler summarized the rich experiences in architectural technology accumulated by the ancient laboring people, and through the book we can see the high achievements in standardization of architectural design gained by them in the Sung dynasty. Especially with respect to using materials in wooden structures, according to the different kinds of buildings they worked out correspondingly a series of different measurements about the length and cross section of the structural members, including columns, frames, beams, rafters, etc., thus assuring both economy and durability.

[continuation of CHIEN-CHU HSUEH-PAO No 1, Mar 77 pp 42-46]

The present article uses the structural theory of statics to prove the scientific and technical level achieved by the ancient laboring people in reasonably utilizing wood and selecting the cross section of structural members, and gives full proof of their wisdom and talent in statics and mathematics.

FRONT, BACK AND INSIDE COVERS: Photographs on front, back and inside covers depict various views of Chairman Mao's old residence in Shaoshan, as well as scenes of the Shaoshan railway station and Shaoshan irrigation canals.

8650

CSO: 4009

AUTHOR: KUO Chien-yen [6753 1696 6056]

ORG: None

TITLE: "Man Can Conquer Earthquakes"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77 pp 12-14

ABSTRACT: China's well-known geologist, the late Li Ssu-kuang [2621 0934 0342], suggested that earthquakes are associated with geologically active structures, and proposed a seismic geology method to find the seismicity pattern in space and time. This and other methods devised by the masses have rapidly elevated medium- and short-term quake prediction in China. Selection of sites and foundations for structures can minimize earthquake damage to structures. Unnecessary exterior ornamentation should be avoided. Reinforced concrete frames can be installed in brick walls to raise shearing resistance and increase flexibility. Bricks should be sprinkled with water before laying for greater shearing strength. In industrial plants, the roof panel quality should be as high as possible. These are the main guidelines in building high-quake-resistant structures.

AUTHOR: None

ORG: Quake-Resistant Structure Study Group, Academy of Architectural Sciences, State Capital Construction Commission

TITLE: "Measures of Limiting Earthquake Damage to Buildings"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese No 1, Mar 77 pp 14-19

ABSTRACT: This article suggests some precautions in erecting a variety of structures. One-story industrial plant buildings in earthquake-prone area should be usually prefabricated reinforced concrete. Building rigidity should be strengthened and connections upgraded for greater strength and flexibility. New light-weight roofs need to be developed. Connections between the main structure on the one hand and exterior brick walls, gable walls and collar beams on the other should be strengthened. Wall panels with good quake resistance should be employed. As for sites and foundations, tectonic movements in plutonic regions and geomorphology in shallow areas are the main conditions governing earthquake intensity. Uneven settlement of foundations should receive particular attention in liquefaction-prone area; and foundation pressure should not be excessive in soft soil areas. Desirable earthquake resistance values are found in raft foundation, caisson foundation, pile

[continuation of CHIEN-CHU HSUEH-PAO No 1, Mar 77 pp 14-19]

foundation and reinforced concrete strip foundation. Other structures discussed are multistory industrial plant building, multistory composite brick structure, highrise building, rural structure, chimney and water tower.

AUTHORS: CH'EN Teng-ao [7115 4098 7663]
CHUANG Nien-sheng [5445 1819 3932]

ORG: None

TITLE: "Architectural Design in Humid-Hot Region"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese
No 1, Mar 77 pp 20-25

ABSTRACT: This article makes suggestions on resolving contradictions often encountered in design work. Structure design in domestic and foreign sites is discussed; construction procedures in humid-hot regions are examined. These regions are South China, Southeast Asia, and major parts of Africa and South America. Covered are the natural draft a structure induces, and sunshade and insulation of roof and wall. Contradictions usually encountered in design occur between natural draft and sunshine, optimum height of story in hot regions, between shading and lighting, and between east-west sunshine and street exposure. Included are 9 photographs and 23 diagrams. Hua Kuo-ying [5478 0948 5391] of the First Design Institute, Ministry of Light Industry, supplied three photographs showing structures in the Congo.

AUTHOR: None

ORG: Design Institute, Ministry of Commerce; Design Office, Shanghai Municipal Bureau of Chemical Industry

TITLE: "Further Promote the Use of Standard Designs"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese
No 1, Mar 77 pp 32-33

ABSTRACT: First applied in cold storage warehouse, designs have been standardized in recent years in slaughter plants, grain warehouses and oil tanks. There is a total of more than 20 standard designs. If standard designs are adopted, a 500-ton capacity cold storage warehouse can be built one-third to one-half faster. Three pictures show a 500-ton capacity cold storage warehouse standard design; these structures are part of the Meng-yin County joint meat plant, the I-hsien County Food Company and the Jung-ch'eng County Bureau of Commerce, all in Shantung Province. The other part of the article shows standard designs for a small synthetic ammonia plant; photographs depict these plants in Nan-an County, Fukien Province, in Pei-liu County, Kwangsi Autonomous Region and in Fu-yang County, Chekiang Province. The total synthetic ammonia output from small plants accounts for more than 50 percent of the China-wide output. Included are seven pictures and three diagrams.

AUTHOR: None

ORG: Luta Architectural Design Institute

TITLE: "Architectural Design of Hollow Concrete Blocks"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese
No 1; Mar 77 pp 34-36

ABSTRACT: In the first half of 1976, intermediate tests of three-row-hole hollow concrete blocks were completed by this design institute; a five-story apartment building was built based on the design. Later, improvements were made in multi-row-hole hollow block structures and in the mechanical forming of concrete blocks. This article presents the thermodynamic characteristics of the multi-row-hole hollow block structure and brief descriptions of the structural design. In the specifications of hollow concrete blocks of a test building, there are six types of three-row-hole blocks for exterior walls and five types of single-row-hole blocks for inner walls. Manufacturing involves both mechanical and manual forming. A diagram shows a six-story tower type apartment building with four-unit flats. Near the close of the article, improvements in the concrete block specifications are presented. Included are one table, one picture and fourteen diagrams.

AUTHOR: None

ORG: None

TITLE: "Pictures of Shao-shan, Mao's Birthplace"

SOURCE: Peking CHIEN-CHU HSUEH-PAO [ARCHITECTURAL JOURNAL] in Chinese
No 1, Mar 77 front cover, back cover, inside front cover and inside back cover

ABSTRACT: The cover photograph shows Shao-shan Exhibition Hall Complex, displaying Chairman Mao's memorabilia. The three back cover photographs are, from top to bottom, interior of room number four of the exhibition hall, hall gate and inner courtyard. The inside front cover photograph shows Mao's birthplace. The three inside back cover photographs are, from top to bottom, Shao-shan Railroad Station, Second Station Restaurant and Shao-shan Irrigation Canal.

10424

CSO: 4009

SCIENTIFIC EXPERIMENT

AUTHOR: CHANG Pin-k'uei [1728 2430 1145]

ORG: Deputy Chief, Designing Academy of Ta-ch'ing Oil Field and Old Worker of Ta-ch'ing Oil Field

TITLE: "Summarize Experience to Continue to Advance Forward"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p p 1-2

ABSTRACT: This paper reports briefly progress in Ta-ch'ing Oil Field since 1970 in the following aspects; (1) With regard to petroleum prospecting, new techniques have made it possible to determine the area and the quantity of reserve oil of Ta-ch'ing in less than a year to repudiate the loose talk of "China is oil poor," and "Only marine phase has oil;" (2) With respect to oil extracting technique; (3) With respect to well drilling technique; (4) With respect to oil field design; (5) With respect to oil refining and petrochemistry.

AUTHOR: WANG Shan [3769 3790]

ORG: Deputy Chief of Ta-ch'ing Oil Field Institute of Well Drilling

TITLE: "'Three-One'Wells of Superior Quality"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 pp 2-3

ABSTRACT: In 1964, the "iron man" Wang Chin-hsi [3769 6651 0823] proposed to use one drill bit to drill one high quality well in one day. This is what is called superior three-one wells. For the purpose of making this resolution a reality, many studies and reforms have been made with regard to the technique of well drilling. The improvements made in the years between 1964 and 1976 in the technique of well drilling as a part of the effort to reach the three-one target are reported.

AUTHOR: WANG Nai-chu [3769 0035 5281]

ORG: Geologist, Production Office, Science Research Designing Academy

TITLE: "Injecting Water to Extract Oil"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 3-4

ABSTRACT: As crude oil is being extracted, the energy or pressure of the oil strata is gradually reduced and the depression process gradually slows down the flow of the crude oil until the well finally becomes dry. In the 1940's the technique of injecting water into the well that was starting to show signs of drying up was successfully tried in foreign countries but this technique of injecting water has never been adopted for new wells because of the fear of having the well producing water instead of oil. On the basis of this foreign experience and the fact of the high pressure level of the Ta-ch'ing oil field, an area measuring several tens of km² was selected for injecting water before oil extraction. The amount of water equaling the amount of oil extracted was injected to maintain a pressure equilibrium in the oil strata. With this technique, the earliest explored wells of 17 years of continuous production are producing the same quantity of oil everyday although about half of the reserve of these wells has already been extracted. In the Soviet Union, this technique is adopted for new wells without maintaining the same pressure throughout. The result has not been as satisfactory.

AUTHOR: WANG Te-ming [3769 1795 2494]

ORG: Engineer, Institute Subterranean Oil Extracting Techniques

TITLE: "New Technique of Separating Layers of Water Injection"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 4-5

ABSTRACT: Crude oil is preserved in many layers several thousand meters deep under the ground surface. The water requirement of every layer for maintaining the desired pressure is different. It is therefore necessary to measure the water absorption of each layer in order to inject different quantity of water into each, as well as to determine the number of layers deep under the well. This paper explains the need of an expansible and contractible separator and its successful manufacture by the author and colleagues after more than one thousand times of experimentation. The structure of this separator is not clearly described.

AUTHOR: KAO Wei-pao [7559 4850 1405]

ORG: Deputy Chief, Sixth Office, Design Institute, Science Research Designing Academy

TITLE: "De-emulsifier for Dehydration of Crude Oil"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 pp 5-6

ABSTRACT: The technique of injecting water was adopted at Ta-ch'ing Oil Field during the early stage and as the quantity of water injected into the wells continued to increase the water content of the crude oil also rose. Aside from the water injected into the well, ground water is also a source of the water content. Some natural substances contained in the crude oil act as an emulsifier to cause the water and the oil to be mixed. There are several possible ways of dehydrating the crude oil. In Ta-ch'ing, a chemical de-emulsifier is used to serve as a surface activating agent in an electrical field. After considerable efforts, a non-ion high efficiency P227 type de-emulsifier has been successfully made to cause the crude oil to meet the the refining standard of the state and the water separated from the oil to be oil-free and clear so as not to pollute the environment. The structure of the de-emulsifier is not described.

AUTHOR: KENG Hsiu-wen [5105 4423 2429]

ORG: Deputy Chief, Office of Geophysics, Science Research Designing Academy

TITLE: "New Development in Well Logging Technique"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p 6

ABSTRACT: In the process of developing the technique of injecting water to extract oil, contradictions are endless. Layers of oil are gradually soaked by the water and it has become extremely important to have a reliable measure to determine the location of the water-soaked layer or layers and the extent of the condition of flooding. After repeated study of Chairman Mao's works, a new technique was discovered, based upon the obvious difference of dielectric constants between oil and water. The dielectric constant of water is 80, that of oil is 2, and that of the rock framework is 4-8. A drawing in the paper helps to explain this technique of determining the water layer.

AUTHOR: K'UNG Chao-jui [1313 2507 3843]

ORG: None

TITLE: "Reclamation and Comprehensive Utilization of Oil Well Gas"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 8-10

ABSTRACT: Well gas is a companion and by-product of oil. It can be used as a fuel to replace coal. It can be made into chemical fertilizers to increase the yield of grain. It can be made into colorful plastics, synthetic fibers, and rubber products. It can also be made into airplane and automobile fuels. It can even be made into nutritious high-protein foods to be served directly on the table. The structure and the origin of well gas, the technique of collecting it as the oil is extracted, and the techniques of utilizing it are explained.

AUTHOR: None

ORG: Designing Academy, First Bureau of Navigation Engineering, Ministry of Communication

TITLE: "Ocean Floor Oil Pipe Line"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 11-12

ABSTRACT: There are three major ways of laying oil pipe lines: (1) Ocean floor towing technique; (2) Floated with buoys; (3) With a ship equipped to weld, examine with x-ray, etc., treat to prevent corrosion, cover with concrete, etc. The advantages and disadvantages of each of the three techniques and the problems involved are briefly discussed.

AUTHOR: LI Chin-ch'ang [2621 6855 2490]

ORG: None

TITLE: "Why Should There be Concerns About the Ozone Layer"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 p 12

ABSTRACT: This paper explains briefly the nature of ozone, the function of the ozone layer, natural factors affecting the ozone layer, and effects of atmospheric pollution on the ozone layer caused by human activities. Conferences held by the United Nations concerning the ozone layer is also briefly reported.

AUTHOR: CHANG K'ai-sun [1728 7030 6676]

ORG: Institute of Mechanics and Electricity, Academy of Machinery, First Ministry of Machines

TITLE: "Stroboscopic Measurement"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 16-17, 7

ABSTRACT: A stroboscope is an instrument used to study the motion of high speed machines with scintillating light, or sparks. The theory of a stroboscope and the numerous applications of stroboscopic measurement are explained.

AUTHOR: I Yueh [6712 2588]

ORG: Office of Meteorology, Peking Municipal Academy of Agriculture

TITLE: "Meteorological Conditions and Wheat Grain Weight"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 p 19

ABSTRACT: The yield of wheat is composed of the three factors of number of spikes, number of grains, and the grain weight, i.e. yield = number of spikes x number of grains x weight of grains. In high yield regions, the number of spikes and the number of grains are generally relatively stable and it is also relatively easy to bring about what is expected. It is different with the grain weight, however. The range of variation of grain weight is rather great and + 10 percent or greater is a normal occurrence. Many factors affect the grain weight, including the nutritional condition of the plants, pests and diseases, and the weather. In the wheat regions of North China, the seed formation and maturation time of wheat happens to be the transitional period between the dry season and the rainy season. The weather at that time is unpredictable and changes very fast. Observations and experiments concerning the effects of the weather condition on the grain weight and possible measures to counter the adverse effects are discussed.

AUTHOR: HUANG Chu-chien [7806 4376 1017]

ORG: Peking Institute of Zoology, Chinese Academy of Sciences

TITLE: "Frog Protection and Pest Control With Frogs"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 20-21, 24

ABSTRACT: China was one of the first countries to use biological control of pests. The technique was reported in books published as early as 304 A.D. The poor and middle farmers of Taiwan Province introduced giant frogs from the main land to control the golden grub that was damaging the sugar cane there with very satisfactory results [The paper does not mention when this occurred.] In China, there are about 160 different kinds of frogs, living in all different environments. This paper is a general discourse of the biological studies of some species of frogs in China and ways of catching them and releasing them into crop fields for pest control.

AUTHOR: YEH Shu-mao [0673 2885 5399]
HUANG Ch'i-pi [7806 1142 4310]
CHANG Shao-wu [1728 4801 2976]

ORG: All of Northwest Institute of Botany

TITLE: "Test Tube Fertilization of Plants"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 25-27

ABSTRACT: In plant breeding, the problem of incompatibility of the parent pair of distant species or the problem of homogeneous incompatibility frequently occur in various forms and artificial pollination can often resolve the problem. This paper describes the three techniques of artificial pollination, including artificial insertion or spraying of pollens on the pistils which remain on the live plant, pollination of pistils removed from the plant, and fertilization of naked ovaries in test tubes. This paper explains briefly the procedures of all three techniques and their significance in production practice.

AUTHOR: LI Jung-ho [2621 2837 0735]
HSU Wei-ch'eng [1776 4850 6134]

ORG: None

TITLE: "High Graft of Fruit Trees"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 27-29, 10

ABSTRACT: High graft is the technique of inserting or grafting the scion in a high location, instead of near the roots, of the stock. The technique began in China as early as about 100 B.C. In recent years after the liberation, it has been adopted to improve adversity resistance, to change the breed or the variety, and to increase the fruiting rate of fruit trees. This paper reports the advantages of this technique, especially with respect to various newly introduced apple varieties. Several procedures of the technique are described.

AUTHOR: HSIA Chung-nan [1115 0022 2809]

ORG: None

TITLE: "Why is it that Alcoholic Beverage is Not Suitable for Those Suffering From Cardiovascular or Liver Diseases

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p 31

ABSTRACT: The major content of liquor is ethyl alcohol. After a man drinks it, the ethyl alcohol content is quickly absorbed by the gastro-enteric tract while more than 95 percent of it is oxydized in the liver. A very small portion of it enters the blood stream to be distributed to other tissues of the body. Drinking liquor on cold days can produce a warm feeling all over because the ethyl alcohol content can cause the peripheral vessels to expand, the heart beat to be faster, and the blood pressure to rise. If this condition is prolonged, the load of the heart increases and the heart will become enlarged. Regular drinking of alcoholic beverage can also cause malnutrition and vitamin deficiency. These facts and some animal experiment data are explained in the paper.

AUTHOR: WANG Chu-chun [3769 4554 0689]

ORG: None

TITLE: "Why Blood Precipitation Test and Anti 'O' Test Should be Performed for Rheumatism"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p 31

ABSTRACT: This paper explains the relationship between increased precipitation rate of red blood cells and inflammatory diseases and the relationship between an increase in the antistreptococin (anti 'O') count and a recent contact with streptococcus. One of the above two phenomena is not sufficient for a diagnosis of rheumatism [rheumatoid arthritis] however. For those who are suffering from fever, joint pain and swelling, shortness of breath, and and palpitation, both tests are necessary to determine the possibility of rheumatism.

AUTHOR: SHIH Wei [4258 5898]

ORG: None

TITLE: "Reasonable Use of Saccharine"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 p 31

ABSTRACT: Saccharine is not sugar. It is a chemically synthesized sweetener, 500 times sweeter than cane sugar. If too much saccharine is added to food, a bitter taste may appear. Saccharine itself is not utilized by the human body and will not remain in the human body for long, but it may contain certain foreign matter, including heavy metals, ammonia compounds, arsenic, etc. as minute impurities of the synthesis process. These impurities may be retained by the body and in the long run their accumulation may cause chronic poison. Sometimes, ingestion of a large quantity of saccharine (more than 5 g) all at once may also cause acute poison. For these reasons, saccharine may be used in foods within the regulated limit but its abuse is harmful to health.

AUTHOR: HUANG Wen-chu [7806 2429 3515]

ORG: None

TITLE: "Tonsils and Tonsillitis"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 32-33

ABSTRACT: Strictly speaking, tonsils are not glands because they do not secrete anything. Tonsils are composed of lymphatic tissues and do function as the first defensive line against bacteria and virus, however. For these reasons, in case of tonsillitis, whether or not tonsillectomy should be performed depends upon the conditions of the disease and the individual patient. This paper explains why tonsillectomy should not be performed for all cases of tonsillitis and other forms of treatment are in fact effective and available.

AUTHOR: None

ORG: Department of Ear, Nose, and Throat, Second Hospital, Wuhan College of Medicine

TITLE: "Bloodless Tonsillectomy With Laser"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p 33

ABSTRACT: In order to prevent hemorrhage during and after tonsillectomy, an electric knife technique was created in China in 1957. Since then, the authors, with the cooperation of other units, have made a CO₂ laser instrument for medical use. It has been used experimentally in 120 cases of tonsillectomy. Of the group, bleeding occurred to one case only after the patient caught a cold 6 days after the operation. Currently, a laser tonsil extractor is being studied and perfected. A photo depicting the process of laser tonsillectomy is included.

AUTHOR: None

ORG: None

TITLE: "Brief News of Sciences and Technology"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p 34

ABSTRACT: Three items are included: (1) Feng-shu-2 Corn Combine Harvester: It was made through the cooperative efforts of the Institute of Agricultural Machinery of the Third Division of the Heilungkiang Production and Construction Regiment, the Third Division of the Twentieth Regiment, and the Institute of Agricultural Machinery of the First Ministry of Machines. Several years of large acreage experiments have proved it to be of good quality. (2) New Type Construction Material--the Gypsum Board: It was successfully made in 1975 by Tientsin Municipal Tung-fang Red Brick Plant and the Tientsin Municipal Institute of Construction Material Designing. Currently, the use of waste gypsum of dye-stuff plants to make gypsum board is being studied. (3) Vibrating Conveyor: Shanghai Flame-resistant Material Plant and Shanghai Lift and Transport Machinery Plant have jointly designed and made a vibrating conveyor measuring 51 m in length. It is completely sealed and is therefore safe for transporting harmful gas or powder, as well as extremely hot or cold materials.

AUTHOR: None

ORG: None

TITLE: "Brief News of Sciences and Technology"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 p 35

ABSTRACT: Two items are included: (1) SWK Numerically Controlled Five-Axle Engraver: Under the direction of the party committees of Kuangsi Province, the Kuei-lin Electric Meter Plant, in cooperation with the Shanghai Watch and Clock Company, and the Shen-yang Meter Plant designed and made the instrument after working one year and one month. The engraver can engrave drawings, numerals, and words on parts of machines. (2) A New Type Liquid Metal Electromagnetic Pump: In February 1976, the Chi-nan Institute of Casting and Annealing and the Shantung Mao-p'ing Electrical Machinery Plant successfully made a new type liquid metal electromagnetic pump, using an entirely new form of distribution circuit. A photo of this new pump is included.

AUTHOR: LU Hsiao-wu [0712 2400 0710]

ORG: None

TITLE: "Biological Characteristics of Honeybee Propagation"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4, Apr 77 pp 36-38

ABSTRACT: This paper gives the facts concerning the reproductive system of the honeybee. The queen bee mates only once in her lifetime, but through parthenogenesis she can lay unfertilized eggs which develop into males, or drones only. The fertilized eggs develop into females, or worker bees and emerging queens, depending upon the nutritional condition. After mating, the queen stores in her body sperms which will survive 2 to 3 years. The worker bees are imperfect females which will lay eggs only when the queen is lost or disappears from the hive. These eggs will all develop into useless drones. When the queen is more than 2 years old, the stored sperms will be used up and she will be producing males in greater number until no worker bees will be produced. For these reasons, in honeybee management, egg-laying worker bees and old queen bees are two things to be afraid of.

AUTHOR: None

ORG: Office of Consolidation, Kiangsu Provincial Institute of Geography;
Nanking Municipal Office of Garden and Forest Management

TITLE: "A Verdant Nanking"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 4,
Apr 77 pp 38-40

ABSTRACT: Nanking is one of the most famous ancient cities of China, established more than 2,400 years ago. Its natural environment of mountains and the Yangtze gives it beauty and grace. Before the liberation, decay and dilapidation had set in, with desolated streets and and blighted buildings. In the beginning of 1949, soon after the liberation, no more than two thousand trees existed in all of the streets of the city. The verdant areas were mainly the government office buildings of the Kuomintang and the residences of the bureaucrats and capitalists. Today, the city streets boast more than 200,000 trees and the park areas have been enlarged three fold, totaling more than 6,000 hectares. This paper reports these improvements. A map of Nanking, depicting the areas of public parks is included.

AUTHOR: None

ORG: Yen-t'ai District Institute of Agricultural Machinery

TITLE: "Iron Ox of Mountains -- T'ai-shan-25 Type Caterpillar Tractors"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5,
May 77 pp 1-2

ABSTRACT: In China, about 40 percent of the arable land is in semi-mountainous regions, where about 50 percent of those who are engaged in agricultural production reside and work. Modernization of agriculture in mountainous and semi-mountainous regions is therefore extremely important. T'ai-shan-25 mountain caterpillar tractors are converted from T'ai-shan-25 wheel type tractors, equipped with a small 25 horsepower engine. Their center of gravity is relatively low to enable them to maneuver stably and safely on slopes of 18-28 degrees. Compared with wheel type tractors of the same horsepower class, this machine is less sensitive to soil humidity. The machine also has sufficient power reserve to work satisfactorily in high altitude regions of Yunnan, Tibet, etc. Visitors to the Chiao-tung region of Shantung Province can witness this tractor at work on the terraced fields of all levels.

AUTHOR: CHANG Ching-kan [1788 4544 1626]

ORG: None

TITLE: "Electrochemical Corrosion Prevation -- Negative Electrode Protection and Positive Electrode Protection"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 3-5

ABSTRACT: Corrosion will occur to most metals if they are placed in acid, alkaline, or saline solutions. Structural members or pipes made of metal and installed in damp soil or sea water will corrode after a certain period of time. This phenomenon is explained as a simple chemical reaction of surface primary battery action. Techniques of creating either a negative or a positive electrode and causing direct current to flow between the metal article to be protected and the added electrode for the purpose of corrosion prevention are explained, with various drawings.

AUTHOR: CHANG K'ai-sun [1728 7030 6676]

ORG: Institute of Mechanics and Electricity, Machinery Academy, First Ministry of Machines

TITLE: "Temperature Measurement With Transistors"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 6-7

ABSTRACT: Since semi-conductor materials became available, it has been discovered that the electric resistance rate of these materials changes abruptly with temperature changes. This special characteristic has been utilized to make very small and very sensitive thermometric instruments. Theories of these instruments designed to measure low temperature, ground temperature, body temperature, atmospheric temperature with balloons, and surface of roads ice formation condition. In the last instance, a small temperature sensitive component made of semi-conductors may be installed on the vehicle close to the road surface. Whenever the temperature drops to the freezing point, the device will send an alarm to warn the driver.

AUTHOR: CHENG Wen-kuang [6774 2429 0342]

ORG: None

TITLE: "Why is it That Among Various Natural Sciences, Astronomy was the First to Develop?"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 11-12

ABSTRACT: Engels once said that the sequential development of natural sciences should be studied. The first to develop was astronomy -- it was absolutely required by nomadic peoples and agricultural tribes to determine the seasons. The paper proceeds to explain that astronomy was the first to develop because from the very beginning the development of natural sciences was to meet the needs of production practice. Astronomical studies in China during the Warring States Period are briefly mentioned to illustrate the theory.

AUTHOR: TING I [0002 0001]

ORG: None

TITLE: "Colored Photographic Film Printing"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 13-15

ABSTRACT: Mao Tse-tung emphasized the unity of arts and politics and Marx believed that of all the senses of beauty, the sense of color is the form of the masses. With the above explanation to prove the importance of the subject matter, the paper proceeds to describe in detail the various processes with which colored photographic film printing is accomplished.

AUTHOR: None

ORG: Institute of Navigation and Transportation in the Yangtze River"

TITLE: "Segmented Cargo Conveyance -- a Form of Faster Transportation of Greater Load of Freight"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 16-18

ABSTRACT: On inland rivers, freight ships cannot be too long or too narrow. The ordinary boats currently in use are suitable for transporting fresh fruits, vegetables, eggs, etc. and can ship these goods very fast to their destination. As to heavy cargoes such as coal, minerals, etc. the freight ships are limited by the depth of the channel and the loading and unloading capacities of the harbors. This paper describes a newly designed form of inland navigation, imitating the box-car system of the railways. This newly designed system utilizes tugboats to tow segments of cargo tanks, which can be arranged in various different groupings. Whether or not this system is being carried out is not mentioned.

AUTHOR: LIU Fu-yu [0491 4395 3768]

ORG: None

TITLE: "Repair Cracks in Concrete With Epoxy Cement"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 p 18

ABSTRACT: Damage to site-poured or precast concrete may occur during storage, transportation, installation, or after an earthquake. For all non-load bearing members, ordinary concrete may be used to repair the cracks. For load-bearing members, cements with high viscosity and strength are needed and epoxy cement is one of these. Ingredients of two types of epoxy cement, methods of mixing them, and the method of using these to repair cracks in concrete are described.

AUTHOR: LI Yao-pang [7812 5069 6721]

ORG: None

TITLE: "Chloridizing Metallurgy"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5,
May 77 p 19

ABSTRACT: Chloridizing metallurgy is to use chlorine gas or chlorides to cause a chemical reaction with the minerals in the process of extracting metals from the minerals. This technique was in use as early as the 16th century to obtain gold or silver. Several chloridizing agents and the method of controlling the chloridizing condition are described. Advantages of chloridizing metallurgy are also briefly discussed.

AUTHOR: LIU Jen-ch'ing [0491 0088 1987]

ORG: None

TITLE: "A Discourse on Cellulose"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5,
May 77 pp 22-24

ABSTRACT: There are vegetable fibers, animal fibers, mineral fibers, and man-made chemical fibers. Cellulose is one of the major chemical elements of plant fibers. Just as starch and sugar, cellulose is also a form of carbohydrates. This paper describes the cell wall, the structure, and the properties of plant fibers, which may also be called cellulose fibers and the chemical structure and the ultra-molecular structure of cellulose. The current and prospective applications of cellulose are also briefly discussed.

AUTHOR: LI Hsiang-kao [2621 0686 7559]

ORG: Kirin Provincial Institute of Special Products

TITLE: "Effective Element of Ginseng -- A Saponinum"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5,
May 77 pp 24-25

ABSTRACT: Traditional legends may have overrated the power of ginseng in its life-saving and rejuvenating effects, but its effects as a tonic and as a medicine have never been denied. After a great deal of research, the contents of ginseng are gradually discovered and its effective element is believed to be a saponium, which has been obtained through chemical extraction. This ginseng saponium is found to be a mixture of 13 different saponiums. The chemical properties of ginseng saponinum may vary with the age of the plant and the various parts of the plant, and they may also vary with the method of processing the raw plant. The effect of the various processing methods on the quality and quantity of the ginseng saponium is discussed.

AUTHOR: LING Chun-hsi [0407 4783 6932]

ORG: None

TITLE: "Many Types of Solar Energy Water Heaters"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5,
May 77 pp 26-27

ABSTRACT: Solar energy water heaters are more common and more effective devices for solar energy utilization. It is estimated that several million such hot water heaters are in use in the world today, including a few places in China. These devices can generally supply 50-60 percent of the hot water needed by public baths, hair dressers, hospitals, and restaurants. They are most suitable for the region between 45 degrees N.L and 45 degree S.L. where the annual daylight hours are above 2000. Designs and theories of four types of solar hot water heaters are briefly described, with a discussion of the problems involved in the utilization of these devices.

AUTHOR: HSIUNG Kuo-yuan [3574 0948 3293]

ORG: Han-t'ang Production Team, Tung-kuei Brigade, Shih-ch'iao Commune, Ts'ang-wu County, Kuangsi Province

TITLE: "Several Concrete Problems of Methane Installation and Management"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 28-29

ABSTRACT: In methane utilization, if the fermentation tank is not constructed in such a manner so that the used residue is not automatically expelled, the residue will gradually accumulate to cause the gas production to be gradually reduced. For this reason, many tanks have to be cleaned once or twice a year. The cleaning process is troublesome and the resealing process also affects safety. This paper describes the design of a tank installed in the commune. It has a capacity of 12 m³. In the 2 years after its installation, it has produced methane gas regularly to cook food to feed 50 persons every day, and the residue is removed automatically without cleaning the tank. Designs of a stove, a lamp, and several component parts are also included with drawings.

AUTHOR: None

ORG: Worker-farmer-soldier Students, Class 73, Rice Teaching and Research Group, Huang-kang Branch, Hua-chung College of Agriculture

TITLE: "How to Increase the Quantity of Seed Production of Paddy Rice Sterile System"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 30-33

ABSTRACT: In heterosis utilization of paddy rice, a higher yield of seeds can reduce the size of the seed-bed and hence the cost of seed production. Following study, the opposite-unity relationship of the parent pair was correctly understood. The planting time of the pater and mater plants must be adjusted in order that their blooming and heading time coincides and will be at a time of suitable temperature and humidity. The planting density of the parent pair is also extremely important. Leaf-cutting operations should be performed in time and artificial pollination for the lower heads must be accomplished to improve the fruiting rate. With these innovations, the yield in 1976 of seeds of the sterile system was 247.8 chin/mu and that of the preserved system was 291.5 chin/mu. The total yield of the parent pair was 539.3 chin/mu.

AUTHOR: KAO Tsung-li [7559 1350 4539]

ORG: None

TITLE: "Prevention and Treatment of Liver Fluke Disease"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 32-33

ABSTRACT: This paper explains that the first intermediary host of liver fluke is snail and the second is fish. Men, cats, and other domestic animals are infected through eating infected snails and/or fish. Thorough cooking of food and sanitary management of night soil are necessary for liver fluke prevention. Symptoms of liver fluke are similar to those of hepatitis; therefore, it is often mistakenly diagnosed. Once the disease is correctly diagnosed with microscopic examination of bile or feces pesticidal drugs and drugs to correct malnutrition and anemia should be administered.

AUTHOR: None

ORG: None

TITLE: "Brief News of Science and Technology"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 pp 34-35

ABSTRACT: Three items are included: (1) DHY-1 Electronic Laryngoscopic Instrument: A picture of the instrument is included. The theory of the instrument is explained in K'O-HSUEH SHIH-YEN No 4, 77. (2) Short Fiber Asbestos Cement Pipe: The use of short fiber asbestos to replace either long fiber asbestos or steel reinforcement to make cement pipe for the new mechanically operated wells in rural villages has been made through the joint effort of Hopei Provincial Langfang District Asbestos Cement Pipe Plant, Hupei Cement Products Design Academy, Liaoning Provincial Ta-lien Asbestos Cement Products Plant, Shantung Institute of Cement Products, and Hupei Provincial Hua-hsin Cement Plant. (3) Cast Stone Elbow Joint Cutting Machine: For the purpose of resolving the machining problem of basalt cast stone pipes, the workers of the Repair and Inspection Brigade of Peking Shih-ching-shan Electrical Power Plant used waste materials and synthetic diamond blades to make the cutting machine. It can successfully cut the pipe into 15, 30, 45, 50, 60 degrees, and 90 degrees slanted or straight sections.

AUTHOR: None

ORG: None

TITLE: "Brief News of Science and Technology"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 p 35

ABSTRACT: Two items are included: (1) Prevention and Control of Corn Borers With Trichogrammatid Wasps: The successful experiment of the poor and middle farmers of I-tu County of Shantung Province with the use of trichogrammatid wasps to control corn borers is told. (2) Chi-nan Spotted Chickens--A New Chicken Breed, Bred for Meat as Well as Eggs: Shantung Provincial Agricultural and Animal Husbandry Experimental Farm used Shanghai P'u-tung chicken as the father and Liaoning Chuang-ho Ta-ku chicken as the mother to proceed with hybridization since 1961. After two generations of hybridization and three to five generations of horizontal crossing, the Chi-nan Spotted chickens were bred out, with four different colors of feathers. This breed grows very fast. The meat is of good quality and the eggs are large and numerous. A red-feathered roaster of this breed is pictured.

AUTHOR: None

ORG: Peking Municipal Institute of Water Conservancy Sciences

TITLE: "A New Type of Soil Hygrometer"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5, May 77 p 36

ABSTRACT: In the past the oven drying method had to be used to determine the soil moisture condition. This is much too complicated for the rural villages. In March 1975, Peking municipal Institute of Water Conservancy Sciences successfully produced the 75-1 type soil hygrometer with the assistance of the Institute of Water Conservancy Planning of the Ministry of Hydroelectricity and Shantung Institute of Industrial Ceramics. This instrument, when it is buried in the ground, gives a direct reading of the moisture expansion of the soil. The method of applying the instrument is described with drawings.

AUTHOR: CHENG Tu [6774 1653]

ORG: None

TITLE: "Aerial Survey of Chu-mu-lang-ma-feng"

SOURCE: Peking K'O-HSUEH SHIH-YEN [SCIENTIFIC EXPERIMENT] in Chinese No 5,
May 77 pp 39-40

ABSTRACT: Since the first successful conquest of the Chu-mu-lang-ma-feng of the Himalayas by the Chinese mountain climbing team on 25 May 1960, surveys of that mountain peak had always been accomplished on the ground surface, including the motion pictures of that region taken with cameras stationed on the ground surface. In June 1976, with the assistance of the people's liberation army and civil aviation departments, the Tibetan Plateau Comprehensive Survey Team of the Chinese Academy of Sciences took aerial pictures of natural geography of the region of that peak. This paper is a report of that aerial survey trip.

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