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HANDBOOK OF JAPANESE INDUSTRY IN JAPAN AND OCCUPIED AREAS

ASSEMBLAGE #43

Supplement No. 1

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File: JAPAN-ASS.

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Research and Analysis Branch OFFICE OF STRATEGIC SERVICES Honolulu December 15, 1944

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HANDBOOK OF JAPANESE INDUSTRY IN JAPAN AND OCCUPIED AREAS

ASSEMBLAGE #43

Supplement No. I (Pages 156-442) December 15, 1944

With Index to Both Issues

FCC short wave intercepts from Radio Tokyo and affiliated stations from March 1, 1944 to November 1, 1944. Compiled by Research and Analysis Branch OFFICE OF STRATEGIC SERVICES HONOLULU

HANDBOOK OF JAPANESE INDUSTRY IN JAPAN AND OCCUPIED AREAS

NOTE

Since bringing out this Assemblage in its original form, the need has been felt for a more detailed Table of Contents than the issue of June 10, 1944, contained, and for a comprehensive Index to all the names of corporations, controlling companies, promoting and financing associations, research institutions and legislative measures, which have been covered both in the original Assemblage and in this Supplement. Accordingly, both these features are herein incorporated.

Agricultural projects, including production and processing of foodstuffs, are omitted from this Assemblage and will be covered later under agricultural programs. Likewise, communications and transportation industries are reserved for separate treatment. Only these financial organizations directly concerned with industrial programs are given in these lists, complete information about financial programs being covered in Assemblage #44 and its projected supplement. Releases about industrial labor do not appear here but are recorded in Assemblage #45 on manpower.

Under "MISCELLANEOUS," data about industries not named in the main list are given, as well as about those companies which handle more than one industry. Under "GENERAL," items of general application to all industry are listed.

This Supplement is paged to follow in sequence the original Assemblage of earlier date.

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AIRCRAFT INDUSTRY

JAPAN

CORPORATIONS AND COMPANIES

Aichi Aircraft Manufacturing Company See Kurashiki Industrial Company, GENERAL CORPORATIONS, 5/23/44

Aomori Aircraft Factory

... The workers of the Aomori Aircraft Factory will occupy the Wakasaya, which has been turned into a dormitory... (4/6/44 Tok. Jap.)

Hakusan Industries Aircraft Manufacturing Factory

The 86 members of the "Konichi-tan" who were geishas or waitresses have joined the plane production line and are working in their own shop of the Hakusan Industries Aircraft Manufacturing Factory in Sashigaya-cho, Koishikawa Ward. As soon as emergency orders had been decreed, they immediately closed up their businesses, organized a volunteer labor corps, and went to work assembling plane parts in a certain factory... (9/16/44 Tok.Jap.)

Ishioka Glider Factory

Mito: Gliders are being mass-produced exclusively by female workers and girls of the Volunteer Student Labor Corps at the Ishioka Glider Factory of the Nippon Aeronautical Association.

(9/15/44 Tok.Eng.)

Katakura Industrial Manufacturers

The women factory workers of the Katakura Industrial Manufacturers have been fighting a gallant fight for an increased aircraft production ever since the enemy forces landed on Saipan, by relinquishing the nine-working-hour regulation for the women workers for that of 24 hours...

(7/4/44 Tok.Jap.)

Koyasan Temple Machinery Corporation

Nara: Answering the urgent cry for increased wooden plane construction, the Kooya (san) Temple, with all its rich forestry resources, has established the Kooya Temple Machinery Corporation to manufacture wooden plane parts. The company is capitalized at 180,000 yen...

(3/6/44 Tok.Jap.)

Kurashiki Aircraft Industrial Corporation See Kurashiki Industrial Company, GENERAL CORPORATIONS. 5/23/44

Manzami Sugi Fan Makers

Fan Makers in (Manzami Sugi) in Shikoku, famous for its fans, have recently discarded their business of a 300 years' standing, and have plunged into aircraft production. Their delicate technique in fan making will henceforth do much toward the increased production of airplane wings.

Nagano Airplane Parts Factory See Showa Aircraft Company, 7/15/44

Nakajima Aircraft Corporation

Airplanes to be produced by women alone. At this time when students and (teachers) on the production line are beginning to fall down in their output, the members of the Women's Volunteer Corps of a certain plant of the Nakajima Aircraft Corporation have voiced their determination -156-

A I R C R A F T I N D U S T R Y JAPAN CORPORATIONS AND COMPANIES

Nakajima Aircraft Corporation (Cont'd.)

thus: "Just watch and wait, we will surely produce planes by ourselves."

These women are keeping the production lines moving day and night by working through the 24 hours in three shifts... The complete construction of the planes from the initial supervision to the last finishing touches is being done by the women Corps members alone...

(6/10/44 Tok.Jap.)

Nisshin Aircraft Industry, Ltd.

The Nisshin Flour Mill Company has organized the Nisshin Aircraft Industry, Ltd., (capital 5,000,000 yen) as an affiliated firm. The new firm held its first general meeting on March 16, at which time the officers of the company were elected. The head office and the factory will be established in Aichi Prefecture. The Tokyo office will be located in the home office building of the Nisshin Flour Mill Company here. The officers of the new firm are as follows: President - Eizaburo Shoda; Managing Director - Mokichi Hyoto; Assistant Managing Director - Kiyoshi Kono; Director - Kyoji Oki; Superintendent - Katsutaro Aizawa; Adviser - Sadaichiro Shoda. (3/17/44 Tok.Jap.)

Shikishima Aircraft Industry See Shikishima Cotton Spinning Company, TEXTILE CORPORATIONS, 7/19/44

Shitsuemi Munitions Factory

Osaka: The Shitsuemi Munitions Factory, created through the efforts of the "War Blind" (soldiers who have lost their sight—trans.) who think it not enough to have given both their eyes in the war, has piled up an enviable record in aircraft production, which is looked upon with great expectations not only by the munitions industries but by all parties concerned. Last fall, the Blind Soldiers' Hall was erected at No. 17, West 3rd, Abeno-Showa-machi, Osaka. Its President, Takeo Iwahashi, noticing how hard the immates, who had received training for a new livelihood, were trying to get into aircraft industries, approached President Tokuji Hayakawa of the Hayakawa Electrical Industries. A factory was set up in the Hall; the machineries were all transported gratis by Mr. Hayakawa, who was touched by the tenaciousness of the veterans, and production of electrical aircraft parts was started.

(4/12/44 Tok. Jap.)

Showa Aircraft Company

Nagano: There is a factory in Nagano City making airplane parts whose officers are all cabinet makers by trade. From Managing Director Toyoichi Kobayashi of Asahi-mura, Kamiina-gun, on down, all the directors have been in the cabinet and furniture making trade for many years, having worked themselves up from apprenticeships. They have great consideration for the workers, and their technical leadership and labor management are all 100%. The factory's achievements in the production of wooden aircraft parts and...are also always 100%, and the factory is placed No. 1 among the cooperating factories of the Showa Aircraft Co. These directors banded together in 1941 and established a woodworking trade association, and with a joint investment of (23,000) yen started making ammunition boxes and other woodwork articles. Later, they converted the factory to making airplane parts and increased its capital to 180,000 yen in one jump to obtain tools and machinery. (7/15/44 Tok.Jap.)

Teijin Aircraft Company See Imperial Rayon Company, TEXTILE CORPORA-TIONS, 5/17/44

A IRCRAFT INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Tohoku Imperial University Aero-dynamics Factory

The Aero-dynamics Department of Tohoku Imperial University has established an aircraft manufacturing plant to solve problems regarding production and to help in boosting the nation's output of planes. The factory is expected to begin production by the end of this month.

(9/18/44 Tok.Jap.)

"CONTROL" ASSOCIATIONS

Aviation Industrial Association (Kookuu Koogyoo Kai)

Various plans have been considered since last fall on obtaining greater production of aircraft for 1944. The government established within the Munitions Ministry the Aviation Headquarters and also encouraged the formation of the Aircraft Industrial Association to accelerate production and to obtain uniformity of production... (4/16/44 Tok.Jap.)

Since January when the association was established, the Aircraft Industry Association has been considering various important moves. (Largely unintelligible portion here, seems to say that the offensive weapons section and the defensive weapons section have been separated so that now the latter is an independent organization. Further, this portion says that the fuels section has been abolished because its work had become very difficult and complicated—trans.)

(4/23/44 Tok.Jap.)

The Aviation Industrial Association held its second meeting of presidents at the conference room of the headquarters at 9 A.M. today. In attendance was Endo, (inspector) of the Military Aviation Headquarters of the War Ministry; also present were respective bureau directors and persons in charge of affiliated offices of the War Ministry. Those representing the Aviation Industrial Association were President and Vice-President Katagiri and ..., respectively; and those from the Navy Ministry were presidents and directors of the seven industries of (wd), motor engine, electricity, (wd) weapons, light metals, and materials. The meeting began with the people's pledge, followed by a greeting by President Katagiri. Then discussions began. The problem of aircraft increased production in compliance with the operations and the methods in which to obtain production materials for factories for the attainment of speedy and abundant production, and their supervision and structure were discussed. At 1 P.M. a lecture meeting was held. Vice-Admiral Shibuya lectured on the results of the administrative investigation of the industries engaged in aircraft production. Immediately following this, Technician Commander Ogawa, who recently returned from Germany, spoke on the fighting conditions in Germany. (8/26/44 Tok. Jap.)

GOVERNMENT ADMINISTRATION

Munitions Ministry

Sendai: As to the key to increased aircraft production, the General Bureau of Aircraft Ordnance of the Munitions Ministry (Gunjusho Kookuuheiki Sookyoku) is instituting a nationwide movement for the conservation of left-over materials (lit. "kaeri-zai" or "returned" material) ...Heretofore, when aluminum ore was made into pure aluminum, the waste material resulting from this process - in other words, the material "returned" - was used in the same form as raw material in the manufacture of airplane parts. This left-over aluminum alloy contained bits of impure iron and silica, and the iron, because of its crystallization in needle-like form, weakened the alloy. Professor Oohinata, noting this

AIRCRAFT INDUSTRY JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry (Cont'd.)

weakness, added a small portion of manganese to this waste aluminum, and by melting it at a certain temperature, caused the needle-like iron in the alloy to fuse with the manganese and crystallize in the form of a round ball. Thus, the weakness resulting from the crystallization of the iron into needle-like forms was eliminated. (3/20/44 Tok. Jap.)

The Munitions Ministry on March 31 announced the revision of the departmental setup of the Aircraft Ordnance General Bureau as of April 1, the beginning of the fiscal year. This revision is being made in the light of experience gained since the establishment of the General Bureau. The main points of the revision are as follows: 1. In view of the importance of aerial torpedo warfare in the present fighting, the knowledge gained from this type of tactics will be applied at once to the manufacture of the necessary munitions, and to this end the new Department of Aerial Torpedo Warfare, which was formerly under the second unit of the Department of Aerial Bombing Warfare (shabaku-ka)... 2. Change the name of the first unit of the division of machine bodies (kitai-ka) to Fuselage Division (Hikooki-ka). Formerly the second unit of the Department of Aerial Bombing Warfare had four divisions, but now five will be established, namely: bombing, aerial torpedo, electrical instruments, sextants (keiki koogaku), and materials. (3/31/44 Tok. Jap.)

To secure diamonds, an essential material in aircraft production, the Munitions Ministry will commence buying out privately owned ornamental diamonds in the form of purchase through private organizations on August 15, or three (3) months hence. The purchase plan was discussed with district governors and others concerned at ... in the Munitions Vice-Minister's office today. The main points of the plan are: 1. The object concerned in this purchase is diamonds and ornamental accessories which hold the diamonds; 2. Department stores designated by their respective trade organizations will do the purchasing at all hours as representatives of the trade organizations under the supervision of their respective governors in Tokyo Metropolis, Osaka urban prefecture, and Kanagawa, Aichi, Hyogo, and Fukuoka prefectures; 3. The Central Material Salvaging Association will go around to make the purchase in districts other than mentioned above; 4. The articles will be appraised and immediately paid for at designated places; and, 5. The purchase prices are fixed and they will be posted at purchasing places... (7/21/44 Tok. Jap.)

The Munitions Ministry is going to start the buying up of diamonds from August 15. These diamonds will be used in the aircraft industry to boost the production of planes. The Royal House of Chosen, greatly concerned with the production of aircraft, has at this time donated to the Munitions Ministry a white gold bracelet with a diamond setting, a white gold ring set with diamonds and emeralds, and a yellow gold ring with a diamond and ruby setting. Lieutenant General Saburo Endo, Chief of the Aircraft Ordnance General Bureau of the Munitions Ministry, visited the Royal House on August 12 where he was presented with the priceless (8/12/44 Tok. Jap.) rings.

RESEARCH, INVENTION, DISCOVERY

Greater Nippon Aeronautical Research Association

... Japanese aeronautical research is made up of the Army, Navy aeronautical research organizations, the Central Aeronautics Bureau, (Shih-tai) Aeronautical Research Office, Small Airplane Manufacturer's Research Association, and the various university research organizations.

A I R C R A F T I N D U S T R Y JAPAN RESEARCH, INVENTION, DISCOVERY

Greater Nippon Aeronautical Research Association (Cont'd.)

Since May of last year a Greater Nippon Aeronautical Research Association was created with all the researchers of either organization as members, and hence was started a cooperated combined research. On October 12 of the same year, the Japanese Cabinet passed the principles of this Aeronautical Research Association. According to these resolutions, an aeronautical station was established at (Tokyo) in April. Following its establishment, many other stations were set by the Cabinet. It is now hoped that these bureaus could be established all over the nation, each expert doing his best in the research of airplane construction, materials, flying techniques, and other special knowledge. It is hoped that in this manner, the research work would be centralized and united. Instead of small-scale, individual research, all these scientists could work together on a grand scale. To further another step, centering around the experts, establish a Special Expert Research Association for the research of special work; the results from such a set-up are certainly worthy of (7/24/44 Hongkong Can.) keen attention.

Scientific Research Council

The Society (for the Advancement) of Scientific Technique in the Aircraft Industry had been making a study of how to utilize most efficiently the materials and labor at present in the hands of airplane factories. Recently, the Society completed a plan and decided to present this plan as its fourth report to the War and Navy Ministers for their deliberation, at the same time announcing the contents of the report on August 9. This report is intended to provide further technical plans necessary to maintain the second expansion of airplane production technique which was instituted in August, 1943, and to improve production methods. The production of airplane parts has been the bottleneck of airplane production. This report emphasizes the necessity of a scientific utilization of materials which go into the production of airplane parts, with economy as the keynote.

The Aircraft Division of the Scientific Research Council, in order to utilize the methods of employing malleable and cast iron in the production of airplane parts, has been deliberating on definite plans which would insure immediate stepped-up production. As a result, the Aircraft Division held its fifth meeting on July 8 for the purpose of drawing up a report answering the questions of the War and Navy Ministers. On August 10 an announcement was made of its findings. Malleable and cast iron products have been used in the manufacture of automobiles and railroad equipment in Japan, and over a long period of years have filled a large demand as substitutes in the making of light metal and copper alloys, as well as in articles of cast steel and in tempered steel plate for ship and ground weapons. Therefore, the technique involved in their production is well developed. In view of the urgency of utilizing these methods in the production of airplane parts, the Scientific Research Council has been making a study of this problem. The contents of the report stress the need of employing malleable and cast steel technique methods in the aircraft production field. For this purpose, vigorous action on the part of the aviation authorities, a production plan, and a thorough understanding of efficiency tests on the part of the management are necessary. As a primary step in carrying out concrete measures, the main emphasis will be placed in the utilization of the tested and reliable (wd), and malleable and cast iron. The report advocates the immediate designation of two or three leading factories, which would concentrate their entire efforts toward improving the total efficiency in the use of materials, labor, and equipment, in order to insure the best (8/10/44 Tok. Jap.) technical methods.

As a result of the progress recently made in the synthetic resin industry, it has been proved that by substituting synthetic resin products

A IRCRAFT INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Scientific Research Council (Cont'd.)

for the great number of metal ball bearings and copper alloy bushings and cocks hitherto used in planes as steering and operating parts, not only can the use of special metals and copper alloys -- which are precious wartime metals -- be curtailed to a great degree, but the functional efficiency of the machinery itself can also be greatly improved. The Aircraft Division of the Scientific Research Council recently decided on measures to further improve the functional qualities of ball bearings, bushings, and cocks, by using synthetic resin plane parts, and submitted a report to the War and Navy Ministers. As a result, synthetic plane parts will be used in great numbers. Not only will they serve as substitute products, but because their reliability and durability for use as steering and operating parts have increased, the Scientific Research Council will very shortly perfect production technique. A movement will be launched to popularize this technique in all the industries concerned. and this will be a great contribution to the mass-production of airplanes. (8/11/44 Tok. Jap.)

Wooden Planes

In connection with the construction of these wooden planes, Mr. Seiichi Kato, who assisted Section-Chief Sugawara, and who exerted his efforts in this work, spoke as follows concerning the difficulties which existed until they had attained success. "We have constructed a plane with the use of (wood) only during the midst of these decisive-wartimes, and I think that to use wood is the best (thing). When one speaks of wooden planes...however, the plane we have now designed shows indications of ... in connection with its weight, speed, and ..., and is far better than the English Mosquito Bomber. In connection with the points which we (discovered) during our research, the weight of a wooden plane was formerly from 40% to 50% greater than a plane constructed of metal, according to former ... The weak points were that the outer shell had to be hardened, and that ... wooden plates had to be utilized. However, in order to strengthen this outer shell, ... the ... would not function right, and there was fear that aerial (accidents) might occur. While being pressed with the ... of motors ... We have now invented a method whereby the fuselage of a plane can be tightly put together through the medium of a vacuum -- an even pressure is applied on the entire outside surface of the fuselage, and thus we have succeeded in (putting together) a perfect (framework). We, at this time, will stress the ... of wooden planes, and by utilizing the unlimited amount of wood, we hope to send excellent and superior planes to the (battlefronts). (9/14/44 Tok. Jap.)

PRODUCTION PROGRAMS

Tokyo: A correspondent of the Mainichi newspaper reported that aircraft production in all Japanese factories has been greatly boosted this year. This was partly due to...production methods as well as an increase in factory hands. Comparison of figures for February show an increase of production of some 300% to 500% over the corresponding period last year. Workers employed were more than double that of last year. (5/19/44 Singapore Eng.)

The conversion of machine tool and production machinery factories into plants for manufacturing aircraft is progressing steadily. The conversion is taking place despite difficulties and great hopes are placed on the industry as a result of the change-over. With the conversion of the (wd) factories airplane production, the whole machine manufacturing industry is now devoting its production effort to turning out aircraft. The present situation demands that the related industries help in the campaign to produce more planes and greater efforts must be made by the machinery manufacturing industry... (8/18/44 Tok.Jap.)

A I R C R A F T I N D U S T R Y MANCHUKUO CORPORATIONS AND COMPANIES

Manchukuo Aircraft Works See Manchukuo Industrial Company, 6/28/44

GOVERNMENT ADMINISTRATION

Transportation Ministry

The Manchukuoan Government, in consideration of the national importance of aviation and aviation projects, has dissolved the Manchukuoan Aviation Affairs Association as of October 1. Thus it has been decided that projects which the Manchukuoan Aviation Affairs Association had heretofore handled will be carried out on a far greater scale in the hands of the Government. Further, the Manchukuoan Government, planning a survey of aviation technicians, has decided to establish a new aviation section (kookuu) and an aviation (office) (kookuukan) within the Transportation Ministry in conjunction with the foregoing action. (10/2/44 Tok. Jap.)

RESEARCH, INVENTION, DISCOVERY

Milk Casein for wooden aircraft

In Manchukuo milk casein which is indispensable in the construction of wooden aircraft will soon be produced on a large scale. As a result of the success made by the Pinchiang provincial government in the small scale production of milk casein from skimmed milk, the manufacture of war-vital milk casein will soon be started in northern Manchukuo where milk is most plentiful.

(4/24/44 Hsinking Eng.)

CORPORATIONS AND COMPANIES

Chosen Airplane Industries Joint-Stock Company
The Chosen Airplane Industries Joint-Stock Company (Chosen
Hikooki Koogyoo Kabushiki Gaisha) will be organized. With
14 powerful industrialists of the Chosen Poninsula as projectors, the establishment of the Chosen Airplane Industries
Joint-Stock Company has been progressing, and an official
grant of permissions was received yesterday. It has been
decided that an inaugural general assembly of the company
will be held in the early part of September.

(8/18/44 Tok. Jap.)

CORPORATIONS AND COMPANIES

Wooden Propeller Factory

Outstanding among reports of all-out war production efforts is the remarkable achievement of the wooden propeller factory at (Djawa-Djana). This firm is reported to have increased its production one hundred fold since the beginning of operations two years ago. (10/20/44 Batavia E.)

ARMS AND WEAPONS INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Osabune Works

Okayama: In Okayama Prefecture, the producing center of Bizen swords, which has turned out such famous blades as the Osabune, white-clothed (i.e., hospitalized - trans.) heroes are now about to be trained as swordsmiths. On the occasion of Army Day on the 10th, classes for training in the technique of making and tempering Japanese swords will be started for disabled soldiers, at the Osabune works and three other plants in the town of Miyuki, Oku County, in this prefecture, which is known as the birthplace of the Bizen sword. (3/8/44 Tok.Jap.)

Tijin (Teijin) Arms Company See Imperial Rayon Company (TEXTILE CORPORATIONS, 5/17/44)

Weapon Manufacturing Association

Niigata: ... The cutlery manufacturers of the city of Sanjoo have organized and started the activities of a Weapon Manufacturing Association. Harukichi Nakamura, 37, a swordsmith of Tajima-cho, turned his talent to the making of... for the Southern Regions. ... the forces of our Imperial Army are using these swords to level jungles...

GOVERNMENT ADMINISTRATION

Munitions Ministry

The production of electrical weapons for aircraft, so necessary to our army and navy air forces operating in the southern skies, has mounted to a figure which is several times that of the production of aircraft itself since the establishment of the Air Weapons Bureau (Kookuu heiki sookyoku) in the Munitions Ministry in January of this year. The output of these weapons is steadily increasing. In viewing the production situation since the first of the year, one finds that the production figures for February were greater than that of January, while March production was much greater than the previous month's output. Since the beginning of the new fiscal year, a still greater gain in output was noticeable. The progress is remarkable as each succeeding month witnesses a greater production over the previous month. The present production capacity has produced results which may equal if not surpass that of enemy America. There is yet more room for still further increase of production. The production of electrical weapons has shown such remarkable results because the civilian companies, encouraged by the Bureau of Air Weapons, put their total efforts into one unified industry and cooperated toward overcoming the bottlenecks in funds, labor supply, and transportation. The production of aircraft and electrical and other weapons is now going on full blast. (5/10/44 Tok. Jap.)

Technical Advisory Department had been set up in the Aircraft Weapons General Bureau during the latter part of August and that in creating this new department a partial reorganization of the Aircraft Weapons General Bureau was carried out. The Production Technical Advisory Department, set up temporarily as a special department, will undertake the task of improving the quality and quantity of aircraft weapon production. The Department is headed by Vice-Admiral Ryutaro Shibuya, one of the nation's foremost authorities on aircraft production technique. He is staffed by capable technical experts of the Army, Navy, Aircraft Weapons General Bureau of the Munitions Ministry, and private organizations. The department is organized into four sections, which are as follows: Cast Metal Works, Machine Manufacturing, Management of Parts, and Analysis of Construction progress, all of which are considered the most difficult

ARMS AND WEAPONS INDUSTRY JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry (Cont'd.)

problems at this time. To avoid the decline in efficiency, a tendency following a change in the wartime administrative machinery, the object of this setup is to unify and manage a practical technical administration by getting the technical experts of the War, Navy, and the Munitions Ministries to work from their respective positions.

(9/15/44 Tok.Jap.)

CHEMICAL INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Asahi Glass Company See Nippon Soda Company, 6/15/44

Hodogaya Industrial Chemicals Company

Tokyo: The Hodogaya Industrial Chemicals Company held a general stock-holders' meeting on May 15, at which time it was decided to declare an 8% dividend on preferred stock. At the same time, it was decided to increase the company's capitalization from 26,450,000 yen to 60,000,000 yen. The increased capitalization will be made by the re-issuance of new shares to stockholders at the rate of two new shares for 10 old shares. This action is expected to be completed by the end of May. (5/16/44 Tok.Jap.)

Japan Dyestuff Manufacturing Company See Sumitomo Chemical Company, 6/30/44

Japan Fertilizer Company

The Japan Fertilizer Company has absorbed two other fertilizer companies and increased its capitalization to 67,000,000 yen. This merger effected with the sanction and aid of the Agriculture and Commerce Ministry.

(4/23/44 Tok.Jap.)

Japan Manure Manufacturing Company

In order to positively develop phosphate deposits in Japan, the Japan (Manure) Manufacturing Company has decided to open up new mines in the (Kichikawa), (Aomoji), Hokkaido and Karafuto districts. A phosphate mine in the (Ichikawa) Prefecture is already in operation and is showing very promising signs.

(6/28/44 Hsinking Eng.)

Nippon Soda Company

Domei, Tokyo: ... The recent merger of the Asahi Glass Company, a subsidiary of the Mitsubishi interests, and the Nippon Soda Company makes possible a more versatile management in the use of the present technical skills and materials on hand. The proposal for the consolidation of the Nippon Plate Glass Company, a subsidiary of the Sumitomo interests, and the Sumitomo Chemical Industry, is being given strong support in some quarters. It is attracting the attention of interests in the various fields of endeavor and at the same time raises the question of the (need) for re-examination of the glass industry. In other words, the Nippon Plate Glass Company has been engaged in the manufacture of plate glass. refractory bricks, and other such special products but as a result of the cut in its soda (ask) supply quota, operations quickly suffered a setback. Also, because of the reduction in the fixed prices for its products, considerable difficulty in management is anticipated. In the last general meeting a 4% dividend (instead of) the (then) current 3% was proposed and various such measures to combat the situation have been in effect but definite solutions have not been found. Moreover, the question regarding the augmenting of capital have made for closer ties between the Nippon Glass Company and the Sumitomo Chemical Industry, giving rise to the opinion that the two companies should be merged, but as conditions involved in this merger differ somewhat from those in the consolidation of the Asahi Glass and Nippon Soda, it is recognized complications can-(6/15/44 Tok. Jap.) not be avoided.

Shimane Chemical Manufacturing Company

The new Japan Rayon Company held its regular general meeting on June 29 in Tokyo. As a result of current losses, it was decided not to declare dividends. Also, a part of the articles of association was revised. The company also decided to change its name to the Shimane Chemical

CHEMICAL INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Shimane Chemical Manufacturing Company (Cont'd.)

Manufacturing Company. The officers of the new company are: Chairman, Toshi Hayashi; President, Bungo Kikuchi; and Managing Director, Hisao (6/30/44 Tok. Jap.) Akashi.

Sumitomo Chemical Company

The Sumitomo Chemical Company held a special general meeting on June 29 at its main office, at which time its merger with the Japan Dyestuff Manufacturing Company was approved. The number of its executive officers was increased by one vice-president, five new members of the Board of Directors, and one auditor. Seijuro Kobayashi, a Director of the Sumitomo Chemical Company, was elected Vice-President. Jiro Inabata, Naoji Azuma, Shozoo Ochi, Hideo Munakata, and Shoo Ohno, all from the Japan Dyestuff Company, were elected to the Board of Directors; Taroo Inabata, also from the Japan Dyestuff Company, was named Auditor. As a result of this merger the capital of the Sumitomo Chemical Company was increased to 110,000,000 yen, of which 98,750,000 yen has been paid up. (6/30/44 Tok. Jap.)

"CONTROL" ASSOCIATIONS

Chemical Industries Control Association

By virtue of the establishment of a Carbide Cooperative (Kaabaido kyoohan) on March 16, the Distribution and Control Department (Haikyu Toosei Kaisha) under the Chemical Industries Control Association has abided by the terms of the Control Association's ordinance (Toosei kaisha rei...) thus strengthening the legal structure in the relations between the control associations. The structure answering the unification of requisitions under the drafted bill was completed by the Control Association, and preparations are now being made to carry out the unified filling of requisitions for essential manufactured products (as) any time upon notice by the Munitions Ministry. In other words, the filling of orders will be carried out most effectively and speedily under this system. Nitric acid will become a controlled item under the Sulphuric Acid Control Association (Ryuusan Toosei Kaisha). Similarly, mineral soda, ... magnesium chloride, and magnesium carbonate will be classed as chemicals within the soda industry. Thus, there is hardly any chemical product that does not come within the scope of the Control Association. In order to effect a unification in filling the orders, considerable investigation of the setup, as well as delivery regulations, will be necessary according to the class of the finished product. (3/17/44 Tok. Jap.)

The Chemicals Industry Control Association, in order to speed the flow of raw materials to the mills, has for some time been studying a plan for establishing a single materials supply company for the entire chemicals manufacturing industry. However, in view of recent experiences of control associations, the plan to establish a single company was abandoned. Instead, the authorities are now working to rationalize the operations of the eleven existing materials supply companies and thus insure proper distribution and supply of all materials needed for (4/4/44 Tok. Jap.) production.

Aiming at increased production of soda, the Chemicals Control Association has completed plans for the organization of a cooperative association to boost soda production. This body will be composed of representatives of the Munitions Ministry, the Ministry of Transportation and Communications, the Ministry for Greater East Asiatic Affairs, the Iron Ore Control Association, the Light Metals Control Association, and other interested government and civilian groups. The inauguration of this association -166-

CHEMICAL INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Chemical Industries Control Association (Cont'd.)

will be formally held on June 6. The Chemicals Control Association hitherto had been considering the soda industry as an essentially peacetime industry, as it was associated with those industries manufacturing rayon, staple fiber, and paper products. The Association is now trying to emphasize to the interested parties that a revolutionary change has come over the soda industry because of the increasing demand for soda. The establishment of the soda cooperative is being watched with interest.

(6/1/44 Tok.Jap.)

Tokyo: The Chemical Industry Control Association has decided to carry out the exchange of information on industrial techniques, which has been contemplated for some time. The Association has been working out a plan with the object of interchanging publicly information on special techniques and industrial rights held by operators of industrial chemical firms engaged in the manufacture of intermediate and processed products and by-products. Ten different types of techniques to be exchanged have been submitted to the Association by its members and deliberations have been made as to how information on these techniques will be published. As a result, it was decided to form within the control organization a committee on the exchange of techniques. This committee will plan a definite outline for each item. The Association at present is studying rules and regulations to be followed by the proposed committee and the selection of members to the committee. (6/16/44 Tok.Jap.)

Tokyo: As the soda industry was pressed with a new raw material problem because of the supply of North China salt, the Chemical Industry Control Association with the aid of the authorities concerned has established a Soda Production Council in the control organization and has embarked on a program of acquiring raw materials. The first meeting of this new Council will be held during the first part of July. There have been numerous questions as to what policies the Council should follow. There were some differences as to whether the Council should actively plan for a mutual understanding among the various companies to acquire salt from North China or whether the Council should rely on the domestic supply of salt and on the conservation of raw materials in its possession. It was finally decided to rely upon the domestic supply.

Chemical Science Advancement and Control Association

...With a view of improving the technique of producing methanol, the Chemical Science Advancement and (Control) Association has decided to organize the Production Technology Deliberative Council made up of persons in charge of the technical departments in the factories engaged in the production of chemicals. An inaugural meeting was held at a certain factory of the Japan Raw Silk Company. (5/12/44 Tok.Jap.)

Japan Bittern Products Companies Association

The Japan Bittern Products Companies Association in accordance with the Commercial and Industrial Association regulations has been changed to a control association. The inaugural ceremonies were held on June 7. At the seme time its name was changed to the Japan Bittern Products Industries Control Association, and the election of new officers was also held. 1. The Association will operate business as a subsidiary branch of the Chemical Industry Association. 2. The purchase of materials necessary to the production of bittern, the sale of the products, and their storage will be done on a cooperative basis. 3. Shoji Yokota, head of the research connected with the bittern products industry, will head the Second Division of the Chemical Industries Control Association.

CHEMICAL INDUSTRY JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry

In connection with the granting of orders concerning chemical products and goods, the Army and Navy and civilian authorities had been granting orders without any mutual connections whatsoever, and this resulted in confusion within the factories which took over these orders. Therefore, the Munitions Ministry in accordance with the previous Cabinet-approved outline of controlling the granting of orders, will establish the Chemical Industrial Products Section Council within the Central Granting of Orders Council, and thus will control the granting of orders concerning chemical products to the factories. The Munitions Ministry also approved the outline for the control of granting of orders concerning the foregoing chemical products. According to this outline, the method by which the authorities will control the granting of orders will be as follows. Firstly, the affiliated parties will be asked to examine and hand in their required figures. On the other hand, the Chemical Bureau of the Munitions Ministry will assist the industrialists in their production, and the material required in this production will be uniformly distributed by the Chemical Bureau of the Munitions Ministry. This controlling of the granting of orders will cover firstly, (wd) manufactured products, asbestos and cement products, glass products, (wd) medical supplies, soap, skins and hides, and leather. Also, preparations are being made in order to control the following: (wds) and rubber goods, and other products. Furthermore, this control of granting orders will be successively carried out as fast as the preparations can be made, but most of them will be carried out by the first quarter of the (fiscal) year of (3/18/44 Tok. Jap.) 1944.

RESEARCH, INVENTION, DISCOVERY

Agricultural Chemistry Institute

Kyoto: It is disclosed that Yoshiyuki Inouye of the Agricultural Chemistry Institute of the Kyoto Imperial University recently completed research on the manufacture of excellent tanning material of palm oil. It is learned the manufacture of this substitute tanning material will shortly be started on a commercial basis. Professor Inouye claims his method, in which a hydrolysis process turns palm oil acid easily into aldehyde, which in turn is emulsified, obtains 100% yield.

(3/8/44 Tok.Eng.)

Borax

... Production of borax (hoosa) a vital necessity in making of electronic weapons, is also proceeding according to expectations. Borax is vitally essential to the production of vacuum tube glass, and for its supply the country relied on imports before the war. Since the outbreak of the war, however, search for sources of borax was carried out all over the ... Japan and Chosen, and domestic production was pushed. Recently, tourmaline, a source of borax, is actively being produced, and its deposits in Japan and Chosen are said to reach (so many) million kilograms. It is contributing greatly to the production of electronic weapons. There are at present two methods of processing tourmaline in making borax. One is the alkali method of a certain research laboratory, and the other, the sulphuric acid method of a certain pharmaceutical company. Rapid production by the first method is considered difficult in view of the soda supply situation, and it is said that the best way is to use sulphuric acid which at present is readily available. At any rate, the speedy production of borax from tourmaline ore is being demanded by those concerned, and it is expected to add greatly to the production of electronic (8/16/44 Tok. Jap.) weapons.

CHEMICAL INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Physical and Chemical Research Institute See GENERAL RESEARCH, Board of Technology, 4/24/44

Tartaric Acid

Koofu: In Yamanashi Prefecture where everyone is actively engaged in the production of tartaric acid, which is essential to the manufacture of radio-controlled weapons, a method of extracting the acid from grape vines and wine sediment has been discovered, enabling grape producers in Yamanashi to steal the march on other grape growers. Yamanashi has been producing half of the country's output of tartaric acid and through this new discovery prefectural authorities hope to brew the entire annual yield of 4,000,000 kan of grapes to make the valuable acid product.

(3/1/44 Tok.Jap.)

Nagano: ...Recently it was discovered that the outer covering and shells of May-beetles and chrysalis were precious material for tartaric acid, and so the people of the prefecture are exerting their efforts to catch beetles and chrysalis. Technical expert Hamada, of the Prefectural Silkworm Experimental Station, spoke as follows: "I remember that before the war Germany purchased a great deal of crab and cod, a product of our northern waters. The shell of the crab was used as raw material for tartaric acid, which is necessary for secret weapons. Shells from any kind of insects like the May-beetle or chrysalis can be used for weapons. From 4,000,000 kan (kan is about 8-1/2 lbs. - trans.) of beetle and crab shells, as well as from grapes, a tremendous amount of weapons can be produced."

...a German submarine stopped over at a place called (Shinwa Shinzanji) in (Horyuu) city in Gifu Prefecture, to render assistance in the processing of tartaric acid, just so the enemies of Japan may be crushed as quickly as possible. There is a grape orchard at this (Shinzanji) which is capable of producing 2,500 tons, and (led) by (possible name - trans.), German...technicians are personally lending a hand daily to the 3,000 pupils of the (city) National School who are (offering) their services at this place, in the production of tartaric acid...

(9/21/44 Tok.Jap.)

To meet the demand for a drastic increase in the production of tartaric acid, essential for production of electrical weapons, Dr. Kitahara, Assistant Professor of the Kyushu Imperial University, discovered a method which will double its production in a shorter period of time. Dr. Kitahara expressed confidence that a sufficient amount of tartaric acid can be produced from wild grapes, abundant in Manchukuo.

(10/4/44 Tok.Jap.)

PRODUCTION PROGRAMS

Marked progress has been attained in the domestic production of carbide, indispensable new material for wartime industries, according to a survey by the Chemical Industrial Control Association. This survey revealed that 99% of the quota for the last month was produced in the first twenty days of April. The great increase in the production of carbide was recorded despite the fact the wet season was delayed about ten days this year. With high water in the river during May and June, a further increase in carbide production is expected.

(5/10/44 Tok.Eng.)

CHEMICAL INDUSTRY CHINA CORPORATIONS AND COMPANIES

Central China Salt Industry Company

See Central China Development Company, MISCEL. 3/8/44, 10/3/44

Chemical Manufacturing Company

The first chemical manufacturing company in Canton has recently been manufacturing a large quantity of washing soap, and very soon this soap will be on sale. The name of the soap is Peacock and the quality is very high. Its texture and durability is much higher than inferior soaps on the market. Recently because of the sudden lack in the commodity, the price of soap sky-rocketed. However with the recent sodiummade products reappearing on the market, the price of soap is gradually dropping. The troublesome problem of obtaining soap among the population from now on will be satisfactorily solved. (4/28/44 Hongkong Cant)

Mitsubishi Chemicals Company

The Munitions Ministry has taken various measures to secure greater production of salt brine, which is a source of magnosium. The measures included those dealing with the salt brine industry monopoly, ways and means to accelerate the collection and distribution of the material and the study of salt brine price revision. Along with plans for boosting magnesium production, the government has set this year's salt brine production goal at several times that of last year. The government also hopes to realize greater synthetic brine production. The government will put greater emphasis on the production of salt brine in North China and in the Kwantung Leased Territory in addition to the domestic brine output. In the past, very little emphasis had been put on the salt brine output of North China and the Kwantung Leased Territory. Most of the brine was thrown away as waste. ... Since calcium chloride, a by-product of ... soda, is used in the menufacture of synthetic brine, the Mitsubishi Chemicals Company, the Tokuyama Soca Company and ... Soda Company have received an order for the production of synthetic salt brine. (4/19/44 Tok. Jap.)

Shantung Salt Company

Tsingtao: With the production of a certain number of tons of salt as its goal, the Shangtung Salt Company has strived for mass production through improvements in flooding the salt-fields, and by bringing (motive) power into full play, and resulted in finally topping the anticipated by so many tens of thousands of salt extracted from the brine fields during the month of July. This is a new high since 1937 and more than double last year's mark. The company is speeding preparations for auxiliary fields in order to cinch the August and September productions. (8/14/44 Tok. Jap.)

Tokuyama Soda Company See Mitsubishi Chemicals Company, 4/19/44

Yuleungyip Chemical Company

The new glass factory established by the (Yuleungyip) Chemical Company, Kwantung branch, is recently completed. On May 1 The new factory started business on (Hanmon) Road. The speedy development of Kwangtung industry is certainly substantial. Now with the establishment of a new glass factory,

CHEMICAL INDUSTRY CHINA CORPORATIONS AND COMPANIES

Yuleungyip Chemical Company (Cont'd)

we can see how well the industrial recovery situation in the peace territory has progressed. (5/5/44 Hongkong Cant.)

PRODUCTION PROGRAMS

Export of crude salt (Motojio) of the Kwangtung) Province is continuing to show excellent results, and the amount of exports since April has already reached 70% of the goal set for exports to Japan. On the other hand, the buying up of salt from the salt fields of local inhabitants is gradually increasing, and it is expected that by the middle of November at the latest exports of crude salt will reach the planned goal of exports to Japan. (9/12/44 Tok. Jap.)

This year's output of salt in (Suchen) Shansi Province has doubled that of last year, showing the largest output in the past seven years, it has been announced by the salt bureau of Suchen.

(9/7/44 Tok. Eng.)

RESEARCH, MANCHUKUO DISCOVERY

Graphite

(Yomiuri-Hochi) Mutangkiang, Manchukuo: The world's richest graphite deposits have been discovered in the (Ryuumoo) River basin of Mutangkiang Province near the Manchukuoan-Soviet border. Graphite is an indispensable source of working material in the thermo-chemical industries because of its extreme heat resistance quality. Graphite can withstand a temperature of 4,000 degrees. Hence, in the war-time electro-chemistry field, it is absolutely necessary for the manufacture of electrodes and crucibles. The graphite in the Ryuumoo River basin is of very high quality, scale-like in appearance. The deposits contain thousands of tons of the precious mineral. The deposits contain 80% graphite, surpassing by 20% the rich fields in Chosen which up to now was considered the best in the Far East. Its discovery was accidental. The deposits were found by local Manchukuoan (3/16/44 Tok. Jap.) farmers.

Tartaric Acid

Wild grapes which are found in the mountains and fields of northeastern Manchukuo can be used for material for tartaric acid which is necessary for radar. The material for this tartaric acid exists in large quantity, and since it is an emergency industry which was born out of this decisive war, its increased production power (divides) northern Manchukuo into two, east and west. If wild grapes are ..., in the mountain ranges in East Lungkiang Province, Kirin, Jehol and Mutankiang, ... is found along the railroad in ... Province, (Eastern) Hsingan Province and (Western) Hsingan Province. Great quantities are found in this area.

CHEMICAL INDUSTRY KOREA RESEARCH, INVENTION, DISCOVERY

A large quantity of mountain grapes is needed to make a chemical called tartaric acid. Hence the Government-General has decided to start a movement throughout Chosen to gather mountain grapes from July 20 ... It has been decided to designate the period from the latter part of July to September as a tartaric acid production increase period and to gather a large quantity of mountain grapes by mobilizing pupils of national schools as well as patriotic societies and (forestry and agriculture) associations.

(6/4/44 Keijo Korean)

BURMA PRODUCTION PROGRAMS

Before the war, 50,000 tons of salt were produced yearly and plans are now under consideration to open now salt beds in certain regions. Burma is expected to produce enough salt for export.

(5/18/44 Tok. Jap.)

FRENCH INDO-CHINA PRODUCTION PROGRAMS

Saigon: The annual production of salt in French Indo-China averages 200,000 tons, of which 150,000 tons are consumed at home, leaving about 50,000 tons for export. Prospects for a heavy salt yield are especially bright in the Baria area where it is expected from 60,000 to 70,000 tons of salt, or half again as much as the 40,000 ton output achieved last year, will be produced ... Before the outbreak of the war, the levy on salt amounted to 8% of the total yearly revenue. Further, the tax on salt amounted to 11% of the total customs duties. In 1943 the huge sum of 7,700,000 piastres in salt revenue was realized, which represented from 4% to 5% of the total 1943 revenue of 170,000,000 piastres. With the revision of the tax system, salt revenue for the 1944-45 fiscal year is expected to meach 10,000,000 piastres. (6/2/44 Tok. Jap.)

MALAYA PRODUCTION PROGRAMS

Seremban: Enterprising Negri Sembilan which before the war had no factory and depended much on rubber and tin is now fast becoming a highly industrialized province for besides her numerous industries she will attain self-sufficiency in salt between September and October this year. The production of salt was experimented upon before the war, but discontinued until the advent of the Japanese Administration. It is now produced in large quantities in Kampong Chuuah, near Port Dickson. Already 130 acres of salt fields have been turned to advantage.

(7/14/44 Singapore, E.)

CHEMICAL INDUSTRY <u>EAST INDIES</u> CORPORATIONS AND COMPANIES

Medan Drug Manufacturing Company

With a view to attaining local self-sufficiency in sulphur medicines for skin diseases, the ... Drug Manufacturing Company established itself in Medan last March and has been making preparations for production. They have completed installation of drug manufacturing machinery and begun production at the company's factory in (Bindjai) in the East Coast Province. At present the company is producing 500 tons of flower of sulphur each month from locally mined sulphur, one ton of derris powdor and two tons of sulphur ointment containing flower of sulphur, derris powder and ... oil. Thus this company is producing effective insecticides and skin-disease remedies from local products. The sulphur ointment especially is a fine product and three or four applications will cure a tropical ulcer of the cancer type which is very common among the natives. This company is working to increase the future output of this product and at the same time is studying the manufacture of insecticides, nicotine sulphate from derris powder and leaf tobacco, which are the special products of the Medan region. (7/21/44 Tok. Jap.)

Pontianak Drug Manufacturing Company

Pontianak: The drug manufacturing plant, under comtemplation by the company in charge, has recently been completed and will commence operation soon. This is part of the plan to obtain local production of insecticides. The harvesting of derris root, from which the derriscide is made, is progressing smoothly. A large quantity of superior grade plants to be planted on the company farms have also arrived from Shonan and the first planting is going on. (6/12/44 Singapore, Jap.)

MILITARY ADMINISTRATION

Industrial Bureau

With the object of supplying caustic soda, which is indispensable to the local paper, textile and soap manufacturing industries, the Industrial Bureau of the Sumatra Military Administration has begun construction of a caustic soda factory at an undisclosed location. Instead of processing sulphates and chlorides of sodium as is generally done by other plants, this factory will manufacture caustic soda through a new process, piping in ocean water, boiling it down and then reducing it by electrolysis. The coal which is to be provided by several rich coal mines nearby will supply the power for this new factory. All the capital and machinery will be supplied locally. The new factory is expected to begin production not later than August. The yearly output is expected to exceed several hundred tons, thus putting the supply of caustic soda in Sumatra on a self-sufficiency basis. (4/19/44 Tok. Jap.)

RESEARCH, INVENTION, DISCOVERY

Djakarta: The production of caffeine as an important ingredient of rations for airplane and submarine crews from tea leaves is now being started as part of the First Term Warpower Increase Drive which began May 5 and will end July 31. At a certain factory in Priangan Province in West

CHEMICAL INDUSTRY EAST INDIES RESEARCH, INVENTION, DISCOVERY

Djawa, caffeine is being obtained through a simple process of heating a solution of tea leaf and alcohol. The factory expects to boost output to ten times the production before the drive began. (7/10/44 Tok. Eng.)

Material Research Bureau, University of Technology

Bandoeng: Two new laboratories will be added to the existing one of the Material Research Bureau located at the premises of the University of Technology here. This expansion of investigational work with regard to the natural resources of Djawa necessitated enlargement of existing facilities for such activity. It is learned the Research Bureau is carrying out experiments regarding a new substitute material for carbide, while plans are afoot to conduct investigations concerning possibilities of establishing a large scale paper industry in this island. (6/22/44 Tok. Eng.)

Vitamin A

Menado: Vitamin oil, an important source of Vitamin A and vitamin ointments indispensable for the treatment of tropical ulcer, itch and other skin diseases, are expected to be produced on a large scale in the northern Celebes in the near future. Satisfactory results have been gined by a local company in experimental reproduction of vitamin oil and vitamin ointments by using as material the livers of the bonito, tunny and other fish abundantly caught in neighborhng waters. Production of vitamin ointment already has commenced while the manufacture of vitamin oil is expected to be started by the end of next month when a temporary plant will be ostablished. Following completion of the plant, the production of these will be actively carried out with a substantial amount set as the goal of yearly output. (4/27/44 Tok. Eng.

Kuching: Since August, 1942, Sgt. Nabekichi Ketsuen, Okayama Prefecture, has been carrying on a scientific study of native products of North Borneo. He first put his attention on the practical uses of (damar) and perfected a paint for shipbottoms using this product and oil from rubber. He further pursued his special studies in (damar) and made a rubber-oil paint for wooden drums. In the past, various chemicals for the manufacture of matches had been imported from Japan or some other country, but the sergeant, taxing his ingenuity on native products, again succeeded in finding a substitute for these chemicals. Thus on April 1 he received the highest honors from the Commander of the army in Borneo for his contribution to the establishment of industrial self-sufficiency in (4/3/44 Tok. Jap.) Borneo.

PRODUCTION PROGRAMS

Production of salt in the southern Celebes is expected to a ttain the goal set for this year with the successful expansion and replenishment of the newly established salt farms and effective guidance in several salt fields. Japanese experts stationed at the actual places of production are now exerting their utmost efforts in giving technical guidance to the native producers in accordance with the Japanese solar evaporation process...These salt farms have recently employed a large number of women.

CHEMICAL INDUSTRY <u>EAST INDIES</u> PRODUCTION PROGRAMS

Preparation of the salt fields in Lombok in the Lesser Sundas (Enden), which were started some time ago, has been completed and soon salt manufacture will be in full swing.

(7/6/44 Tok. Jap.)

PHILIPPINE ISLANDS CORPORATIONS AND COMPANIES

Chemical Industrial Association

A new industrial association has been formed in the city for the purpose of helping the unemployment situation and at the same time to expand the industry. This association will deal in the manufacture of chemicals and the general headquarters, factory and laboratory will be situated on the site of the former Grand Opera House in Manial. The laboratory will manufacture carbonic, sulphuric acid and will make batteries. The chief engineer and the chemist in charge are taking the necessary steps so that the factory will function as soon as possible.

(10/9/44 Manila, Tag.)

LEGISLATION

Licensed Sugar Mills

President Laurel has issued Ordinance No. 32, prohibiting the...removal, transport, transfer, consignment or sale of sugar cane except for the purpose of having it used by authorized or licensed sugar mills...The idea is to conserve the sugar industry so as to ensure, at least during the present emergency, the continuous production and manufacture of sugar and alcohol, as well as other essential products derived from sugar cane.

(9/5/44 Manila, Eng.)

RESEARCH, INVENTION, DISCOVERY

Institute of Science and Technology

The production of a non-arsenic...insecticide from local materials, mostly from coconut oil, has been reported by chemists of the Institute of Science and Technology. (4/14/44 Manila, Eng.)

CORPORATIONS AND COMPANIES

Dai Nihon Mine. See LEGISLATION, Factory Control, 8/26/44

Fukuoka Coal Mines

Relative to the district administrative council presidents, the Administrative President of the Kyushu District, Yoshida, Governor of Fukuoka, concurrently came to hold the post of Director of the Fukuoka Coal Mines Superintendence Bureau... (3/11/44 Tok.Jap.)

Iriyama Colliery See Japan Coal Control Association, 6/12/44

Japan Coal Company (Nihon Sekitan Kaisha)

The Japan Coal Company (Nihon Sekitan Kaisha) held a special stockholders' meeting on April 28 and decided to double the capitalization of the company and revise certain sections of the company by-laws. The firm will increase its present capitalization of 50,000,000 yen, of which half was put up by the government, to 100,000,000 yen. The new capital to be invested will be raised by the shareholders and the government, with the government advancing 25,000,000 yen and the stockholders raising the balance. The meeting decided that among the stockholders, each shareholder will invest in proportion to the number of shares he holds. In other words, a man holding only one share in the company would be allowed to purchase only one new share. Those holding two would subscribe to two shares, etc. Revision of the by-laws of the company will be carried out in consideration of the urgent need to increase coal production in the Kyushu coal field. By the revisions, the company expects to improve coal transportation facilities in Kyushu and establish a (4/28/44 Tok. Jap.) branch office in Fukuoka.

The Japan Coal Company, which put into effect the direct sales methods, decided that, in the management of the coal business it would be necessary for the company to operate or indirectly operate some coal mines in respect to production increase of special coal or coal mines on which the company may depend in case of emergency. At the same time that the company is taking countermeasures by investing in the coal mines...increased production in indirectly operated coal mines, it is planning on increased coal production, rationalization of the coal mines in conformity with national policy. In the event that a great merger of an adjustment or unification were to take place in the future, the company plans (to invest large sums of capital), thus taking an active part in coal mining. Informal arrangements have already been made to invest certain hundreds of thousands of yen in the Ube coal mine. Some of the large coal mine operators are said to be strongly against the participation of the Japan Coal Company in coal mine operation, saying that for the company to go into production of coal was going out of its bound in view of its original business (of selling coal-trans.). Consequently, the future autcome on this matter is looked upon with interest. Now that the direct selling of coal by the Japan Coal Company has eliminated direct dealines of the coal industry with the consumers, this company will represent them in investing their abundant funds in coal mines to help in increasing coal production despite opposition by the coal mine operators. This measure is considered a just necessity. When huge investments running into tens of millions of yen are made, opposition in the matter of personnel and in the management of the organization will naturally rise; nevertheless, the participation of the Japan Coal Company in coal mine operation is expected to begin very soon. (6/9/44 Tok. Jap.)

The Munitions Ministry has decided to carry out the unified, simple, and effective distribution-control law by improving (speedily) the distribution system of the cokes and utilizing the already fixed coal distribution system. That is to say that the distribution of the cokes in great quantity all at the same time will be carried out in order to do (wd) by

CORPORATIONS AND COMPANIES

Japan Coal Company (Nihon Sekitan Kaisha) - Cont'd.

unifying the Japan Coal Joint-Stock Co. (Nippon Sekitan Kabushiki Kaisha), the Imperial Cokes Joint-Stock Co. (Teikoku Cokes Kabushiki Kaisha), and the wholesale dealers, and at the same time a share distribution system will be established by unifying all local (wd) and local dealers concerned through the Coal Distribution-Control Joint-Stock Co. that will be under the auspices of the local Administration Deliberative Council. The important points concerning the making of the coke distribution regulations have been notified to the local governors and those concerned. By this the present coke distribution control regulation will be improved and, as soon as the completion of the business routine, the coal distribution will be carried out speedily according to the new system.

The importance of cokes in all phases of the munition production is steadily growing. In view of the fact that the present cokes distribution control system is too complicated and often interferes with production, the Munitions Ministry has been studying plans which will adjust and strengthen the cokes distribution machinery. The complicated distribution system has been revised at this time so that shipment of coal and cokes can be made simply to factories without delay. The coal distribution machinery already in existence will be adapted. The Teikoku Cokes Corporation and the wholesalers are to be absorbed by the Japan Coal Corporation, and it will do the purchasing and selling of coal in the future. At the same time, the Regional Coal Distribution Control Company, which exists in each Regional Administrative District, also is to absorb the Regional Cokes Distribution Control Association and the local dealers. The object of which is to put into effect a powerful distribution control machinery, simplify procedures as much as possible, and unify the handling of cokes. The absorption of the Teikoku Cokes Corporation by the Japan Coal Corporation will not be a merger but in a form of purchase whereas the personnel and equipment will be transferred (8/21/44 Tok. Jap.) automatically.

Karatsu Colliery See Japan Coal Control Association, 6/12/44

Koshiro Mine See Japan Coal Control Association, 6/12/44

Sumitomo Mining Company See Japan Coal Control Association, 6/12/44

Teikoku Cokes Corporation See Japan Coal Company, 8/21/44

Tobo Mine See LEGISLATION, Factory Control, 8/26/44

Ube Coal Mine See Japan Coal Company, 6/9/44

Yuwaki Colliery See Japan Coal Control Association, 6/12/44

"CONTROL" ASSOCIATIONS

Japan Coal Control Association

The direct sale of coal under the new system of distribution has been progressing very favorably since the beginning of the new fiscal year, April 1. The new system is the result of the complete revision of the former coal distribution control setup, and the operation of a new unified distribution under the Japan Coal Control Association. This was made necessary by the virtual disappearance of the coal reserve during the latter half of last year. In addition, with the establishment of a super-emergency increased war production setup, more coal was needed. Also in inverse proportion to the electric power available for consumption during the fourth quarter, transportation difficulties increased

COAL INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Japan Coal Control Association (Cont'd.)

and created an unprecedented coal problem. To meet this situation, the year was passed with an emergency countermeasure by the Japan Coal Control Association, which adopted irregular direct distribution systems by districts. This created a severe pressure on the coal market at the beginning of the new year, and has also caused considerable difficulties on the emergency production front. As there is not an abundance of factory coal reserves as in the past, however, an all-around flexible coal distribution has been carried on smoothly by unified control and a just system of distribution. Consequently, in connection with the establishment of a direct distribution system by the Japan Coal Control Association, and the defining of the distribution fields of the regional coal control corporations, the plan is to work the Japan Coal Control Association's retail marketing system into the regional coal distribution system, and to transfer companies consuming 20,000 metric tons of coal to the regional coal control field of distribution. The Japan Coal Control Association has established detailed distribution plans for the regional coal distribution field, leaving only the actual procedure and contracting to the regional coal control operators, thus facilitating distribu-(4/11/44 Tok. Jap.) tion of coal towards more important fields.

To assume the stability of labor in the coal industries, a labor conscript system has been urgently demanded, and at the general meeting of control associations which was held at the end of last month, Chairman Matsumoto stressed the necessity of designating the coal mines as an essential war industry, probably with the idea of conscription in mind. At this meeting, Chairman Matsumoto claimed that he has secured an understanding with the authorities regarding the rationalization of the compensation system which is the nucleus of labor measures and labor problems. The control association is endeavoring, through adequate measures to find a plan to prevent the shifting of manpower in order to increase efficiency and advancement in skills, etc. Attention now focuses on efforts being made to consolidate the small mining companies, as this is one of the basic problems in the present coal mining situation.

(4/15/44 Tok.Jap.)

The government was instrumental in effecting the merger of the Iriyama Colliery and the Yuwaki Colliery last spring. This new company began its business under the new setup in early April. As a further step, the government has succeeded in effecting the consolidation of the Karatsu Colliery in Saga Prefecture with the Sumitomo Mining Company. The Munitions Ministry on June 12 announced that merger agreement, signed June 9, is effective on June 12. This amalgamation was effected through the mediation of the Coal Control Association and was carried out in accordance with the provisions of the regulations governing the reorganization of the coal mining industry. The Karatsu Colliery has been under the management of Keihachi Yamaguchi, who also operates the Koshiro Colliery. With the absorption of the Karatsu mine by the Sumitomo interests, Yamaguchi will devote all his energies to the operation of the Koshiro mine. Although the quality of the coal and the nature of the deposits of the Karatsu Colliery make it one of the best coal mines in Japan, production recently has been lagging. But with the Sumitomo interests taking over, it is expected that the output will be greatly expanded. The Sumitomo Mining Company is expected to introduce system-(6/12/44 Tok. Jap.) atic, large-scale mining methods.

Tokyo: The Coal Control Association previously designated machinery repair shops to ensure the repair and reconstruction of coal mining equipment and ease the demand for such machinery. All arrangements recently were completed and shops were officially designated in the following prefectures: Five in Yamaguchi, 26 in Fukuoka, 9 in Saga, 7 in Nagasaki, 2 in Fukushima, 12 in Ibaragi, 2 in Tokyo, and 27 in the Hokkaido. At

COAL INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Japan Coal Control Association (Cont'd.)

the same time, arrangements were made to supply these shops with raw materials needed for repair work. Much is expected to result from the designation of these repair facilities. (7/4/44 Tok.Jap.)

Regional Coal Distribution Control Company See Japan Coal Company, 8/21/44

LEGISLATION

Factory and Workshop Control Law

The Munitions Ministry decided to apply the Factory and Workshop Control Law to 118 more coal mines in order to drastically increase the production of coal, a vital counterpart of the material war. The announcement to this effect was made on August 26. Among the mines effected are the Tobo Mine and the Dai Nihon Mine. Previously, 83 principal mines have been put under the control law, and the move at this time brings the number of mines under control to 201, a near majority of the principal mines in Japan.

(8/26/44 Tok.Jap.)

RESEARCH, INVENTION, DISCOVERY

Hokkaido Iron Works

The tremendous increase in iron and steel production by iron works in Hokkaido is greatly ascribed to the effective utilization of coal produced in Hokkaido. The iron works in Hokkaido, it is reported, have now discovered a certain technique for utilizing Hokkaido coal, which has hitherto been regarded as unfit for iron manufacturing.

(9/28/44 Tok. Eng.)

Tokuyama Soda Company

A new method for complete utilization of inferior-grade coal, expected to break one production bottleneck, the fuel shortage, has been worked out. This new method, which is said to increase the heating power of low-grade coal, involves the use of a 2-stage stoker, and it was devised by Miyoichi Sotokawa, Chief of the (Boiler Construction) Section of the Locomotive and Railway Car Manufacturing Company. The Board of Technology has asked the Munitions Ministry to popularize the new method immediately. As a result of the general use of poor coal recently, the coal power electric plants and light metal and chemical factories have lost 50% of their efficiency in steam generation. Besides this, these factories have had to use 40% more coal to secure the same results when good coal is used. In the 2-stage stoker combustion system, a second stoker is placed in the central part of an ordinary furnace. The attached stoker is designed to provide extra coal to the main furnace in such a way as to increase greatly the steam-generating power. According to trial experiments made on the boilers of the Tokuyama Soda Company, steam generation of one boiler with a capacity of 65 tons per hour (sic) was increased 80% and a saving of 15% in coal consumption was effected as compared to the single-feed system. Only five metric tons of iron are needed to install this system and when an entirely new boiler is constructed, it is possible to cut down various materials used by 1%. Consequently, when this new device is installed, it is expected to greatly aid the production effort. Steam generation will be increased, coal will be conserved, and boiler construction material will be saved. (8/18/44 Tok. Jap.)

COAL INDUSTRY JAPAN PRODUCTION PROGRAMS

Tokyo: The 1944 production increase goal has been set at a minimum of 15% for coal, ... the great decrease in imported coal -- North China ... Manchukuoan coal raw materials, and coal for use in gas generating furnaces -- is inevitable because of the shipping allocated for coal transportation. There are extremely difficult circumstances in connection with Karafuto...coal in which, relatively, there is more margin for production increase, in addition to which a sudden increase in demand in Japan proper is anticipated because of the establishment of the war production increase structure. If we scrutinize the three points which have recently developed into problems, each of which is a problem calling for urgent solution, they are as follows: (1) Demand for designation under the Munitions Companies Law: In regard to designation as munitions companies of the first category, from the point of view of the importance of coal companies as well as their workers, it was expected that they would naturally be so designated, but up to the present they have been excluded. Coal is an especially basic industry among the five great key industries, and in consideration of the importance which its success in reaching the goal so greatly bears on all production, comprehensive measures are necessary for achievement of the production for which each is responsible. And on the basis that, for this, they should be designated as munitions companies, its realization is being strongly urged. The demand in the mines for designation as munitions companies arises from (the desire of ...) achieving the allocated production for which they are responsible, and the replenishment of labor, the guarantee of materials. etc., necessary for this are largely involved therein. On the other hand, those in charge of production are calling for a strengthening of authority necessary to advance the enforcement of production increase according to respective localities. (2) Setting up of transportation plans: Various measures to cope with the shipping shortage are being devised and contemplated. There is a demand for approval of shipping operated by the shipper himself, which is necessary for enforcement of increased production of coal of appropriate quality and for emergency shipments, and with such self-operated vessels it is desired to make emergency shipments possible. (3) Guarantee of mine labor, and training of technicians: While it is a (prime) key industry, employees connected with the work of head offices of mining enterprises, etc., are being conscripted in numbers. There is a strong call to stop this, and to establish training centers for technicians among office employees in order to guarantee technicians, and thus ensure training. (3721/44 Tok. Jap.)

Tokyo: Japan's coal and iron mines are working excellently under wartime conditions. For record-breaking coal production, the Minister of Munitions will award medals of commendation to 22 coal mines in Kyushu Island. The production of coal ore in Japan for the fiscal year 1943 to 1944 ending this month has already reached the production goal set for this year. The output of the large mines is ahead of schedule, while the small mines as well as newly developed ones are expected to exceed their quotas... (3/21/44 Singapore Eng.)

... Nevertheless, the production from a certain month to the following month was unfavorable. From December, however, greater production was achieved, more than making up for the decreased summer production and thereby fulfilling the aims of the Commodity Mobilization Plan. The production increase was effected after the government had investigated conditions in the coal mining industry. This investigation was carried out by the Mine Inspection Committee from the Munitions (Industry). Reorganization of labor management to prevent accidental deaths, the repair of coal mining machinery, the replenishment of labor supply and the abolition of holidays—all these helped the government to increase the coal output. (4/15/44 Tok. Jap.)

COAL INDUSTRY JAPAN PRODUCTION PROGRAMS

(Cont'd.)
The bottlenecks in coal production are labor and the (lack of) funds,
but with the efforts of the production facilitating (harmonizing) agencies which were established during the latter part of last year, extremely gratifying results were obtained. In order to stabilize labor
conditions the coal industry has been making strong demands for labor
conscription and great emphasis is being placed on the necessity for
classifying the coal industry as a war industry. The issuance of general
and special awards for production output is considered effective as a
production incentive and the merger of small and medium mines is being
carefully studied.

(4/18/44 Tok.Jap.)

Tokyo: The supply of North China coal to the Japanese steel industry was not up to expectations because of shipping difficulties. Hence, the needs of the steel mills were met principally by coal from Hokkaido, while a small part was brought in by ships operating from harbor terminals of the South Chosen Railway lines which have been handling coal shipped over lines linked with the North China-Chosen railways. The coal supply situation in the Kyushu and Kansai regions, which are connected by government railways, for the first quarter this year was excellent, but the supply of coal has shown remarkable improvement by the adjustments carried out in both ocean and land transportation facilities. Special priority is being given to coal sent over the southern Chosen railway lines. As for the North China-Chosen railway, it hitherto had been engaged mainly in passenger transportation. Since the organization changed its policy and began to concentrate its efforts on freight handling, the railway has made a very satisfactory showing since the middle of May. There is also increased efficiency in stevedoring operations in harbors connected with southern Chosen railway lines. With more efficient shipping operations promised a shipment of minimum quota of coal (6/13/44 Tok. Jap.) from North China to Japan is expected.

Fukuoka: On the basis that an output of a certain number of tons of coal would be equal to turning out one plane, all the coal mines in Kyushu and in Yamaguchi Prefecture launched an "airplane donation" increased production movement in May. According to the results of this increased coal production movement compiled on June 13, by the Kyushu District Mining Bureau, this was the brilliant record achieved: Coal production equivalent to turning out 736 fighter (planes) —surpassing last year's actual results— and 281 bombers—surpassing this year's fixed goal— or a grand total of 1,044 planes. The list was headed by the (Mike Mine), with an output equivalent to 114 fighters and 53 bombers.

During first quarter of 1944: The production of coal for this year, set far above that of the previous year, is slightly behind schedule. However, when taking into consideration the supply and the kind of labor, production was very good. Steps, such as using labor from Chosen and the enforcement of the Munitions Factory Law, are expected to step up production during the second quarter. (7/3/44 Tok.Jap.)

CORPORATIONS AND COMPANIES

Sailing Coal Mine (Kaning)

Canton: Further stepping up of China's coal production will take place with the completion in the near future, in Kwangtung Province, of an 11 kilometer rail line to be used exclusively for the transportation of coal. The new line which is being constructed under the supervision of the construction bureau of the Kwangtung provincial government will link Sailing colliery, an important coal center in Huahien, with Sinkai, located along the Canton-Hankow railway. It is understood that immediately following the opening of the new rail line, completely mechanized production processes will be introduced at the Sailing Mine to bolster coal mining which hitherto was undertaken by manual labor only.

(6/20/44 Tok. Eng.)

A fitting ceremony for the opening of the (Kaning) coal mine in Kwangtung Province was held recently in the presence of Mr. Chen Chun Fu, governor of Kwangtung Province, and other high dignitaries of the Kwangtung government. This leading coal mine is situated in the (southern) district in (Kwachien), Kwangtung Province, and the railroad leading from the (Kaning) coal mine to (Fukie) and the Canton-Hankow railway is nearly completed, needing only ... of construction work before the whole line is completed. (7/8/44 Hongkong Eng.)

Southern Anhwei Coal Mine See Central China Development Company, MISCEL. 10/3/44

LEGISLATION

Regulations for exploitation of private coal mines

Nanking: Provisional regulation of the exploitation of private coal mines which was presented to the Executive Yuan by the Ministry of Industry and Commerce as an integral part of the intensification of coal production was passed by the Executive Yuan on March 27. The main points of this regulation which was published today in the Government Gazette and put into effect immediately, consist of the following: first, subsidies will be offered to mines which through lack of capital are not being exploited very actively; second, no restrictions will be imposed on the sale and transportation of goods not in actual use and owned by the mines, provided they do not try to make unwarranted profits; third, the Ministry of Industry and Commerce will punish mine owners who refuse to work in accordance with this plan. As a result of the adoption of this program, a notable increase in coal production is expected, to such an extent that it will insure an ample supply of coal for all industries engaged in war pro-(3/29/44 Tok. Span.) duction.

PRODUCTION PROGRAMS

A dispatch from a press section member on the Hunan front: Piangsiang, which was captured by our forces, is known as "The Piangsiang of the coal mines" and is located to the northeast of Kwangsi Province. This town is connected with Liling, previously captured by our forces, by the Chuchow-Piangsiang railway. The population of this town is less than 10,000 but it has recently attracted attention as a coal production center. The coal deposits in this area are estimated at 500,000,000

COAL INDUSTRY CHINA PRODUCTION PROGRAMS

tons. Even if 1,000,000 tons of coal were extracted annually this coal belt would yield for more than a hundred years. Recently a project to produce coal on a large scale was started, and its progress indicates a great advance. Furthermore, another important thing is that the coal and coke produced here is transported as far as Kunming and ... as the best coal mine belt under the Chungking regime, and this area has been playing a motivating role in the war industries of resisting Chungking. Therefore, the damages inflicted upon the war industries of Chungking by the capture of this area are indeed very great. This is the first time that the Japanese forces had advanced into this area since the beginning of the China Incident. Even before the China Incident there were only a few Japanese who lived in this area. (6/24/44 Tok. Jap.)

Sekido, head of the coal section of the Munitions Ministry's Fuel Bureau, who recently returned after accompanying the present Munitions Minister Fujiwara, who was then minister without portfolio, on an inspection tour of coal and steel conditions in Manchukuo and China, spoke as follows on the transportation and supplying of coal now so vital in those countries: "There are many bottlenecks in coal production in North China. The problem of supplying sufficient props for the mines was most troublesome, but this was solved by the considerable supply sent from Chosen through the efforts of Inspector Fujiwara. The remaining problem is the freight car shortage for land transportation. This, of course, is inevitable in view of the great operations being carried out on the China front. However, the lowered efficiency resulting from the diversion of empty freight cars to Southern Chosen lines must not be overlooked. Much is expected from the (Chunghsing mines and also from the (Tzuhsien) mines where the quality of the coal is very good and greatly increased production is possible. The greatest efforts are to be given to the trial sales of coal, centering about (Heishan) in Shantung Province and (Tzuhsien) (Seikei), (Chengfeng), and (Kairan) in North China. The coal production in (Kairan) has fallen, but (Kengchu) and (Kangtou) have an abundant stock of coal, and if this can be moved, production will be renewed." (7/26/44 Tok. Jap.)

MANCHUKUO CORPORATIONS AND COMPANIES

Manchukuo Coal Mining Company

Mr. Ninzoo Yamada recently resigned as chairman of the board of directors and as president of the Manchukuo Coal Mining Company. Mr. Chokuo Itoo, former president of the Toohendo Development Company, was named president of the coal company. Mr. Yamada, however, was later reappointed chairman of the board of directors of the same company.

(4/6/44 Tok. Jap.)

See Central Council, GOVERNMENT, Manchukuo Colliery Company 3/9/44

See Coal Mining Association, CONTROL, Mishan Coal Mines 5/14/44

See Central Council, GOVERNMENT, Southern Manchuria Railway 3/9/44

C O A L I N D U S T R Y MANCHUKUO "CONTROL" ASSOCIATIONS

Manchukuo Coal Control Association See Coal Mining Research Institute, RESEARCH, 5/14/44

According to a survey made by the Manchukuo Coal (Control) Association, the various mines in Manchukuo continued to produce their (maximum) amount of coal from April to June, following other fields of increased production. In general, all of the mines showed favorable results, achieving ... record. Comparing this with the output of the (first period) of last year, it is a considerably large increase.

(8/6/44 Tok. Jap.)

GOVERNMENT ADMINISTRATION

Central Council for Increased Coal Production

Hsinking: The Manchukuo Government (held a meeting) of the Central Council for the Promotion of Increased Coal Production ..., established last year-end. As a result, decisions were made on concrete measures for an effective and rapid increased production at the (Fushun) colliery and the (Laotienpu) colliery. Beginning this fiscal year this measure will be put into greater effect with the all-out cooperation of the Southern Manchuria Railway, the Manchukuo Colliery Company and other collieries. (3/9/44 Tok. Jap.)

RESEARCH, INVENTION, DISCOVERY

Coal Mining Research Institute

Hsinking: Professors of mining and metallurgy of the universities and colleges throughout Manchukuo will be mobilized to cope with actual problems connected with coal mining as the result of the creation of a Coal Mining Research Institute Book learning and technique will thus be mobilized together into a workable whole to speed up Manchukuo's efforts in line with increased coal production. Special experimental stations will be set up by the Coal Mining Research Institute where professors will study with technicians engaged in actual mining questions connected with mining technique and practical problems as well as handling of research work for various concerns. In addition technicians will be trained at these centers on a large scale. The Mishan Mines will be the site of the first experimental station. On the other hand, the Coal Mining Association already has drafted plans for increased production in the next fiscal year. The plan involves putting into use all idle machinery, manufacture of improved equipment, rational distribution of labor and material, and improvement in technique.

Hsinking: It is learned enormous deposits of high quality industrial (coal) ... Fushun and Hokang (make) discovered near Hsingan and Aihunhsien in Heiho Province. Test borings ... (in) late May reveal that the greater part of the coal deposits average three meters in thickness lying at a depth of 3 to 4 ... below the surface. Analytical tests show that the coal is low category bituminous type with a heat value of 6,300 calories. Other deposits of the same quality coal were also found at (point of an) area stretching from Wutaokau on the Amur River to (Payeh Banner East Hwingan Province. The Heiho Province office will undertake further

COAL INDUSTRY MANCHUKUO RESEARCH, INVENTION, DISCOVERY

Coal Mining Research Institute (Cont'd)

test boring to (adepth) from 200 meters.
(6/5/44 Tok. Eng.)

PRODUCTION PROGRAMS

Hsinking: The production of coal in Manchukuo during the first quarter of 1943 was rather disappointing, but in July and August, as a result of the summer production campaign, the usual summer slack was overcome. In fact, the output of coal during the summer set a new high for the past three-year period. However, in September, because of the labor shortage and natural obstacles faced at the coal mines, the output for the first half of the 1943 fiscal year ended rather unfavorably. On entering the second half of the fiscal year, the situation was unfavorable for a short time, but with the launching of another increased-coal production campaign and a movement to accelerate transportation of the coal, remarkable results were obtained in December. (5/11/44 Tok. Jap.)

Sakido said: "... It is said that the slowness of production of Fushun coal greatly affected the coal supply of Manchukuo. It appears that the reason for the slowness was the slump in deep mining. All in all, the whole trouble seems to lie in the lack of appropriate government supervision over the South Manchurian Railway. The South Manchurian Railway is under the jurisdiction of the Kwantung Government and because of differences in administrative policies, it may be that things are not going as smoothly as one would wish. However, if suitable measures can be devised, there should be no anxiety in the coal supply conditions in Japan, Manchukuo, or China." (7/26/44 Tok. Jap.)

MONGOLIA CORPORATIONS AND COMPANIES

Daido Coal Mines

The Mengchiang Federated Autonomous Government welcomes its fifth anniversary of establishment yesterday, blessing the results which the government achieved during the past five years. At the same time, it strengthened its determination to prosecute the GEA war by further bolstering fighting spirit in the future and increase fighting power. However, in Mengchiang there is great hope in the abundant underground resources. In short, increased production and development of all kinds of underground resources, including iron and coal, are further becoming (important) with the progress of the war situation. Therefore in the current year, plans for large increased production have been made. Among the plans which were put into effect at first is the recent (merging) of all materials, labor power, and techniques of ... (Branch) of the Hanasono Coal Mines to the Daido Coal Mines by the Mengchiang Government and the various affiliated organs. This step is, at the present time, an extremely positive step and its results are anticipated. The three important things necessary for in-

CORPORATIONS AND COMPANIES

Daido Coal Mines (Cont'd)

creased production are materials, labor power and technique. As for Mengchiang, which is a new nation, materials and technique must be found elsewhere outside of Mengchiang. Therefore development of underground resources in Mengchiang must be undertaken by labor power ... The Mengchiang Government, therefore, organized the Patriotic Labor Service Corps in the various provinces or postponed or abandoned construction work which need not be completed at once, thus exerting its efforts in supplying the necessary labor by Mengchiang itself. In this way in Mengchiang, all kinds of measures are being taken to replete the three important things, namely: materials, labor power and technique for increased production and development of underground resources. Further, the Mengchiang Government is considering even redistribution of these three important points which it has at present. The transfer of the Hanasono Coal Mines to the Daido Coal Mines is one example of this. By this, the Hanasono Coal Mines have a possibility of having 50% increased production compared (9/1/44 Tok. Jap.) to the past.

Hanasono Coal Mines See Daido Coal Mines, 9/1/44
Tatung Coal Mine See IRON, GOVERNMENT, 7/27/44

GOVERNMENT ADMINISTRATION

The Coal Production Increase Council (sokitan zoosan kyoogikai) meeting was held this morning at the first conference room of the Government-General. Those attending were Director Sekiguchi of the fuel section, Director Oda of the increased production section and other representatives of officials and civilians. First of all, Director Konishi of the (Control) Bureau delivered an address, followed by detailed investigations of ... concerning every affiliated field. (4/22/44 Keijo Jap.)

PRODUCTION PROGRAMS

Sanho Mine

Great are the expectations of securing electrical power for carbide production, accompanying a season of abundant water, but the above will only fulfill fixed plans for the second quarter, and the companies concerned are worried as to how to guarantee the production after the second quarter. This will result in freely utilizing necessary production funds by the installation of special electrical transmission, but in considering the second quarter production funds, one cannot expect as much as from the first quarter. This may be surmised from the standpoint of the demand and supply of anthracite coal. The munitions and related authorities, realizing the necessity for lightning counter-measures in securing anthracite, have since last year been pushing the Sanho mine production in Chosen, as well as improvements in its coal mining technique. At present marine transportation conditions for the transport of this coal

COAL INDUSTRY KOREA PRODUCTION PROGRAMS

Sanho Mine (Cont'd)

are expected to take a sudden turn for the better, and definite measures to effect development (of the mines) are desired. (4/26/44 Tok. Jap.)

"CONTROL" ASSOCIATIONS

Taiwan Coal Company

Tokyo: The Government-General of Taiwan, in order to nationalize distribution and plan for a general control to accelerate increased production of coal, has decided to reorganize and rename the existing Taiwan Coal Company in conformity with the Taiwan Coal Control Law.

(5/17/44 Tok. Jap.)

BURMA PRODUCTION PROGRAMS

In the near future, mining of coal is expected to begin. To increase manpower resources, which necessarily must parallel the development of industry, the establishment of industrial schools, technical research organizations, etc., is being encouraged. Technical experts also are being called upon by the government to help in the industrial program. (4/30/44 Tok. Jap.)

PHILIPPINE ISLANDS PRODUCTION PROGRAMS

Coal production has become the most important mining operation in Mindanao. (4/13/44 Tok. Jap.)

ELECTRIC POWER & EQUIPMENT INDUSTRY

JAPAN

CORPORATIONS AND COMPANIES

Adachi Electric Company See PROMOTING ASSOCIATIONS, 5/9/44

Fuji Communications Equipment Company See PROMOTING ASSOCIATIONS, 5/9/44

Fukui Electric Power Plant

The ceremony for the commendation of persons who rendered meritorious services in connection with the construction of the Fukui electric power plant in Kanagawa Prefecture was held today in the conference room of the Munitions Ministry. Commendation certificates were given by State Minister Kishi to three persons - Ando, Governor of Kanagawa Prefecture; Miyazaki, Chief of the Public Works Department of Kanagawa Prefecture; and Amano, Superintendent of the ... Construction Works Office. Also, gratitude certificates were given to four persons - Hiromine, President of the Meiden Company; Iwata, Superintendent of a certain factory of the (Hitachi Company); the President of the Kumagaigumi Company; and Hara, President of the Okura Engineering Company. Attached decorations were given also by Arai, President of the Dai Nippon Electric Association. The recent construction of this Fukui electric power plant met with epochal success in that the period of construction was shortened by one year through economy in the use of materials owing to a novel design due to the enthusiasm of all persons concerned and also through the active employment of substitute materials and discarded materials... (3/20/44 Tok. Jap.)

Hidachi Manufacturing Company, Ltd. See PROMOTING ASSOCIATIONS, 5/9/44

Japan Communications Equipment Company See PROMOTING ASSOCIATIONS, 5/9/44

Japan Wireless Company See PROMOTING ASSOCIATIONS, 5/9/44

Kanto Electric Distributing Company

The Kanto Electric Distributing Company called an emergency general meeting today at the (wd) Hall in Akasaka, Tokyo, and held an election of vice-presidents (which have been vacant). As a result, Osamu Fujinami, former Business (Director) of the Nippon Electric Distributing Company, and Muneo (Nishida), Director of the Kanto Electric Distributing Company were elected respectively. Recently, Vice-President Yasutoshi and assumed the office of (Business Director) of the Nippon Electric Distributing Company, coming from the Kanto Electric Distributing Company, and with the assumption by Osamu Fujinami of the office of Vice-President of the Kanto Electric Distributing Company the personnel (wd) of both the Nippon Electric Distributing Company and the Kanto Electric Distributing Company has been realized. (4/28/44 Tok.Jap.)

Kawanishi Equipment Company See PROMOTING ASSOCIATIONS, 5/9/44

Matsushita Wireless Company See PROMOTING ASSOCIATIONS, 5/9/44

Mitsubishi Electric Manufacturing Company See TEXTILE, CORPORATIONS, 7/19/44

Nippon Electrical Power Sending Company See GOVERNMENT ADMINISTRATION, Munitions Ministry

The Nippon Electric Transmission Corporation (Nippon Hassooden Kabushiki Kaisha—trans.) adopted a structural renovation last Spring and effected an adjustment of departments and sections and decrease of employees, and -188-

ELECTRIC POWER & EQUIPMENT INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Nippon Electrical Power Sending Company (Cont'd.)

today it announced the personnel transfers which had been postponed in order to restore transmitters. The current transfers are in accordance with the government adjustments for electricity mobilization and are designed to effect a simplified and effective personnel (adjustment)... There will be a shake-up of three firm presidents... Approximately a total of 400 persons, including seven directors, 14 secretaries, 16... and 47 technicians who are employees of the corporation as official employees are to retire. (4/5/44 Tok.Jap.)

The Nippon Electricity Distribution (Nippon Hassooden) Company held its regular general meeting at the Nippon Industrial Club. Matters concerning the method of dividing regular profits, changes of...branches due to the application of the extraordinary measure relative to factories and others, the selection of candidates for directors and (selection) of secretaries whose terms of office have expired, and transfer of...were presented for discussion and all these matters were decided upon. By the way, the directors will be appointed by the Munitions Ministry in the near future.

A factor which has been retarding the intensification of our productive power is the existence of two kinds of frequencies -- the 50 and 60 cycles -- in our nation's electric power system. The Japan Electric Power Generation and Transmission Company, which has been working for the adoption of a single frequency, mapped out a program to standardize the power system in various localities to either 50 or 60 cycles, depending upon local circumstances. In the Toohoku area and in Hokkaido, two regions where the electric power distribution was the most complicated owing to the existence of the two power frequencies, unification of power systems is being carried out. The Toohoku region has seen the completion of the conversion to a single 50-cycle frequency a half year earlier than was originally scheduled. This has made possible the utilization of an average of 12,000 kilowatts hitherto lost yearly because of the complex transmission connections of the two frequencies, and has contributed greatly to the war effort. Since its formation the Tochoku Electric Power Company has striven to complete conversion of power facilities on a three-year plan. In order to effect the change-over from the 60-cycle power lines, over which was carried 30% of the total power supplies by local companies, the Toohoku Electric has had to rebuild 35 hydro-electric plants and 37 transformer sub-stations. It also did away with the 60-cycle thermoelectric power stations. (7/10/44 Tok. Jap.)

The Japan Electric Power Generation and Transmission Company, acting in accordance with the war situation, previously introduced a system of giving more authority to its branch firms, thus facilitating the transaction of business. In view of the wide areas over which each branch had to manage, it was decided to further divide the jurisdictional areas of the branches on a prefectural basis by establishing electric power offices which will act as general field offices. These field offices will be given vast authority and will work to get the highest efficiency out of the present generation and transmission systems. In the past, the power generating stations, transmission line maintenance offices, sub-stations, and other branches doing field operational work did a wide variety of work and they lacked coordination necessary for speedy and efficient management. With the establishment of these prefectural electric power offices on August 1, these various stations and offices were reorganized and unified, thus greatly strengthening the electric power (8/1/44 Tok. Jap.) industry.

Nippon Industrial Electric Company (Nippon Kooden) See GENERAL, LEGISLATION, Munitions Industry Law, 4/26/44

ELECTRIC POWER & EQUIPMENT INDUSTRY JAPAN CORFORATIONS AND COMPANIES

Oki Electric Company See PROMOTING ASSOCIATIONS, 5/9/44

Ryuwa Aeronautical Electrical Equipment Corporation See TEXTILES,

CORPORATIONS - Shikishima Cotton Spinning
Company, 7/19/44

Sumitomo Industrial Communications Company See PROMOTING ASSOCIATIONS, 5/9/44

Tooyoo Communications Company See PROMOTING ASSOCIATIONS, 5/9/44

Tokyo Shibaura Electric Company See PROMOTING ASSOCIATIONS, 5/9/44

As if to respond to the indignation of the people who have avowed vengeance, the Tokyo Shibaura Electric Company on July 19 put into effect its plan to step up production by ten-fold. Production chief Kawai, representing the Japan Technical Board, explained to us in detail the emergency production program which the Tokyo Shibaura Electric Company put into effect in its radar section ... He said: "The essence of the emergency production program which we have recently put into effect is the mobilization of more than 10 companies related to the same capital interest into one unit and placing the responsibility of production under one man. Since production of radars is super-essential, some member factories that are now manufacturing weapons of secondary nature may necessarily have to discontinue this production. Fortunately, although the factories are scattered all over the country, and since it is possible to help each other out materially and concentrate on production of one kind of weapon by shifting the techniques and labor of these factories, the quantity which single unit companies could not obtain even with money will immediately become available. The unified production plan of all factories, attempted for the first time in Japan, has changed many aspects of production. As a result of the revamping of production machinery it has for the present dissolved the organization of the single unit, and a young technical expert whose ability has been well recognized is to become its chief. By concentrating on technique, 800 first-class technical experts belonging to factories throughout Japan have been mobilized to take over control of production technique. Thus, doing away with such matters as dividends and capital, everything will be devoted to the nation to increase production... (7/18/44 Tok. Jap.)

Tokyo Wireless Company See PROMOTING ASSOCIATIONS, 5/9/44

Yamanaka Electric Company See PROMOTING ASSOCIATIONS, 5/9/44

Yasukawa Aeronautical Electric Equipment Corporation See Shikishima Cotton Spinning Company, TEXTILES, CORPORATIONS, 7/19/44

Yasukawa Electric Manufacturing Company See TEXTILES, CORPORATIONS, Shikishima Cotton Spinning Company, 7/19/44

"CONTROL" ASSOCIATIONS

Electrical Machinery Control Association

Tokyo: In view of the coal situation and the shortage of waterpower, the Electrical Machinery Control Association will regulate the demand and supply of electric power, especially to guarantee urgent consumers an ample supply. This will be done through control measures based on recent orders from the Munitions Ministry. Class-one power consumers will be given 5% less power than they used in June, while Class-two consumers will be subjected to a 25% reduction. Class-three consumers will be reduced 10% in power allotments, although special disposition will be made

ELECTRIC POWER & EQUIPMENT INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Electrical Machinery Control Association (Cont'd.)

to consumers. The period during which electric power will be regulated has not been determined but the Munitions Ministry is preparing orders for Munitions superintendence chiefs after a careful study has been made of such factors as the supply of coal, the conditions and supply of transformers, the water supply, etc. Power will be regulated in the following areas: Hanshin, Chuubu (including Hokuriku - Domei's) and Kwihin.

(9/5/44 Tok.Jap.)

PROMOTING ASSOCIATIONS

To improve the quality and at the same time increase the output of radio weapons and electrical communications equipment, 13 companies engaged in the radio, electrical and communications fields recently got together and formed an association to promote mutual interests. This association, headed by the leaders of the Tokyo Shibaura Electrical Communications Company and the Sumitomo Industrial Communications Company, will conduct research and determine various methods of improving and revising technique. It also will seek to solve problems in the production field. This association will take the place of the old Japan Communications Equipment Manufacturers Association. Other members of the new association are: Japan Wireless, Oki Electric, Fuji Communications Equipment, Hidachi Manufacturing, Ltd., Adachi Electric, Tokyo Wireless, Kawanishi Equipment Company, Tooyoo Communications, Japan Communications Equipment Company, Yamanaka Electric, and Matsushita Wireless. The inaugural meeting of the new body will be held soon. (5/9/44 Tok.Jap.)

GOVERNMENT ADMINISTRATION

Munitions Ministry

In order to speed up the completion of the construction of electrical power houses and harmonious and extensive utilization of electrical power, which are the main features of the Electrical Power Mobilization Program which was decided upon in a cabinet meeting during the latter part of last year, the Munitions Ministry decided to solidify the structure of the Electrical Power Bureau and this will go into effect beginning tomorrow, April 1. Subsequently, it was decided that the former 6-section system, consisting of Business Affairs, Facilities, Negotiation, Electrical Power, Fire Power, and Hydraulic Power, will be merged into the 4-section system, consisting of Business Affairs, Planning, Self-Sufficiency, and Facilities. Furthermore, the Electrical Power Bureau decided to post officials to the headquarters offices of the Nippon Electrical Power Sending Company, so that the complete coordination with the Nippon Electrical Power Sending Company can be materialized. At present the selection of officials to be posted is progressing. Simultaneously the majority of authority in the central administration over the jurisdiction of electrical power will be transferred to the local munition superintendent offices. (3/31/44 Tok. Jap.)

For the purpose of drastic advancement of munition industries by making an all-out utilization of electrical power during the "abundant water season," the Munitions Ministry began a special transmission of electrical power March 8. However, to enforce thoroughly this design, the Munitions Ministry created the first Production Period Extraordinary Production Increase Promotion Corps, and through this corps, and by the extraordinary utilization of motivating power, it has been planned that a speedy effort will be devoted to attain the expected production goal. This corps will tour the Tohcku, Hokuriku, Kanto, Tookai, and Kinki districts, which are under the jurisdiction of the Munitions Superintendents' Offices, and it will devote its efforts to immediate solution on-

ELECTRIC POWER & EQUIPMENT INDUSTRY JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry (Cont'd.)

the-spot of various problems which are the problems of transportation, needed materials, and raw materials, particularly coal. The corps will be organized completely by the end of this month, April, and it is scheduled to begin its activities immediately. (4/20/44 Tok.Jap.)

As one of the emergency measures for increased production, the Munitions Ministry has enforced the intensified use of electrical power during the period of April 8 to June 30, which is a period of abundant water. During this period, the rate of rise in water was quite favorable in the Tohoku and Central Honshu areas, and, further aided by thorough preparations in advance, very gratifying results were obtained: a long period record for operation without coal power electricity was chalked up, and the increase in the emergency production of essential wartime materials was made possible. On July 12, the Munitions Ministry announced the following summary regarding actual results: 1. In the Tohoku and Central Honshu areas, the rise in water during the abundant water season was generally favorable; with stringent wartime power generation, a record for operations without coal power electricity over a long period was established. 2. The participating areas were: Hokkaido, Tohoku, Kanto, Chubu, and Kansai which rely on hydro-electric power; and the number of plants totalled 1,077 which was double that of the previous year. 3. The amount of power consumed showed an increase of 30% in April, and 38% in May over the previous year. When computed in terms of coal, it will aggregate a tremendous amount of tonnage, so when we imagine the same amount of power as being consumed during a period of water scarcity we can see the tremendous savings realized in coal. 4. The volume of production due to the intensified use of electrical power has shown an increase over the same period of the previous year; especially in special ores, light metals, carbides, and steel--materials in which increased production is demanded. 5. Since all kinds of bottlenecks were anticipated in the recent undertaking preparatory plans were made; local emergency increased production and power utilization corps were formed during the period of abundant water supply; plans were made for local disposition of bottlenecks which could be overcome locally through the cooperation of related interests centering around the Superintendence Department of the Munitions Ministry. Appropriate measures were taken for matters requiring dealings centrally which were decided at the liaison headquarters within the Information Bureau, to be later relayed to the local Superintendence Department of the Munitions (7/12/44 Tok. Jap.) Ministry.

The supply of electric power so necessary to the urgent strengthening of war power which centers on aircraft has become stringent lately. Therefore, at this time, the consumption regulating method of industrial power has been fundamentally revised in view of the foreseen future supply of power and the changes in production conditions. This new revision will be put into effect on September 1. Heretofore the essential industries were divided into three classes - first, second-A, and second-B - each class limited to a certain amount of power consumption. The power consumption was put into six groups in order of importance. However, the revised system will provide the industries with the power according to needs and in order of importance of the industry. It is also expected to distribute power very flexibly to factories changing locations as result of air raids and to meet the changes of production conditions. The distribution of power will be carried out by the Munitions Minister of the Munitions Superintendence Bureau Chief. It will be done periodically and according to months. The industries, factories, and businesses will be lined up according to importance, and the greatest power load and the power consumption they will have. (8/6/44 Tok. Jap.)

ELECTRIC POWER INDUSTRY A STANKE STANK ST

Nagoya: It is disclosed a midget dry battery only one-tenth the size of batteries now produced but maintaining a high voltage is being constructed by Dr. Kumazo Sasaki, professor of applied science in the Engineering Department of the Nagoya Imperial University. It is understood because of its comparatively high voltage, despite its much reduced size, this new dry battery ... for use in airplanes as well as in portable searchlights. Although the usual materials, such as manganese, ammonia, glass and zinc go into the new battery, there is still one significant difference, namely, the kind of manganese used ... (9/12/44 Tok. Eng.)

CORPORATIONS AND COMPANIES

Central China Hydraulic Electric Power

See Central
China Development Company,
MISCEL. 10/3/44

GOVERNMENT ADMINISTRATION

Electric Power Liaison Conference

Peking: The first electric power liaison conference of Manchukuo, China, and Mengchiang was held here today under the chairmanship of Juishi Tsushima, president of the North China Development Company. After hearing reports from delegates of the participating countries and exchanging frank views on measures proposed by the delegates, the conference adopted the following resolutions: first, separate committees shall be appointed to draft plans for permanent establishment of an electric power conference of Manchukuo, China, and Mengchiang for expansion of the above conference into a continental electric power liaison conference, and for holding a GEA electric power roundtable conference. Second, consideration will be given by the authorities of Manchukuo and China in regard to electric power and industrial developments of the Manchukuo, China and Mengchiang border problem. Third, in regard to exchange of electrical material and technical service for the requirements for industrial development of Manchukuo, it will supply chiefly machinery and technical service, while China will supply chiefly coal, iron, (magnet), bittern, plaster and labor. Fourth, for the time being the mutual supply of ideal transformers, medium and small sized motors, electric wire and electric bulbs will be effected. Fifth, the holding of a capital fund liaison conference will be decided after a concrete plan has been drafted by the committee appointed for this purpose. An ... roundtable conference will be held tomorrow by the participants of today's liaison conference. (3/12/44 Tok. Eng.)

Peking, July 14: The Second Manchukuo-Menchiang-North China Electric Power Coordinating Conference, which was scheduled to be opened around mid-July in Hsinking had been postponed for the convenience of Manchukuo. However, Manchukuo recently presented plans for a conference between North China and Manchukuo only. ... after

ELECTRIC POWER INDUSTRY CHINA GOVERNMENT ADMINISTRATION

Electric Power Liaison Conference (Cont'd)

negotiations the conference will be held on the same day, provided Manchukuo agrees. North China anticipates the acceleration of the flow of material supplies from Manchukuo and the exchange of personnel connected with electrical work between Menchiang and Manchukuo as a result of this conference. (7/15/44 Tok. Jap.)

MANCHUKUO CORPORATIONS AND COMPANIES

Hydro-electric Power Construction Bureau

See Manchuria Electric Corporation, 3/31/44

Manchukuo Electric Company

See Manchuria Electric Corporation, 3/31/44

Manchukuo Electric Industry Corporation

The Manchuria Electric Corporation was organized by the amalgamation of the Hydro-electric Power Construction Bureau and the Manchuria Electric Company.

(3/31/44 Tok. Eng.)

Officials of the New Manchukuo Electrical Industry Corporation were appointed by the Manchukuo government as of April 1. They are president, Kan-wu-hai, former chairman of the Manchukuo Electrical Company; and vice-president, Toshio Hirabayashi, former vice-chairman of the same company.

See Light Metals Production Increase Consultation Council, PROMOTING, 5/11/44

Peking: The plan of operation of the Manchukuo Electric Corporation for the 1944-45 fiscal year, which began April 1, formally will be decided soon. The working budget has been set at 250,000,000 yen, an increase of 100,000,000 yen over the previous year. A greater part of this budget will be earmarked for hydro-electric power development, entailing construction. The rest will be for payments of interest on bonds and investments issued by the Yalu River Hydro-electric Power Company and other affiliated concerns. To meet increased costs, the corporation will issue 80,000,000 yen worth of stocks and bonds, borrow 120,000,000 and use up its reserve of 50,000,000.

Mitsubishi's Kanto Electrification Company

See Manchukuo Light Metals Company, LIGHT METALS, CORPORATIONS, 3/15/44

Second Sungari River Power Plant

Manchukuo has already become the number two electric power generating nation in the GEA sphere, second only to Japan. In particular, the Second Sungari River Power Plant, which was recently completed and started generat-

ELECTRIC POWER INDUSTRY MANCHUKUO CORPORATIONS AND COMPANIES

Second Sungari River Power Plant (Cont'd)

ing power, is said to be the largest in the Orient. A total of 15,000,000 workers helped complete the project, which cost 120,000,000 yen. Two million cubic meters of cement went into the construction and the cost of the cement sacks alone is said to have amounted to 3,000,000 yen. The length of the dam is 1,100 meters and the yen. The length of the dam is 1,100 meters and the height, 91 meters. Furthermore, the area of the manheight, 91 meters. Furthermore, that of Lake Biwa (in made lake which resulted is 8/10 that of Lake Biwa (in Japan).

Suifeng Hydro-electric Plant

In Manchukuo the construction of a hydro-electric power plant in ..., running from Suifeng Hydro-electric Plant to the industrial areas in southern Manchukuo is expected to be fully completed within the next month. Actual transmission of power will commence in October. The ... steel towers from (kuch) to (extend) the power lines have already been completed. The power lines will be charged with 220,000 volts and thus ... the largest power plants in ... the world. With the completion of this high power system, the great industrial areas of southern Manchukuo will be accomodated by both the ... and Suifeng Power Dams. What is particularly significant about the completion of this transmission system is the fact that it makes possible the saving of millions of tons of coal formerly used in southern Manchukuo for generation of caloric power. (8/12/44 Hsinking Eng.)

Yalu River Hydro-electric Power Company

See Manchukuo Electric Corporation, 5/21/44

FRENCH INDO CHINA CORPORATIONS AND COMPANIES

Dalat Power Plant

In the hydro-electric line a power plant has been built in (Ahntiek) with the view to supply Dalat with electric (4/18/44 Fr. Saigon power.

Saigon, April 25: French Indo-China's first hydro-electric plant, which is to get its power from the (Ankuruee) dam, is nearing completion. The maximum kilowatt capacity of the new power plant runs into four figures.

The water head is less than 100 meters.

(4/26/44 Tok. Jap.)

PRODUCTION PROGRAMS

Shonan: The manufacture of electric light bulbs in the southern regions was virtually impossible before the war because of reciprocal trade policies between Britain and the Dutch East Indies. However, production of these bulbs has been started... At the above mentioned fac-

ELECTRIC POWER INDUSTRY MALAYA PRODUCTION PROGRAMS

tory, quick training has been given to workers in the art of glass blowing, and thousands of bulbs have been manufactured almost exclusively by Malayan women. The raw materials for producing this item will be furnished locally and the finished product will be available not only to Malayan homes and industries, but to those in Borneo, Sumatra, and Burma. (5/9/44 Tok. Jap.)

Shonan: Kyooichi Suzuki, who has served as chief of the Maritime and the Power Administration Bureaus of the Malay Military Administration since its establishment two years ago, is to return to Japan. On the maritime and power conditions in Malaya, Mr. Suzuki made the following statement: "... In the electrical power division, everything was completely restored at an early date and at present work is being done in maintaining and repairing existing facilities. The installation of supplementary power lines which was begun in the latter part of last year and completed this February was a great undertaking covering all lines and was done in order to facilitate and perfect the maintenance work on transmission lines. The difficulty in obtaining materials has made the supply of electrical lines an extremely serious problem and the facilitating of this supply is one of the main problems of the power administration." (7/12/44 Tok. Jap.)

CORPORATIONS AND COMPANIES

Nippon Power Transmission Company

Sumatra, April 8: The management of enemy electric power companies in Sumatra formerly was entrusted to the offices of various states or to the special municipalities of the island, but by the action of the Military Administration the Nippon Power Transmission Company has been given charge of these operations and business under this new set-up was begun in April. Up until this change was introduced, the company was engaged principally in the repair and construction of power and electric installations, but hereafter by virtue of this entrusted management, it will have charge of the island's electric power generation, transmission and distribution enterprises and of the construction of necessary electric installations. Company headquarters will be established in the city of Padan with branches in Medan and Palembang. Business offices will be established throughout the various provinces. (4/9/44 Tok. Jap.)

"CONTROL" ASSOCIATIONS

Power Development Headquarters

Djakarta: With the object of positively developing power resources within the island administration a "Power Development Headquarters" was established within the administration. Under rational guidance the new headquarters will take up thorough-going control measures for developing the vast power resources. The

ELECTRIC POWER INDUSTRY <u>EAST INDIES</u> "CONTROL" ASSOCIATIONS

measures include drawing up concrete development schemes, designing power plants, supplying the necessary materials and labor as well as the adjustment of supply and demand of power in the island. It is understood members of the local power firms will be named as staff members of the headquarters.

(4/21/44 Tok. Eng.)

CORPORATIONS AND COMPANIES

National Power Corporation

See Government-owned Corporations, GOVERNMENT, 7/11/44.

GASOLINE, OIL AND OTHER FUELS INDUSTRY

JAPAN CORPORATIONS AND COMPANIES

Amazaki Synthetic Petroleum Company (Amazaki Jinzoo Sekiyuu) See Imperial Fuel Manufacturing Company, 10/2/44

Daido Petroleum Company See Imperial Petroleum Company, 6/12/44

East Asia Fuel Company See PRODUCTION PROGRAMS, 6/13/44

Hokkaido Carbon Products Company See Mitsui Chemical Company, 9/7/44

Hokkaido Synthetic Petroleum Company (Hokkaido Jinzoo Sekiyu) See Imperial Fuel Manufacturing Company, 10/2/44

Imperial Fuel Manufacturing (Industry or Industrial) Company

In order to ensure the supply and essential distribution of substitute fuels, the Bureau of Fuels has been rationing coalite, a by-product of the manufacture of synthetic fuels. The rationing was done heretofore by voluntary methods, but the Imperial Fuel Industry Company will now assume charge of a new unified distribution system. Coalite has been handled by coal brokers as a side business. The Mitsubishi Horo had been voluntarily distributing coalite, but with the entrance of Ube, Nissan of Takamatsu, and Karafuto Synthetic Fuel companies into the field of coalite production, the strengthening of price and distribution control measures has become necessary. Thus, from the first of May the former arbitrary price has been fixed. The Imperial Fuel Industry Company will buy up all the coalite from the producers and will supervise its distribution, which will be done by the brokers. There are many coal brokers who have transferred their coal businesses to local coal companies and are now barely existing by handling coke and coalite. Therefore, there was some apprehension of the business approaching a cooperative system. With the Imperial Fuel Industry Company becoming the sole buyer and wholesale distributor, the distribution will be the same as before. Lump coalite, essential to substitute-fuel furnaces, has been rationed by the Bureau of Fuels for some time, but now powdered coalite also will be rationed. Powdered coalite will be distributed to most of the synthetic fuel producers to produce more coalite balls and briquets. This should increase the amount of substitute fuel. There are at present three companies producing coalite, the Mitsubishi Horo, Nissan Fuel, and the Ube Company, but with the Karafuto Synthetic Fuel Company scheduled to produce a vast quantity this summer, the supply of coalite in Japan will be more than doubled. The selection of a distributor for the Karafuto firm is eagerly awaited. (5/10/44 Tok. Jap.)

With a view to a drastic increase in the production of synthetic oil, the government has been drafting a ... Merger Plan and on November 1 launched a promising program based on the new plan. In other words, the Imperial Fuel Manufacturing Company (Teikoku Menryoo Koogyoo Gaisha -- Ed.) not only absorbed the Karafuto Synthetic Petroleum (Karafuto Jinzoo Sekiyu - Ed.), the Mitsubishi Petroleum Manufacturing Company (Mitsubishi Sekiyu Uaky Koogyoo -- Ed.), and the Ube (Oil -- Ed.) Manufacturing Company, but also executed the merger of the Hokkaido Synthetic Petroleum (Hokkaido Jinzoo Sekiyu -- Ed.), the Amazaki Synthetic Petroleum (Amazaki Jinzoo Sekiyuu), and the Mitsui Controlled Synthetic Petroleum Corporation (Mitsuikei Jinzoo Sekiyuu Goose -- Ed.), and set up the Nippon Synthetic Petroleum Company (Nippon Jinzoo Sekiyu Kabushiki Kaisha - Ed.). The Imperial Fuel Manufacture Company set up a capital of 250,000,000 yen for this and it will not only serve as a strong organ to lead the synthetic oil enterprises in Japan, Korea, and Manchukuo as well as manifest a unified administration of the same, but it will also plunge forward to the frontline of the battle of (10/2/44 Tok. Jap.) production.

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Imperial Fuel Manufacturing (Industry or Industrial) Company (Cont'd.)

... the Imperial Fuel Industrial Company (Teikoku Nenryoo Koogyoo), capitalized at 250,000,000 yen, was organized through the merger of the Saghalien Synthetic Oil Company (Karafuto Jinzoo Sekiyu), and the Mitsubishi Coal Liquefaction Company (Mitsubishi Sekitan Yukakoogyoo) and the Ube Coal Liquefaction Company. Heretofore, this company, whose connection with the Synthetic Oil Industry had been limited to financial (control), has now launched into the actual production of synthetic oil. Next, the three companies of the Hokkaido Synthetic Oil, the Amagasaki and the Miyike Synthetic Oil were consolidated to form the Japan Synthetic Oil Corporation (Nihon Jinzoo Sekiyu Kaisha), capitalized at 150,000,000. Furthermore, a change was made in the directorates of the two newly formed oil companies, and a wartime setup was established. On the other hand, the oil installations in the Southern Regions, destroyed by the enemy at the beginning of the war, were completely (10/6/44 Tok. Jap.) restored...

Imperial Petroleum Company (Same as Imperial Fuel Manufacturing Company?) See also PRODUCTION PROGRAMS, 6/13/44

The North Karafuto Petroleum Company has lost its business as a result of the recent conclusion of the Japan Soviet protocol transferring the oil and coal concessions in northern Karafuto to the Soviet Union. Recently, it was agreed that the North Karafuto Petroleum Company should merge with the Imperial Petroleum Company and the two companies held special general meetings to approve the merger contract. Consequently, the North Karafuto Petroleum Company was dissolved and at the same time the capitalization of the Imperial Petroleum Company was increased by 20,000,000 yen. Its total capitalization now stands at 280,000,000 yen. The amalgamation will be on a 50-50 basis. The merger is effective July 1.

Prior to the war the oil supply in Japan, as in Germany, was extremely stringent. With production of synthetic oil still in the experimental stage. Japan produced only 8% of its consumption - 400,000 metric tons in 1936, depending on imports for a large part of its demands, which totalled 5,000,000 metric tons annually. On the other hand, prior to the war the annual output of oil in Sumatra totalled 5,300,000 metric tons, in Borneo 1,800,000 metric tons, in Djawa 840,000 metric tons, in Ceram 100,000 metric tons, and in Burma 1,100,000 metric tons. A noteworthy fact is that in many cases such prewar production figures in the Southern Regions have more than doubled and tripled at present. Meanwhile, the Japanese government, not satisfied with the abundant supplies of oil from the Southern Regions, is trying to increase domestic oil production under the unified rational control of the Imperial Oil Company, a special semi-governmental corporation which is authorized by the government to take all necessary means for bolstering domestic oil (6/1/44 Tok. Eng.) production.

In order to guarantee self-sufficiency in liquid fuel in keeping with the progress of the war, the Cabinet on February 12 decided upon matters relative to the securing of emergency supply of aviation fuel and high-grade lubricating oil. According to these decisions the management of the petroleum industry, oil refining, synthetic oil, synthetic tenkazai (probably materials added to give gas higher explosive power, such as ethyl-lead — trans.) and other related industries will be left to the (offices) within the five essential industries; and through this measure there has been established a basic structure for self-sufficiency in fuel oil wherein quantity and quality will be assured. The re-allocation and the establishment of priorities in labor, materials, electrical power, machinery, etc., and such matters as the designation of munitions plants,

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Imperial Petroleum Company (Cont'd.)

have been carried forward vigorously. The operation of the existing plants and the rapid completion of unfinished projects are progressing at a satisfactory rate. The oil fields in Japan proper are to be found in such places as Niigata, Yamagata, Akita, Hokkaido, etc., while those outside Japan proper are found in scattered areas in Karafuto and Taiwan, but the principal producers are in Japan proper, and among these the oil wells in Yamagata and Akita are considered to be the ones which will add greatly to wartime oil production. The Imperial Oil Company, which was established in accordance with the provisions of Law No. 73, which was enacted in 1941, was organized in March, 1942, with a capitalization of 250,000,000 yen, through the merger of the Nippon Petroleum, the Asahi Petroleum, and the Japan Industrial companies. This company now controls the greater part of the nation's oil wells. In addition to the Imperial Petroleum Company, there are the Daido Petroleum Company, which was established by the amalgamation of small-and mediumscale companies and other private companies in Karafuto. The yearly petroleum production in our country before the China Incident was a scant 300,000 tons, from which figure we can well understand our dependence for fuel on foreign countries. Our occupation of the Southern Regions, resulting in the subsequent development of oil wells therein, has, for a time, been retarding our own oil development. Oil drilling in these times of all-out offensives is done principally by a rotary method, which may be called a hydro-rotary process. Drilling by this method is done by employing drills which are placed on one end of a drilling pipe. This equipment drills through rocks or breaks them up. This difficult laborious process has been greatly improved, and great progress has been made in the drilling technique. (6/12/44 Tok. Jap.)

Japan Oil Tanker Company See GOVERNMENT ADMINISTRATION, Fuel Bureau,

7/12/44

Kanegafuchi Industrial Company

The two companies of the Kanegafuchi engaged in fat and oil processing are the Kanegafuchi Industrial Company and the Kanegafuchi Fat and Oil Company. Due to the unwieldy internal and external structure and the resulting inconveniences, and because the Kanegafuchi Industrial Company is so often mistaken as a subsidiary, it has been decided that the Kanegafuchi Fat and Oil Company will increase its capitalization and merge with the Kanegafuchi Industrial Company to form a single concern. As the permit for this action has been granted, the matter will be taken up at a special meeting. The capital of the oil concern will be increased by 1,500,000 yen to 2,500,000 yen. The investment will be in the form of actual equipment of the Kanegafuchi Industrial Company. The Hyoogoo Prefecture plant of the Kanegafuchi Industrial Company will not be included for the time being, but it is expected that it will be incorporated at a later date.

(6/9/44 Tok.Jap.)

Karafuto Synthetic Fuel (or Petroleum) Company See Imperial Fuel Industry Company 5/10/44 and 10/2/44

Maruzen Petroleum Company See PRODUCTION PROGRAMS, 6/13/44

Mitsubishi Horo See Imperial Fuel Industry Company, 5/10/44

Mitsubishi Petroleum Manufacturing Company (Same as Mitsubishi Coal Liquefaction Company?) See Imperial Manufacturing Company, 10/2/44 and 10/6/44

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN

CORPORATIONS AND COMPANIES

Mitsui Chemical Company See Light Metals Control Association, CONTROL, 7/6/44

Tokyo: The importance of pitch coke used in the manufacture of electrodes, which is vital to light metal refining, has greatly increased and its production as a by-product of coal carbonization is no longer sufficient to meet present needs. The Mitsui Chemical Company and the Hokkaido Carbon Products Company — successor to the Showa Electric Company — will begin the production of pitch coke by a direct extraction method under the supervision of the authorities. The Mitsui Chemical will be supplied with coal from Kyushu, while the Hokkaido Carbon Products Company will use Hokkaido coal. The method to be used will be the process perfected by the Fuel Research Laboratory of the Hokkaido Carbon Products Company. As only 3/10 to 4/10 of a ton of pitch coke can be obtained from one ton of coal, its cost will be somewhat high, but it seems that some method of adjustment will be made in the government purchasing price.

Mitsui Controlled Synthetic Petroleum Corporation (Mitsuikei Jinzoo Sekiyuu Goose) See Imperial Fuel Manufacturing Company, 10/2/44

Nippon Oil Company

The resignation of Keizoo Hashimoto, Chairman of the Board of Directors of the Nippon Oil Company, Ltd., was formally accepted by the Board at its account-settling meeting on May 8. Hashimoto, however, was named to the Advisory Board. He has been with the firm for 30 years and it was largely through his efforts that the establishment was built up. Hashimoto became chairman last February, when the company was designated a munitions company, an act which left the responsibility of oil production in the hands of Mizuta, the new president. Hereafter as president of the Teikoku Petroleum Company he will devote his entire efforts to patriotic oil development. He also will relinquish his posts as Chairman of the Board of Directors of the Manchukuo Petroleum Company and President of the Chosen Oil Company. (5/8/44 Tok.Jap.)

Nippon Synthetic Petroleum Company (Nippon Jinzoo Seliyu Kabushiki Kaisha) See Imperial Fuel Manufacturing Company, 10/2/44

Nissan Fuel Company See Imperial Fuel Industry Company, 5/10/44

North Karafuto Petroleum Company See Imperial Petroleum Company, 5/20/44

Finance Minister Ishiwata disclosed at today's Budget Plenary Session of the House of Representatives that...the special subsidy fund for the Northern Karafuto Petroleum Company was more than 35,000,000 yen...

(9/8/44 Tok.Jap.)

Teikoku Petroleum Company See Nippon Oil Company, 5/8/44

Tokyo Gas Company See CONTROL, Imperial Gas Association, 5/17/44

Ube Oil Manufacturing Company (Same as Ube Coal Liquefaction Company?)

See Imperial Fuel Manufacturing Company,

5/10/44 and 10/2/44

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

High Grade Petroleum Control

The Agriculture and Commerce and Munitions ministries have continuously studied control of (high-grade) petroleum which is a vital material for military purposes and now they have decided to complete equipment of its structure. The petroleum industrial guilds existing now in each municipal prefecture and prefecture will be reorganized into industrial guilds based upon the control law. Simultaneously in the central government a control organ of these industrial guilds will be formed. For this purpose yesterday the industrialists concerned were gathered in the conference room of the Agriculture and Commerce Ministry and as a result of discussions an establishment preparatory committee of 16 members was nominated. The authorities intend to establish this control organ by the end of the month and have it begin operations in April, the beginning of the new fiscal year. (3/11/44 Tok.Jap.)

Imperial Gas Association

Tokyo: The Imperial Gas Association had its 32nd periodic meeting at 1:00 P.M. yesterday and a matter concerning the revision of part of its articles of association was discussed and approved. The three-year term of the President was shortened to one year; the staff of 15 (Standing Committee members) was increased to 16 persons; and, as a result of the re-election of staff members whose terms had expired, Kunizo Hara, President of the Tokyo Gas Company, was elected the new President. Hanrokyo Ota was re-elected Vice-President, while Tamotsu Ishii and Matsutaro Yanagida were re-elected standing directors.

(5/17/44 Tok.Jap.)

Oil Distribution and Control Company See GOVERNMENT ADMINISTRATION,
Fuel Bureau, 7/12/44

FROMOTING ASSOCIATIONS

Central Fuel Wood and Charcoal Association

The Central Fuel Wood and Charcoal Association held its second general assembly today at the...Hall in Akasaka, Tokyo, at 1 P.M. After a greeting extended by Minister Uchida of the Agriculture and Commerce Ministry, matters concerning the report on the enterprises in 1943 and approval of surplus capital for the use of...were decided upon. As the result of the elections for the posts of advisors and directors, Miyozo Takatsuka and Katsuya Kawai are elected as advisors, and Riichiro Hayashi and Yutaka Kudo are elected as directors.

(5/31/44 Tok.Jap.)

Level Land Forest Utilization Association

The Level Land Forest Utilization Association which...held an inaugural meeting at 11:30 A.M. today at the GEA Hall and made a start with the appointment of Lt. Gen. Teiichi Suzuki as President, Tadayoshi Obata as Vice-President, and of others as members of the Executive Board. The Level Land Forest Utilization Association at the inaugural meeting today approved basic programs for the utilization of forest on level land and is looking forward to the application of these programs now that they have been transmitted to the government and other proper quarters. The main points of these programs are as follows: (1) to give official approval to private production of wood fuel when there are timbers on level lands in areas close to war factories and conveniently situated for transportation, in order to plan for the emergency large-scale production of wood fuel; (2) to plan for the speedy enforcement of private production of gas briquets particularly for the use of trucks, in order

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN PROMOTING ASSOCIATIONS

Level Land Forest Utilization Association (Cont'd.)

to attain large-scale production of gas briquets for...(industry);
(3) to plan on self-sufficiency in wood fuel for family use in cities to the greatest extent possible for encouraging families larger than the average to cut down garden trees in order to economize on the remaining labor power; (4) to distribute wood fuel, brazier and hot water bottles in order to effect a speedy saving on use of wood charcoal and in order to...by families; and, (5) to use speedily students and IRAA Youth Corps for transporting timbers and wood fuel and to use them actively for the emergency increased production of gas briquets.

(6/2/44 Tok.Jap.)

GOVERNMENT ADMINISTRATION

Agriculture and Commerce Ministry

A decision has been reached to aid the output of wood fuel in the same way as charcoal. The Ministry of Agriculture and Commerce transmitted to the metropolises, districts, urban prectures, and prefectures subsidy funds to increase the output of charcoal and wood fuel. The approximate subsidy fund from (today) to March of next year is 2,159,000 yen for charcoal and 673,000 yen for wood fuel. (7/13/44 Tok.Jap.)

The Agriculture and Commerce Ministry, which has been doing its utmost to increase the production of firewood and charcoal as home fuel, has decided to designate the whole month of October as the firewood and charcoal transportation promotion period to rush into the production and distribution of firewood and charcoal. This measure was formally decided upon at today's Vice-Ministers' meeting and a notification to this effect was immediately transmitted to various affiliated district governors. The situation now is such that a huge amount of firewood and charcoal cannot be shipped out from the production areas due to a difficult situation confronting the transportation field. The amount equals approximately 10 months' supply for the six greater cities. The Agriculture and Commerce Ministry, therefore, has decided to mobilize school children and young men's associations of the respective metropolises, districts, urban prefectures, and prefectures to ship out firewood and charcoal from the production areas and, as a result of consultation with the Transportation and Communications Ministry, will devote the whole month of October for conveying them to homes, in preference to all other materials, thus supplying the six greater cities, including Tokyo Metropolis, where fuel shortage is most acute with (9/28/44 Tok. Jap.) firewood and charcoal.

Fuel Bureau

The Fuel Bureau has been considering measures to ensure supply of oil to meet critical situations such as in times of air raids. At this time it has been decided to establish an oil refining emergency headquarters within the Oil Refineries Council as a special organ to carry out temporary expediency measures dealing with defense of oil refineries and oil transportation, decentralization, repairs, production changes, insurance against losses, etc. This headquarters will consist of the various oil refinery companies, mutual...companies, the Japan Oil Tanker Company, various oil importing companies, and the Oil Distribution Control Company, as members. This office will establish the groundwork providing for the defense of oil plants and transportation facilities and also in time of emergency will carry out measures effecting the reciprocal exchange of crude oil, materials, partly finished products, semi-crude oils, etc., among the members. (7/12/44 Tok.Jap.)

GASOLINE, OIL AND OTHER FUELS INDUSTRY

JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry

Tokyo: The Munitions Ministry, in order to strengthen the plans to develop domestic oil resources, to maintain the high quality of petroleum products, and to promote the synthetic petroleum industry, has effected a raise in the retail price of coal oil, effective June 1. This decision was announced in the Official Gazette of the same date. The following gives the different types of fuel affected and the respective percentage increase in prices: aviation gasoline 5%, ordinary gasoline 3%, industrial gasoline 13%, number 2 heavy oil 4%, machine oil 25%, grease 25%, (Non-monopoly hisenbai) coal oil 11%, kerosene 3%, light oils 3%, number 1 heavy oil 3%. (6/1/44 Tok.Jap.)

The Munitions Ministry has newly established the Gas Department in the Coal Section of the Fuel Bureau. Lately, business pertaining to their production and adjustment of their supply and demand has become complicated and enormous. The purpose of the Gas Department is to speed up handling of these business matters and to place the (program) on a firm footing. Together with the establishment of the Gas Department, the former (Sammu) Department of the Coal Section has been changed to (Haisan) Department. Division of duties and matters pertaining to personnel and such of the Gas Department and (Haisan) Department will be promulgated today.

(9/20/44 Tok.Jap.)

LEGISLATION

Wood Charcoal Production Plan

The Agriculture and Commerce Ministry has at this time effected a partial revision of the 1944 Wood Charcoal Production Plan and has formulated a supplementary increased production plan for 200,000 tons (of fuel) including wood charcoal, and at the same time has decided on a plan for the increased production of substitute fuels such as peat, (coalite), (too-tan) and brown coal. At today's regular meeting of Vice-Ministers, Agriculture and Commerce Vice-Minister Shigemasa explained the program for the enforcement of measures to ensure guidance and increased production of wood charcoal and this was approved by the Vice-Ministers. The program of these enforcement measures contains the following aims: (1) ensuring the supply of raw wood, (2) the firm establishment of a responsible system for production and transportation, (3) establishing security of labor materials and transportation power, (4) developing and increasing production of substitute fuels. If the main points of the program should be enumerated, they are as follows. In addition to the already established production plan for wood charcoal, and with the purpose of ensuring the supply resources for wood charcoal and...with an increased production of 200,000 tons in charcoal...official prices on raw wood on which no fixed price was set in the past were immediately fixed and a decision has been reached to make plans for the direct increased production by cutting down undeveloped and publicly owned forests in Okutama (Teishi-gun) in Tokyo Metropolis which have no public value for the purpose of using them as raw wood for charcoal. Also keeping in step with the foregoing and with the purpose of establishing security of skilled workers for the production of wood and charcoal, special measures will be formulated and at the same time mobilization of students' Patriotic Labor Service Corps will be carried out on a positive and systematic basis. Also a decision has been reached to ensure the ... materials of wood charcoal and to ensure and...the use of...transportation organs such as freight motor vehicles and sailing vessels to transport wood and charcoal by sailing vessels. In addition to the above, a decision has been made to ensure the supply of raw materials for charcoal and bean-size briquets and to develop and utilize in a positive manner substitute fuels such as peat, (coalite),

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN LEGISLATION

Wood Charcoal Production Plan (Cont'd.)

(too-tan), brown coal, (Kun-tan) and (Kumi-kiri). In order to carry out the foregoing, emergency measures such as strengthening and fully enforcing the production and transportation responsibility system will be prepared in order to ensure the amount of production and transportation quotas. Emergency measures related to the program of enforcing measures for the guidance and increasing production of coal and wood were approved today at the Vice-Ministers' meeting with the purpose of planning for the increased production of coal and wood, and hence direct acceleration will be brought on the increased production of substitute fuels such as wood charcoal, bean-type briquets, (coalite), and (too-tan), but as substitutes for wood and coal which are more and more used for the drastically increased transportation, (kun-tan) and (kumi-kiri) will be manufactured by various processes...

(5/18/44 Tok.Jap.)

The government had previously approved measures necessary for the increased production of timbers such as buying up forests in the interiors of mountains and the felling of trees on level lands and had also firmly established the decisive wartime timber measures. In connection with the great increased production of wood to be used as fuel in the homes and of gas briquets for transportation and industrial purposes, the government has taken decisive steps in the enforcement of measures such as the establishment of security in the administration of business affairs in the production of ... and the reduction of time set for the felling of trees for fuel use. At this juncture discussion meetings for the increased production of timbers and wood fuel for 1944 will be held in Tokyo and Osaka calling together representatives from 15 districts from throughout the country, and fully taking into consideration the views of the government authorities will request further cooperation from these representatives. These discussions which are to be held in Tokyo and Osaka and which are to be attended by representatives from 15 districts will be in session for 13 days beginning June 9 at the (private residences) of the various... The part that can be noted in these discussion meetings is that consumers who in the past had relied entirely on the producers for wood fuel will be made to produce (5/30/44 Tok. Jap.) (i.e., get) wood fuel for private use.

RESEARCH, INVENTION, DISCOVERY

Combustible Soil

Shizuoka: Yoshiro Kamiya, a local resident, recently discovered a unique specie of combustible mud which abounds in the slope areas of Mount Fuji, which can be made into a fuel substitute. As a result of tests carried out by the Mining Bureau on this specie of combustible mud it was found out the degree of heat the new fuel substitute gives is about 1,780 to 2,000 calories, and is smokeless and odorless. It is also understood the combustible mud can be manufactured into excellent briquette and charcoal balls. Plans for the industrialization of this specie of combustible are already being pushed, following the authorities' approval of the application for excavating this combustible mud. For the time being, excavation work will be undertaken in two different sectors which skirt the mountain, and then will start manufacturing various kinds of fuel products.

(5/24/44 Tok.Eng.)

Nagano: It has been discovered that the black, combustible soil which is found on the foothills of Iizuna, Kurohime and Myoko along the border of Nagano and Niigata prefectures can be used as fuel. The people in this locality have been making briquet and charcoal balls by mixing this soil with clay. The village of Furuma in Kamiminouchi-gun in

GASOLINE, OIL AND OTHER FUELS INDUSTRY

RESEARCH, INVENTION, DISCOVERY

Combustible Soil (Cont'd.)

Nagano Prefecture is producing 40 tons daily. Plans are under way to use this as automobile fuel after proper processing.

(8/7/44 Tok.Jap.)

East Asia Fuel Research Laboratory

The East Asia Fuel Research Laboratory has opened a new stage in extracting oil out of raw rubber, an experiment carried on since the establishment of the laboratory. Recently, it succeeded in producing high octane airplane gasoline and aircraft lubricating oil from raw rubber... It is also said that from a ton of raw rubber approximately 50% of lubricating oil and about 800 liters of gasoline can be extracted... Definite plans are being taken to commercialize aircraft lubricating oil and airplane gasoline soon... (6/3/44 Tok.Jap.)

Geological Survey Bureau See PRODUCTION PROGRAMS, 6/13/44

Japanese Research Institute

A remarkable new method of obtaining tar and crude oil from the rejected lumber of pine, cryptomeria and Japanese cypress has been recently announced by the Japanese Research Institute. Even the leaves and roots of these trees can be utilized to produce tar and crude oil by the new method. The Japanese Institute is making preparations to industrialize this method and distribute the products to various factories throughout Japan.

(3/28/44 Tok.Eng.)

Nippon Improved Fuels Corporation (Nihon Kikanenryo Kabushiki Kaisha)

...At present, coal and peat briquettes are being used by steam locomotives...Hindetoshi Matsunami of the Railways Technical Laboratory recently succeeded in producing a new type of improved fuel which has higher British termal units than the peat briquette. He discovered this new product by compressing low-grade coal at a low temperature. The government railways have ordered that large-scale production of this new fuel be started by the Nippon Improved Fuels Corporation (Nihon Kikanenryo Kabushiki Kaisha)... (4/2/44 Tok.Jap.)

Oji Paper Company

... Haruo Otaguro, a chemist of a Japan (name not disclosed) company. has been working in the factory of the former Oji Paper Co., in Kyoto, since June of last year, carrying on research in the intermediate industrial processing of fermenting and refining barks of mulberry tree with a view to industrial production. While he was experimenting with the fermented waste liquid, in the course of refining mulberry tree fibre by adding a 5% solution of ammonium phosphate, he succeeded in dissolving and separating by the boiling water method in a mere 30 minutes, whereas it formerly required three days (...). Moreover, the waste liquid provides the most favorable conditions for the nurture of butanol germs, and it has been proved that high-grade aircraft fuel butanol heretofore obtained from sugar can be produced from this waste liquid. Although it is still in the experimental stage, in the future it is expected to increase production of butanol by substituting for sugar the use of ammonium phosphate which is found in inexhaustible (7/15/44 Tok. Jap.) supply in the South Sea Islands.

Petroleum Mining Technicians Commission See PRODUCTION PROGRAMS, 6/13/44

GASOLINE, OIL AND OTHER FUELS INDUSTRY

RESEARCH, INVENTION, DISCOVERY

Seal Oil

The production of a new lubricant, a moving force for increasing wartime production, extracted from sea animals, was finally successfully completed by Mr. (Ryokachi Iwami) and Mr. (Shindo Morishika) who had been carrying on their studies for several years. Heretofore, lubricating oil was produced mainly from fish, but these two men have succeeded in producing oil from seals, which abound in the high seas near Sakhalin.

PRODUCTION PROGRAMS

The government has adopted a prudent policy of mobilizing geological experts from the Imperial Petroleum Corporation and the Geological Survey Bureau, while holding at the same time yearly meetings of the Petroleum Mining Technicians Commission, comprised of the country's petroleum mining authorities. Every year the government decides the order of urgency and the site for prospecting and the Commission supplies the necessary materials. For this fiscal year, prospecting is being developed in various areas. A system of encouraging it has been revived and a budget of...tens of thousands of yen has been appropriated. In the prospecting expense setup, even before the GEA war, the government had been subsidizing 2/3 of all expenses and in the 1941 fiscal year new oil wells were found. The gusher at...in Akita Prefecture and the prospecting at...in Niigata Prefecture are typical. Recently a great gusher in Yamagata Prefecture has brought glad tidings to the increased fuel production program. In this way the increased production plans for aviation fuel and aviation lubricating oil have made rapid progress hand in hand with the energetic intensification of aircraft fighting strength. German technique has been freely adopted in aviation fuel and aviation lubricating oil production methods. Not only has Japanese production gone one step further, scoring successes with Southern Regions crude petroleum, high in wax content, but it has been successful in aviation gasoline production methods in obtaining aromatic benzol, a by-product in the manufacture of (iso-octane) as well as in methods for making liquid propane. Such factories as the Maruzen Petroleum and the East Asia Fuel Company of Wakayama Prefecture are representative. Both factories, in line with aircraft production which has increased...times are battling to increase oil production...times. It is said that the workers of both factories are comprised of those who have made their fortunes in South America and elsewhere and are well established financially. Other refining factories scattered throughout Chugoku and Kyushu are respectively developing their own ideas and they are meeting their quota of increased production. (6/13/44 Tok. Jap.)

The government (has set) this year's production goal of firewood and charcoal as 5,660,000 (bags) of charcoal and 48,000,000 koku (sic), 1,600,000,000 bundles of firewood... The government has also planned to purchase about 40% of 4,980,000 koku (sic) of charcoal which will be exported from prefectures. The government is endeavoring to achieve the purpose. However, so far the production is not going as scheduled due to labor circumstances. From April of this year up to the present, actual results are about 60% of the production goal. This is 80% when compared with actual results achieved last year. Therefore, in anticipation of increased production and supply (for this year) the government has decided to enforce the reward system. For needed expenses the government has submitted for approval a total of 85,500,000 yen, the amount not included in the budget and to be charged to the National Treasury, including 78,400,000 yen for charcoal and 2,100,000 yen for firewood. Thus, an epoch-making reward system will be put into effect. The new reward system will apply on charcoal above 60% of the amount of

GASOLINE, OIL AND OTHER FUELS INDUSTRY JAPAN

PRODUCTION PROGRAMS

(Continued) the supply quota for one year in cities, towns, and villages. For firewood it will apply on the shipped quantity above 70% of the amount of the export quota. The reward money will be granted for the amount increased and supplied as determined for the respective organizations. The method of granting reward money will be related next. Regarding charcoal, cities, towns and villages which are assigned the supply quota will receive rewards. Organizations of ... which are allotted the supply quota apart from cities, towns and villages will also be treated as the same and will receive reward money. The reward money will be granted for an increased amount of production when the actual result reaches more than 60% of the amount of supply quota for one year. The grant will be made on the following basis: 55 sen (per bag) for the amount above 60% and less than 75%; 80 sen for above 75% and less than 90%; 1 yen and 50 sen for above 90% and less than 100%; 2 yen and 50 sen for above 100% and less than 110%; 3 yen and 50 sen above 110% and less than 120%, and 5 yen for above 120%. The actual result of charcoal supply will be determined by the amount which has passed the charcoal inspection conducted by prefectures and the amount purchased by the government. The amount accepted by the Japan... Charcoal Company will be treated as charcoal purchased by the government. The method of granting reward money for firewood will be given next. The objects which receive reward money will be ... Associations and organizations of ... An amount of reward money will be granted on the following basis for the quantity of the export quota for one year: 1 yen 30 sen per koku (sic) for the amount above 70% and less than 80%; 2 yen and 60 sen for above 80% and less than 90%; 3 yen and 90 sen for above 90% and less than 100%; 5 yen and 20 sen for above 100% and less than 110%; and 6 yen 50 sen for more than 110%. The...of firewood will be determined by the amount purchased by the government and used in pre-(9/19/44 Tok. Jap.) fectures by the government ...

"CONTROL" ASSOCIATIONS

North China Petroleum Control Associations

The North China Petroleum Control Association (Kita Shina Sekiyuu Toosei Kyookai) in Peking has made plans to resume production of vegetable oil to be used as a lubricant in place of mineral oil and is engaged in large scale production of vegetable oil using raw materials such as castor beans, peanuts, cotton and poppies. (10/2/44 Tok. Jap.)

CORPORATIONS AND COMPANIES

Greater Shanghai Gas Company

See Central China Development Company, MISCEL. 10/3/44

RESEARCH, MANCHUKUO INVENTION, DISCOVERY

Eastern Railway Technical Laboratory

Hsinking: Huge deposits of high quality peat were recently discovered in a special banner district of Lungkiang Province in the midst of the great Tundra Belt -208-

GASOLINE, OIL AND OTHER FUELS

RESEARCH, MANCHUKUO DISCOVERY

Eastern Railway Technical Laboratory (Cont'd)

along the Harbin-Manchuli Railway. The discovery was made by Shigeru Yoshikawa, employee of the livestock industry section of the Chichihaerh Railway. The deposits lie a meter and a half below the surface of the Tundra Belt, and its veins spread 2 meters ... which estimated many tons is of extremely high quality having a content as low as 5%. When compressed and processed to sheet form, the product makes excellent cold insulation felt substitute. When pressed into cylindrical shape, it makes good fuel briquets.

(6/16/44 Tok. Eng.)

The production of a new substitute coal (for) rolling stock was recently consummated by the (Eastern) Rail-way Technical Laboratory. Methane is obtained from the (rotting or rising) of ... which is abundant in northern Manchukuo. With this new coal substitution the entire rolling stock ... and also that of ... preservation (measures) are expected to be (fully met).

(8/22/44 Hsinking Eng.)

Manchukuo Engineering Works

Hsinking: Again another valuable discovery has been made by one of Manchukuo's energetic scientists who are doing their utmost to leave no stone unturned in order to permit maximum wartime utilization of the resources of this country. After experimenting for over a year with the chemical composition of Manchurian pine, Takumi Miyamoto of the Manchuria Engineering Works succeeded in extracting a high quality freeze-proof lubricant. The lubricant was extracted through destructive distillation. Prior to this process a tar product was obtained from the Manchurian pine. The tar product is mixed with an inorganic catalytic agent and then subjected to destructive distillation at low temperature and low pressure. By varying the temperature it is possible to extract a lubricant oil of different baume. The lubricant extracted from the Manchurian pine ranges between 150 and 180 degrees and has a freezing point ranging between -30 and -40 centigrade. These lubricants, therefore, are highly suitable for use in the northern regions of Manchukuo. When properly mixed with other lubricants they become suitable for use in both war and cold areas. It is possible to extract the new lubricants from waste pine wood. The manufacturing process is simple and short. They, moreover, are suited for large scale production. Beside the valuable lubricant other useful products are obtained, among them, oil of turpentine and acetic acid. (6/24/44 Tok. Eng.)

PRODUCTION PROGRAMS

The Manchukuo Government has adopted a plan to effect an initial increase in the production of alcoholic fuel. This plan will be put into action promptly with the aim of attaining complete liquid fuel self-sufficiency in Manchukuo. There are more than 800 distilling plants in Manchukuo and a great majority of them are lying idle. (They have created) a powerful central organ

GASOLINE, OIL AND OTHER FUELS INDUSTRY MANCHUKUO PRODUCTION PROGRAMS

which founded and put forth the plan and (commitments) of production (in) alcohol and now the 800 distilling plants will be (humming with great) activity.

(9/2/44 Hsinking Eng.)

FORMOSA CORPORATIONS AND COMPANIES

Ensuiko Sugar Manufacturing Company

See Goodoo Alcohol Company, CONTROL, 6/13/44

See Taiwan Synthetic Fuel Manufacturing Company, 6/27/44

Imperial Oil Company

See Kinsui Oil Fields, PRODUCTION, 7/12/44

Meiji Sugar Company

See Goodoo Alcohol Company, CONTROL, 6/13/44

See Taiwan Synthetic Fuel Manufacturing Company, 6/27/44

Nitto Development Company

See Goodoo Alcohol Company, CONTROL, _6/13/44

Taiwan Sugar Company

See Goodoo Alcohol Company, CONTROL, 6/13/44

See Taiwan Synthetic Fuel Manufacturing Company, 6/27/44

Taiwan Synthetic Fuel Manufacturing Company

In view of the importance of aviation fuel manufactured from sugar, four companies, the Nippon Sugar Manufacturing Company, Meiji Sugar Manufacturing Company, Taiwan Sugar Manufacturing Company, and Ensuiko Sugar Manufacturing Company, had been making preparations for the establishment of aviation fuel manufacturing company to be operated jointly. Recently with the aid of the Industrial Equipment Corporation the Taiwan Synthetic Fuel Manufacturing Company has been established. The aviation fuel to be manufactured by this company is to be of the (iso-propyl) type having a very high octane content and when this fuel commences to be produced in quantity, it is expected to contribute greatly to the strengthening of the war effort. The capital of this company is set at 5,000,000 yen.

"CONTROL" ASSOCIATIONS

Goodoo Alcohol Company

In the sugar producing areas, the manufacture of sugar products is again the center of attention. The Taiwan Sugar, the Meiji Sugar, the Nitto Development, and the Ensuiko Sugar Manufacturing Companies of Taiwan are forming themselves into a single cooperating unit to

GASOLINE, OIL AND OTHER FUELS
INDUSTRY
FORMOSA
"CONTROL" ASSOCIATIONS

Goodoo Alcohol Company (cont'd)

manufacture iso-octane which is used to produce butanol. Very little time has elapsed since these four companies converted their facilities to the manufacture of iso-octane and since many improvements need to be made in technique supervision by the Goodoo Alcohol and other companies is held necessary. The establishment of self-sufficiency of aviation fuel in Taiwan depends on the cooperative efforts of the Japanese and Taiwan fuel manufacturing interests. It is believed that a new aviation fuel company will be established to put Taiwan on a self-sufficient basis. (6/13/44 Tok. Jap.)

PRODUCTION PROGRAMS

Kinsui Oil Fields

Production of oil during the 1943-44 fiscal year by the Kinsui Oil Fields in Taiwan exceeded production estimates by 30%, a fact which has greatly impressed the authorities. These oil properties belong to the Imperial Oil Company. This gratifying production achievement was effected by the successful drilling of a new well in March. This well has produced a great amount of oil. The oil strata was reached at a depth of 2,500 meters. Work on this well was first started for the purpose of producing carbon black and now the drilled hole exceeds 3,800 meters, setting a new record for drilling in this country and for the world. Considering the present rate of production and the fact that other wells have been flowing steadily since 1938, it is believed that the above mentioned well will continue to produce large quantities of oil for a long (7/12/44 Tok. Jap.) time.

PRODUCTION PROGRAMS

Rangoon: The 1944-45 plans have been mapped out for the use of surplus rubber in Burma. Surplus rubber, the authorities announce, will be used for the production of synthetic gasoline and the manufacture of (gas) from mineral oil. (4/3/44 Tok. Eng.)

The enemy completely destroyed oil producing installations when he fled Burma, but every effort was made to repair these oil wells. Since that time, large scale drilling had been held up owing to conditions in Burma, but it is needless to say that bright prospects are in store for Burma's oil industry. (5/18/44 Tok. Jap.)

FRENCH INDO CHINA PRODUCTION PROGRAMS

Saigon: According to a recent survey, the fat and oil production in French Indo China during 1943 amounted to nearly 30,000 tons. The raw materials used in the production were coconut, kapok, fish, castor beans, rubber tree seeds and others, totalling 80,000 tons. The above

GASOLINE, OIL AND OTHER FUELS INDUSTRY FRENCH INDO CHINA PRODUCTION PROGRAMS

figures compared with the 1942 output indicate an increase of from 5,000 to 7,000 tons. In 1942, the government-general collection of fat and oil amounted to 15,000 tons. When the amount consumed by the producers themselves is added, the total output in 1942 is placed between 20,000 and 25,000 tons. The French Indo China government figures are usually conservative and it is believed that 25,000 tons of fat and oil were actually produced in 1943. Among the fats and oils produced in 1943, about 3,000 tons of rubber tree seed oil and dry distilled latex oil were produced in Cochin China. In 1942, it was only 400 tons of rubber tree seed oil and a small amount of dry distilled latex oil. In Tongking 1,500 tons of coconut oil were produced in 1943. It is estimated that 80% of the oil needed in FIC is selfsupplied. In addition it is estimated conservatively that 30,000 tons of alcohol have also been produced. (7/13/44 Tok. Jap.)

The creation of the Coal Control Office made it possible to regulate the price of charcoal and the conditions under which it was made, which is also important. It is especially important when one considers the fact that the coalmen (had control) of the mangroves of (Canao) which is the great charcoal reserve of Indo China and if one is aware that 25 years are needed to (regrow) an (area) from 10 to 15 centimeters in diameter, that is to produce material which can be used for the manufacture of charcoal. Now this region of (mangroves) represents only some 160,000 hectares. You can well see (the disorder which would) result from a lack of close control, the same kind of control as that placed upon the transport of the coal to Saigon and other centers of Western Cochin-China. In effect, this transport has been given over to one single company, The New French Western Development Society, especially created and limited to the transportation of charcoal which has the advantage of preventing any traffic (in charcoal) en route which always brings about an increase in the price or if you prefer, brings on the black market. But the action of the Coal Control Office and the Forestry Service do not stop there. These two organizations in that connection have applied all their care to ordering and facilitating the development of the mangrove in view of bringing about a general improvement. Each coal dealer was assigned a determined group. Their work has also been rearranged so as to avoid delays and high transport (7/18/44 Fr. Saigon costs. Fr.)

RESEARCH, EAST INDIES DISCOVERY

Vegetable Oil

Djakarta: A factory has now been constructed somewhere in Djawa for the production of the new type of vegetable oil as fuel for internal combustion engines. In experiments carried out on ships, the fuel proved it could compete with mineral oil. (Palm) oil is the basis for the new fuel while the process used is both simple and economical. (3/24/44 Batavia Eng.)

GASOLINE, OIL AND OTHER FUELS INDUSTRY EAST INDIES PRODUCTION PROGRAMS

Djakarta: Moving to assure a sufficient supply of lumber and firewood for wartime expansion of the manufacturing industry and a general production increase, the Department of Military Administration decided to enforce a series of important measures to step up the island's lumbering to a great extent, prompted by a demand for firewood for the vastly increased ... transportation, cement, (sulphate) and other vital industries. The administration will meet the situation by securing sufficient labor power for lumbering and gathering firewood, and it will construct a light highway suitable (for) 8,000 wagons which have been manufactured for transportation, with the assistance of regional government offices ... The sources of firewood will be mostly government owned forests. In view of the expanded demand for charcoal as a substitute for coke for the manufacturing industry, two charcoal kilns will be constructed in the island for burning charcoal from Acacia (mangrove) wood through a newly developed process. (9/1/44 Tok. Eng.)

PHILIPPINE ISLANDS PRODUCTION PROGRAMS

Manila: Before the war the demand for coconut charcoal was hardly more than 2,000 tons, which was consumed for the most part in Manila and was used mainly as a charcoal substitute. Since the outbreak of the war, not only has there been an increased demand for coconut charcoal for use as a poison preventative but also as substitute for various types of fuel. On the Luzon Island, many measures encouraging coconut charcoal production have been adopted in order to achieve a certain tonnage goal, and the amount of production is being stepped up to a high degree. The caloric content of this product is very high, and usually produces 4,000 to 4,500 calories of heat. And, depending upon a special type of furnace, 7,000 calories can be produced. Therefore, it is a very desirable fuel at this time when fuel is difficult to obtain. Many plants are using it as boiler fuel. It is also being utilized in vehicles using substitute fuel and also in removing odor from beer. (7/21/44 Tok. Jap.)

IRON AND STEEL INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Japan Heavy Industries Company See Kurashiki Industrial Company, GENERAL, CORPORATIONS, 5/23/44

Japan Iron Mining Company (Mittetsu Kogyo) See PRODUCTION PROGRAMS, 3/23/44

Japan (Nippon) Iron Works Company

Kokura: Mr. Toyoda is now making an inspection and "encouragement" tour of the Kyushu factories of the Nippon Iron Works... From the standpoint of production efficiency, stress will be laid on factories which are (wd) with the most efficient working conditions. Hence, there is a possibility that some factories which are outside this scope will be forced to discontinue operations. (3/26/44 Tok.Jap.)

workshops, the Japan Iron Works Company has decided on the main points for the establishment of a system to fix personal status (mibun) and personal duties (shokubun) of employees and personnel. Notification to this effect was transmitted to all foremen of workshops in the name of President (Tsuneda). As a result of this step, in addition to the system of fixing personal duties which was used thus far, a system of fixing personal status (mibun) was established, thus expanding the policing powers over workshops according to the personnel placement system. The foregoing will be put into effect on June 30.

(5/18/44 Tok.Jap.)

Tokyo: In the Nippon Iron Works, in accordance with the government plans to institute the military system in plants, regulations establishing the status and duties of officials and workers have been decided upon. On May 18, a notice to this effect was sent to the heads of every division in the name of President Toyoda. Heretofore, where there were only functions or duties, a system of ranks will be instituted and through these changes a system of military command will be established. These measures will be effective beginning June 20. (5/18/44 Tok.Jap.)

See "CONTROL" ASSOCIATIONS, Munitions Factories Consultation, 3/30/44

See RESEARCH, INVENTION, DISCOVERY, Special Steel Method, 5/1/44

See GOVERNMENT ADMINISTRATION, Munitions Ministry, 7/18/44

Japan Steel Corporation

The Japan Steel Corporation held its regular general meeting on June 23 at its main office in Marunouchi. The disposal of profits for the current period was decided. The 7% annual dividend was deferred. At the same time it was decided to increase the number of members in the Board of Directors by one. Keizaburo Morita was elected to fill the newly created position. (6/26/44 Tok.Jap.)

See "CONTROL" ASSOCIATIONS, Munitions Factories Consultation, 3/30/44

Japan Steel Tube Manufacturing Company See RESEARCH, INVENTION, DISCOVERY, 4/28/44 - 5/1/44

IRON AND STEEL INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Kamaishi Tenguyama Mine

Yomiuri-Hochi. Kamaishi: The blasting of a 700-meter-mining ceiling was carried out at 2:30 P.M. on July 5 at the Tenguyama mine in Kamaishi. This is the first time in the history of our country that such a daring project has been undertaken and was executed in the hope that such a process would bring down large lumps of ore in one blasting operation and greatly aid the increased iron production program. ...Thus the mine ceiling blasting experiment was successfully carried out...

(7/5/44 Tok.Jap.)

Under the auspices of the Munitions Ministry a powerful mobile unit has been created for the purpose of increasing the production of minerals. This mobile unit has been christened the Mining Charge Unit (Koozan Totsugeki Tai - trans.). The Munitions Ministry had previously proposed a plan to select from the mines throughout the nation, those miners who especially possess excellent ability, organize them, dispatch them to the mines in the various areas throughout the entire nation, and have them (pass on) their excellent abilities. This proposal has at this time come to bear fine fruit. First, one such unit is scheduled to be dispatched to the Kamaishi Iron Mine of the Tohoku District, and to display its special abilities... (8/31/44 Tok.Jap.)

Kanegafuchi Steel Works

Fukuoka: A women's gliders section to teach women engaged in aircraft production how to pilot gliders has been organized in a certain plant of the Kanegafuchi Steel Works. A men's gliders section already is in existence.

(4/10/44 Tok.Jap.)

Kobe Steel Company See Shikishima Cotton Spinning Company, TEXTILE CORPORATIONS, 7/19/44

Matsuo Mining Company (Matsuo Kogyo) See PRODUCTION PROGRAMS, 3/23/44

Mitsubishi Mining Industries See GENERAL, LEGISLATION, Munitions Industry Law, 4/26/44

Mitsui Bussan

Tokyo: The Mitsui Bussan Company held the regular general meeting on June 28, at which time the first payment of dividends, 6% annually, for the current period was decided. A part of the company's articles of association was revised and the system of chairmanship was eliminated and a presidency created. Tasuo Sumii, Chairman of the Board, was elected the company's first President. (6/29/44 Tok.Jap.)

Mitsui Honsha

The Mitsui Honsha, which has been directing all the operations of the Mitsui Konzern since its reorganization on March 1, is now concentrating much of its efforts on the strengthening of its vital wartime industries. Formerly, all Mitsui operations were under the management of the Mitsui Bussan. The following are some pertinent facts regarding the recent reorganization of the Mitsui Konzern: 1. As a result of the reorganization of the Mitsui combine the Mitsui Honsha (capital 3144,950,000 yen of which 247,367,275 yen is paid up) was formed. 2. The old Mitsui Bussan was also reorganized and two separate companies were formed, the New Mitsui Bussan (capital 100,000,000 yen) and the Mitsui Lumber Company (capital 30,000,000 yen); the New Mitsui Bussan further has lost its controlling influence in the departments of public welfare and of commerce. 3. The Mitsui Honsha will take over all matters relating to personnel, which formerly were left to various subsidiary firms and

IRON AND STEEL INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Mitsui Honsha (Cont'd.)

departments. The reorganization of the Mitsui combine has made possible a unified control of its affiliated companies and their industries. The move is expected to effect much improvement in production methods and also insure the erection of a solid foundation for the Mitsui chemical and heavy metal industries. Moreover, the Mitsui interests are expected to advance further in the development of essential wartime industries, which was difficult to carry out under the former setup. One significant fact is that Baron Takakimi Mitsui is the only member of the eleven Mitsui families actively participating in the operation of the Mitsui enterprises. The Baron, however, wields more control over his organization now than formerly.

(3/14/44 Tok.Jap.)

Mitsui Mines Company See GENERAL, LEGISLATION, Munitions Industry Law, 4/26/44

Shiina Munitions Company See "CONTROL" ASSOCIATIONS, Munitions Factories Consultation, 3/30/44

"CONTROL" ASSOCIATIONS

Iron Ores Control Corporation See LEGISLATION, 6/19/44

Iron Sales Control Association

A plan for the reorganization of the control of supply and demand of iron ore has been formulated, and will be put into immediate effect from the 1944 fiscal year. The object of reorganization under this program is three-fold: The first is to bring about a smoother system of regulating the supply and demand of iron ore. Henceforth, excepting in the case of munitions requirements, a government organization known as the Iron Sales Control Association (Tekkoo Hanbai Toosei Kaisha) will issue the regulations. The second is to unify regulation of both government and civilian supply. Heretofore, supplies for the Army have been handled through direct contracts between the Army and private producers. No one knew who would be asked to produce what sort of goods. The Army had unrestricted power on this matter. ... Therefore from now on, a more general and thorough regulation will be carried out between the Army, the government and civilian demands. The ratio of requisitions to production will therefore be put on a more rational basis. The third is the (wd) of shipping agents. Ordinarily, forwarding agents are not necessary for shipments by sea or by rail. If, however, transportation facilities are not sufficient to cope with production, there will be an overaccumulation of goods. Therefore, future shipments will be based on the urgency of the movement of the goods in question. ... The various control associations, as well as the steel plants, will be unable to plan their own shipping schedules, or alter them, without the support of the Iron Ore Bureau (Tekkoo Kyoku) of the munitions industry, or of the officials of the Munitions Supervisory (3/24/44 Tok. Jap.) Bureau (Gunju Kanri-bu).

Mine Control Association

The Mine Control Association, in conjunction with this year's expansion program for steel manufacture, has had under consideration definite proposals calling for the increased ore supply for the first half of this year. It has adopted the following three measures: 1. Further study will be given the diversion of marine transportation to land transportation which was given much support in 1943 and though it has just about reached its apex, some further possibilities for further development along these lines remain. 2. Heretofore the various

IRON AND STEEL INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Mine Control Association (Cont'd.)

refineries, because of their preference for refining ores from their own mines, frequently impeded the smooth operation of land-sea transportation. But this year the policy of exclusive processing of ore from their own mines will be laid aside and the relations between all the ore maines and refineries will be harmonized. They will strive for the shortening of the land-sea transportation distances, and the disposition of ores by the refineries through cooperative effort in their aim for higher efficiency. 3. The mines will do their utmost to put out the best ores possible to eliminate the clogging up of transportation routes. The preferential policy of the refineries of the various mines to handle their own ores has been a bottleneck in the increased production program and has often presented difficulties. Recently within the steel circles, the opinion to the effect that the time for reforms had arrived has prevailed and so the recent decision of the refineries for the cooperative handling of their ores can be termed as (4/16/44 Tok. Jap.) a step forward for the industry.

Munitions Factories Consultation Association

The inauguration ceremony of the Munitions Factories Consultation Association (Gunju Gaisha Kondan Kai) which has been under preparation for some time was held at the Nippon Industrial Club in Marunouchi today. Attending were 103 members of representative munitions factories and persons in charge of production, and, as guest, Director of the Mobilization Bureau of the Shiina Munitions Company, (name) Ozaki, and Chiefs Kuribara and Matsumura, respectively of the Navy and Army press sections. The administrative policies for April were decided, and for President of the Association (Risaburo) Toyota, President of the Japan Iron Foundry, Ltd., (Nittetsu), was selected and members selected are 32, besides President Asano of the Japan Steel Company. This Consultation Association will thoroughly enforce the measures of the Munitions Companies Law, and in order to bring about a harmonious operation of these munitions companies will have those which are in accord with the Munitions Companies Law lead the way. The members will assemble once every other month or once a month and hold an exchange of opinions on the administration of the munitions companies and common problems for the various groups. Whenever necessary they will consult with the officials of the government and, again, relative to matters which necessitate special investigation an expert's committee will be formed to study the matter, and will cooperate with the control associations and industrial associations in their control and guidance. (3/30/44 N.E.I. Eng.)

Nippon Ferrous-Alloy Control Association

The Nippon Ferrous-Alloy Control Association has agreed on a distribution plan based on the ferrous-alloy supply and demand regulations established by the Munitions Ministry. According to an announcement by the association large orders by manufacturers will be handled directly by the association, but small orders will be handled by various ministerial departments which handle war supplies. (4/18/44 Tok. Jap.)

Pig Iron Control Association

Tokyo: Pig Iron Industries Council, in accordance with the provisions of the law regulating commercial and industrial associations, will establish a single unified control association incorporating all associations excepting the nonmember pig iron works and the pig iron reprocessing works. On May 17, an organization committee meeting was held, and on May 24 a general organization meeting will be called. This pig iron council has been an (unofficial) organ included within the Iron Works Control Association and all of its control proceedings have been

IRON AND STEEL INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Pig Iron Control Association (Cont'd.)

handled directly by the control association but as this council has been a more or less voluntary organization, the control association has had no legal authority in the matters of control and this placed many obstacles in the way of the plans to strengthen control. Therefore, at this time this council has been dissolved and simultaneously it has been reorganized as a control group and incorporated within the control association. Pig iron works to qualify as a member of this newly organized control association must be a plant which produces pig iron with equipment other than a smelting furnace with a daily capacity of forty tons. Pig iron reprocessing companies are not eligible.

(5/18/44 Tok.Jap.)

Steel Products Control Association

With the assured cooperation of the government and the people, the drive to increase materials for the accelerated expansion of aircraft output is fast gaining momentum. Along with the production drive, efforts have been made recently to step up the output of special steels with the installation of a new kind of electric furnace in the various steel producing mills. Successful public demonstrations already have been completed and it has been decided to use this new process as one way of enlarging the output of the industry. The Steel Products Control Association is expected to provide for new construction of these special steel furnaces during this month and by April it is expected to begin operation throughout the whole country. (3/7/44 Tok.Jap.)

GOVERNMENT ADMINISTRATION

Munitions Ministry See Iron Sales Control Association, 3/24/44

Paralleling the intensification of the war situation, the government's fixed policy of developing domestic iron resources to meet the fiscal year steel quota is becoming more and more problematical; so the Munitions Ministry, the Nonferrous Metals Bureau, and both the Mine and Iron Ore Control associations have been speeding up every possible preparation for the immediate generalized development of existing rising domestic mines, both medium and small. This depends to a large degree on high efficiency increased production through scientific improvement of the rising medium and small mines... The present managerial shortcomings of the medium and small mines are two-fold: first, there is a lack of prospecting facilities. Unless they obtain aid from the Japan Iron Works or other large companies, there are none that can work physical mines or boring mines by themselves. Consequently, there are many instances where investment is made in open-air mining, without being able to discover the existence of potential mineral deposits. Second, there is a lack of mining plans. Blinded by immediate commercial profit, construction of a systematized transportation setup has not been provided for, and there has been no definite planning as to the selection of sites to improve quality. On this particular, the Yamamoto technique of approximate ore detection has been recently applied, to eliminate insecurity of investment; furthermore, encouragement to produce high-grade ores to improve the quality has been practiced; but as a fundamental countermeasure, the development of medium and small mines by existing big mines is under serious consideration. As a concrete measure, the large iron mine operators such as the Japan Iron Works, the Mitsubishi Mining and the Japan Iron Manufacturing Company should take steps to either buy outright the medium and small mines, or obtain rights to operate them in trust. Judging from the records chalked up by some of the mines owned by the large mines, it is but a natural concomitant of capital, technique, and labor rushing to the aid of medium and small mines. The Japan Iron Manufacturing Company

IRON AND STEEL INDUSTRY JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry (Cont'd.)

has been considering the policy of launching into the field of medium and small mines since 1942; since last year on to this year it has either acquired or purchased dual mining rights from individually operated medium and small mines in Yamaguchi and Gifu prefectures and in Hokkaido, and it is gradually blazing the trail for the development of these mines. It is a foregone conclusion that it will be a potent factor in this fiscal year's increased production from iron mines, and a resolute leadership is desired of the authorities and control associations in the matter of the larger mines absorbing the smaller.

(7/18/44 Tok.Jap.)

See PRODUCTION PROGRAMS, 3/23/44

Sendai Mine Bureau See PRODUCTION PROGRAMS, 3/23/44

Tokyo Mine Bureau See PRODUCTION PROGRAMS, 3/23/44

LEGISLATION

Advance Payments

Some time ago the Munitions Ministry effected a measure providing for advanced estimated payments on iron ore, thereby securing a production plan by which producers are enabled to carry on mining operations without undue anxiety. Furthermore, as an added incentive a system of awards has been instituted in order to promote the production of higher grade ores. This system is for the purpose of securing better grade ores by effecting economies in transportation and coal consumption, and creating higher efficiency in steel production. These measures were decided upon last December to be retroactive to April. A standardized special price bonus for iron sand has been effected which leads to the expectation that the quality and quantity of iron ore will be maintained. Until a certain standard quality in iron ore is reached, with each 1% increase, an award will be given of accordance with the system of graduated increases. This measure aims to promote cooperation among the producers to improve the quality of ore and the body which will handle these matters for ores produced in Japan will be the Iron Ores Control Corporation. The purchasing prices for the ores will be announced by (6/19/44 Tok. Jap.) the Public Enterprises Organization.

RESEARCH, INVENTION, DISCOVERY

Iron Industry Council

Tokyo: The Scientific Research Institute has established a special Iron Industry Council to speed up the work of founding a special iron manufacturing industry to meet demands for vital steel. The council will promote the sound development of a new iron processing method and will conduct surveys of iron ore resources and plan for their development to strengthen the war effort. The officers of the new Iron Industry Council are: Chairman, Ichiro Satoo, who is a Bureau Director of the Scientific Research Institute; and Vice-Chairmen Takeyasu Minkawa, Director of the Steel Bureau of the Munitions Ministry, and Sei Tsukahara, Director of Production Technique of the Board of Technology.

Iron Ore Research Group

In the House of Peers, in order to cooperate positively towards the realization of the government's policy for increased iron ore production,

IRON AND STEEL INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Iron Ore Research Group (Cont'd.)

an iron ore research group has been recently created especially under the Research Association. As a result of the selection of members to this special research group, a committee composed of ten members, including Yoshiaki Hatta, former Transportation and Communications Minister, was decided today. Moreover, this committee will hold its first meeting on the 25th and will discuss operation problems of the research group. Also scheduled is a talk by Committee Chairman Watanabe of the Iron Ore Control Association, prior to the general discussions. (8/22/44 Tok.Jap.)

Natural Gas as Fuel

Experiments are being conducted on an iron refining process utilizing natural gas, which is found in various parts of the country, as fuel. This special iron manufacturing process, which does not use the blast furnace, has been started recently on a nationwide basis as the principal means for refining special ores, and it is believed that this process will gradually show good results. As long as coal is consumed as fuel, the coal situation bottleneck is hard to break, and this is fast becoming the fundamental problem blocking the road to accelerated increased production. By using natural gas, which is found in various parts of Japan, as the principal fuel and by setting up reducing furnaces locally, the disposition of iron sand and limonite through advantageous geographical conditions is simple. Then, if the reduction process for iron sand and limonite were to be done by this method of (organized mining), the problem will have been solved technically. Only through the development of the areas where the existence of natural gas has been verified, such as the Boso area (Chiba - trans.), and Niigata and Yamagata, and through the development of the areas where iron sand and limonite are found, can the materialization of this new process (8/25/44 Tok. Jap.) be made possible.

Ore Smelting Refining Research Laboratory

Sendai: In order to challenge the enemy's mineral production, students of the Ore Smelting Refining Research Laboratory of the Tohoku Imperial University, headed by Professor Matsujiro Hamasumi, President of the laboratory, succeeded in inventing a new process for turning out pig iron from iron sand. The process consists in simply mixing iron sand with a deoxiding agent of alloy which is a by-product obtained in manufacturing aluminum from alumina ore. Later the compounds are dried in sun and lime mixed with coke is added in furnace and smelted. The special quality of this pig iron lies in the fineness of the grade.

(6/25/44 Tok.Eng.)

Technical Committee for Production of Special Steels

Tokyo, April 27: A preferred new method of treating special steel, involving a 20% economy in electric power and electrodes and a substantial reduction in the time required for the melting process, has been invented by a special steel plant operated by the Japan Steel Tube Manufacturing Company. Although hitherto it was believed that subjecting (steel - ed.) to a low electric pressure was the only method available for the manufacture of special steel, it has been discovered that a simple change to high electric pressure greatly shortens the melting time, thereby enabling a 20% to 30% increase in production. Noteworthy feature of the new method is that by simply changing to high electric pressure it is possible to effect about a 20% economy, in both electric power and electrodes, without requiring any addition to existing equipment...

IRON AND STEEL INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Technical Committee for Production of Special Steels (Cont'd.)

The government and the producers, represented respectively by the Munitions (Industry) and the Iron Ore Control Association, are continuing their intensified efforts to keep up the production of special steels and light metals which are essential in the manufacture of aircraft. The manufacture of these special steels had been undertaken almost exclusively by small-and middle-scale enterprises, but recently two large companies, the Japan Iron Works and the Japan Steel Tube Company, undertook the production of these steel products. These two companies are completing the installation of equipment with the object of effecting a tremendous output. These establishments also are to utilize electric furnaces. The operations are expected to begin soon. ... The Japan Iron Works is hurriedly organizing the facilities of its small factories so that it will be able to enter productive work immediately. The Japan Steel Tube Company will complete its equipment within this year. Because of the difficulties in obtaining scrap iron. heretofore used in production by the electric furnace process, a new method of using pig iron will be adopted by both companies. This new method is expected to cut production time by half and double the output. It also will save labor and electric power considerably. The development of this new technique is really a turning point in the history of producing special steel products in Japan. Under the leadership of the Technical Committee for Production of Special Steels recently established in the Munitions Ministry, a tremendous output of (5/1/44 Tok. Jap.) these special products is anticipated.

PRODUCTION PROGRAMS

The feverish output of iron ore by large iron mines in Japan during the period April last year up to the end of January this year averaged 100% for the scheduled production goal, with total output for the 1943-44 fiscal year ending March exceeding the quota for the year. Production by some of the small and medium sized mines, as well as newly developed ones, has not been "up to their goal." (3/20/44 Tok.Eng.)

All quarters are concerned over the results of domestic iron ore production, as being the determining factor in special industries using iron ore. However, having successively overcome numerous bottlenecks that existed in labor, materials, transportation, and so forth, through the emergency measures taken by the munitions authorities, various mine bureaus, the Mine Control Association, etc., the actual 1943 production results are following an upward course. Looking at details of the production results of big mines in 1943, a comparison of average quotas for production from April to January shows: 1. Under jurisdiction of the Sapporo Mine Bureau. Hokkaido: Japan Iron Mining Company (Mittetsu Kogyo), at Kutchan, about 90%; at Tokushunbetsu, about 97%; at Pepenai, about 80%. 2. Under jurisdiction of Sendai Mine Bureau. Iwate (Prefecture): Matsuo Mining Company (Matsuo Kogyo), Matsuo, 165%; Wakasennin Mine (Wakasennin Kozan), Wakasennin, 88%. 3. Under jurisdiction of Tokyo. Nagano (Prefecture): Japan Iron Mining Company, Akatani, 99%; Japan Mine (Nihon Kozan), Suwa, 107%. -- Investigation at Kamaishi, which is under jurisdiction of Sendai Mine Bureau, still not complete .-Excluding Kamaishi, the combined results of these seven mines reaches an average of approximately 100%, and in another ten days it is certain that the 1943 quotas will be surpassed. However, among medium and small iron mines, and new iron mines, it seems that there are some that will not reach the 1943 quotas. Therefore the 1944 iron ore production increase program, at the same time that it looks for still greater efforts in the big iron mines aims at a thorough-going increase of effort in (3/23/44 Tok. Jap.) medium and small iron mines ...

IRON AND STEEL INDUSTRY JAPAN PRODUCTION PROGRAMS

The plan to assure the guarantee of the enormous amounts of iron ore as demanded by the (wd) stresses the following three points: (1) a gigantic development of iron ore deposits in the Japanese mainland as well as in Korea; (2) the full use of iron sand, (ryuusa) and (ryuusansoo); and, (3) full-scale strengthening of scrap iron collections and the efficient utilization of steel shavings. This three-point program will be enforced.

Great hazards and difficulties have involved the operation of iron works which lare cly depend upon the marine transportation, but in 1944 their program has been facilitated by the securing of iron ore and coal from the less distant places, and for that purpose all iron ores such as ferrous oxide, (Dolomite?) and even pulverized and sandy iron ores will be uzed in the production of iron in Japan proper. Increasing smelting capacity---The installation of a (vat?) system, and the small type of blasting furnaces to treat pulverized ore by a special process (Dankoo), and the production of ferro-cokes is to be expected on a large scale, beginning this year. Furthermore, the Tookendo Development Company (a consolidation of the Seikoo, Honkeikoo and Baitetsu Companies) of Manchukuo, and the newly established iron works in North China, and in Tsingtao are expected to contribute greatly to the increased iron production. By proposed adjustments in the supply of iron products, a plan of production has also been established. Also, a foundry industry (4/15/44 Tok. Jap.) organization has been founded ...

The iron industry faces great odds because of the difficulty in obtaining supplies through shipping but production itself is proceeding satisfactorily despite adverse conditions. This year, in addition to the stepped up production of domestic iron ores, other material from which iron can be extracted will be utilized to the utmost. Some of these are ferrous oxide, iron sand, pulverized ore, pyrites, (dookarami) and (senryoosi). It is expected that small smelters will reach their peak of efficiency this year. With the birth of the mighty Manchukuo Steel Works and the full force increased production by the North China Steel and Tsingtao Steel companies, the contribution from the mainland steel companies is expected to be great indeed. As a production incentive, a general and special award system for production output had been adopted previously and, effective from April, a basic unit award system was also put into effect, further stimulating production. In addition, as a result of the (wd)adjustments of iron products which have been an old problem, a control system has been perfected. Furthermore, group enterprises have been set up for the production of cast and pig iron ... (4/18/44 Tok. Jap.)

By telephone from Ito (Ibaragi Prefecture). Some persons, suddenly becoming aware of the unlimited iron sand supply brought in by the surging waves all along the shores from Ootsu to Hiragata in Taga-gun, took it upon themselves to consult some experts about it. The ensuing essay revealed the presence of titanium in sand ore form, and the people straightway fell to gathering this valuable material. In order that such valuable material will not go to waste, all women in both Ootsu and Hiragata, not engaged in fishing, have been mobilized, and they are busily engaged in collecting this titanium ore. Already, several tons have been sent to Tokyo plants. Scooping up the salt water (into pails -trans.) as it pours into the holes dug in the beach is a heavy task and presents a scene quite like the primitive salt industry. One day's amount obtained from this unlimited sea source is several tons, which shows great promise, as this record does not fall below that of the (5/8/44 Tok. Jap.) first 10 of 120 such places in Japan.

During first quarter of 1944: Production of pig-iron and ordinary steel were slightly below the goal, but if we add the pig-iron in China and that produced by small smelters now getting into full swing,

IRON AND STEEL INDUSTRY JAPAN PRODUCTION PROGRAMS

total production for the first quarter easily surpasses that of the same period in 1943. By a positive development of resources in Japan and by stepping up the use of small smelters, much is expected of production during the second quarter. The manufacture of special steel which is urgently needed for airplane production, continues to increase, a development which is consistent with the trend of the last two or three years. Its production far surpassed the goal for the first quarter.

(7/3/44 Tok.Jap.)

... In view of the fact that the production of iron and steel is the prime requisite for victory and runs parallel with the production of aircraft, the significance of the unification of Japan-Manchukuo-China iron and steel production is truly great. This unification has been the aim which antedates the GEA war. In Manchukuo, this unification has been manifested in the establishment of the Japan Iron and Steel Control Association and the participation in it by the Manchurian iron manufacturers, the establishment of a Manchurian liaison office of the control association, and the establishment of a close relationship between the control association and the Manchurian Iron and Steel Council. In North China it has been realized by the appearance of the Japan Iron and Steel Tube Company in North China, and through the offices of the GEA Ministry. There still remain, however, many flaws in the Japan-Manchukuo-China economy which hold us from saying there is a thorough unification. In order to overcome this hurdle, the establishment of a strong joint organ of the iron manufacturers of the three countries is necessary. This need was especially noticed at the time of the recent enemy raid against Manchukuo. The super essential production setup in Japan spurs this, bringing to the attention of Manchukuo and China the smooth operating Japanese factories, so that their factories will be made more mobile. Expansion of the iron refineries in Manchukuo and China is also being considered a possibility. Only by the establishment of a joint organ of a Japan-Manchukuo-China iron and steel industry can speedy and appropriate measures be expected. Such an organ should be established without delay. (8/21/44 Tok. Jap.)

CORPORATIONS AND COMPANIES

Japan Aeronautic Company

See GEA Ministry, GOVERNMENT, 7/19/44

Japan Iron and Steel Tube Company

See JAPAN PRODUCTION PROGRAMS, 8/21/44

Japan Steel Company

See GEA Ministry, GOVERNMENT, 7/19/44

Koa Iron Works

See North China Development Company, MISCEL. CORPORA-TIONS, 10/6/44

North China Iron Manufacturing Company (Iron Works) (Kitashima Seitetsu)

Pekin: The 1944 operational program of the North China Iron Manufacturing Company (Kitashima Seitetsu) was recently decided upon and rapid expansion of the local iron manufacturing industry can be looked for. That is

IRON AND STEEL INDUSTRY CHINA CORPORATIONS AND COMPANIES

North China Iron Manufacturing Company (Cont'd)

to say, in the new year construction of small-type blast furnaces will be entirely abandoned, and the principal goals will be the speeding up of Japanese plast furnaces and the completion and perfection of auxiliary equipment needed to raise the capacity of existing facilities. In line with increased construction, the intention is to expand steel manufacturing and ... facilities as well as to perfect the handling of by-products from ... of coke furnaces. Consequently in comparison with the 1943 construction in which energy was expended for the urgent completion of small-type blast furnaces and ... facilities, 1944 will see the emergence of the local iron manufacturing industry to the stage of actual perfection, and as such, much is expected of it. Conforming to the above, the company will resolutely carry out a fundamental renovation of its organization in the new year commencing in April. Using the greater part of the head office organization, certain operational ... will be concentrated upon, and the Pekin head office is expected to be confined to the scale of a liaison organ with the authorities. (3/28/44 Tok. Jap.)

Peking: With a view to further accelerating increased production, the North China Iron Manufacturing Company recently reorganized its structure with emphasis laid on actual place operations. In the new setup the main office here is made up only of the presidents of the chamber and planning and liaison rooms instead of the former general affairs and construction departments. The company's works which were formerly used as an operation department are renamed as an iron foundry with heads of the chamber and four new departments of the general affairs production engineering and defense placed in it. It is understood the president assumes concurrently the post of head of the new foundry. Two branch offices at Nanking and Tientsin which were formerly under the control of the main office are placed under the jurisdiction of the iron foundry. In line with the reorganization, structure personnel shifts are (4/2/44 Tok. Eng.) also announced.

See North China Development Company, MISCEL., 10/6/44

North China Steel Company

See JAPAN, PRODUCTION PROGRAMS, 4/18/44

See GEA Ministry, GOVERNMENT, 7/19/44

Tsingtao Steel Company

See JAPAN, PRODUCTION PROGRAMS, 4/18/44

GOVERNMENT ADMINISTRATION

GEA Ministry

On the morning of July 19, the GEA Ministry held a steel conference at the minister's residence on Nagata-Cho. The main guest was Minister Fujiwara who had just

IRON AND STEEL INDUSTRY CHINA GOVERNMENT ADMINISTRATION

GEA Ministry (Cont'd)

returned from his tour of North China and Mengchiang. Others present were Aoki, GEA minister; Takeuchi, secretary of general affairs of the GEA Ministry; Minagawa, iron ore bureau of the Munitions Ministry, and the representatives of the Japan Aeronautic, Japan Steel, North China Development, North China Steel, Manchukuo Steel, Lungyen Iron Ore Companies and those representing the interests of Mengchiang and Shansi industries. The parley took up the discussions of various measures to increase the production of iron products in North China and Mengchiang.

(7/19/44 Tok. Jap.)

MANCHUKUO CORPORATIONS AND COMPANIES

Manchukuo Heavy Industrial Company

Following his return to Hsinking from an inspection tour of North China (in) the Mengchiang district,
Tatsunosuke Takasaki, president of the Manchuria Heavy
Industry Development Corporation told the newsmen on
Tuesday that the authorities of North China in Mengchiang are (fully cognisant of) the aims of Manchukuo
to bolster the fighting power of East Asia. President
Takasaki expressed the firm conviction that if we
succeed in (providing) the natural resources and ...
and equipment of North China and Mongolia with those
of Manchukuo, we shall be able to establish an unbeatable production ... (3/22/44 Hsinking Eng.)

Peking: It is learned Juichi Tsushima, president of the North China Development Company, left here this morning for Hsinking where he will confer with government authorities as well as officials of the Manchukuo Heavy Industrial Development Corporation to promote further the interchange of resources and materials between North China and Manchukuo. In addition to this he will (study) industrial conditions in Manchukuo. It is expected, as his visit closely follows the recent visit of Tatsunosuke Takasaki, president of the Manchuria Heavy Industrial Development Corporation, to North China that the relationship between North China and Manchukuo will be further promoted. (3/24/44 Tok. Eng.)

Hsinking: The sound financial position and tremendous augmentation of the production capacity of heavy industries in Manchukuo are reflected in business reports presented at the thirteenth general shareholder meeting of the Manchuria Heavy Industry Development Corporation which was held yesterday at the corporation's head office in Hsinking. Investments of the corporation at the end of the first half-year period of 1944 reached the colossal amount of 2,000,000,000 yen. During the same period under review, an increase of over 223,000,000 yen of investments was registered. Of this amount 157,281,000 yen in loans were extended to affiliated concerns. The net profit totalled 17,631,000 yen. Most outstanding among the changes which have been effected by the Manchuria Heavy Industry Development Corporation in the management of subsidiary concerns

IRON AND STEEL INDUSTRY MANCHUKUO CORPORATIONS AND COMPANIES

Manchukuo Heavy Industrial Company (Cont'd)

in the period under review was the establishment of the Manchuria Iron Manufacturing Corporation through the Amalgamation ... Steel Works, the ... Iron and Colliery Company and the Tunpientao Steel Development Company. The new giant concern was established on April 1 of the present year with an authorized capital of 750,000,000 yuan in line with the government policy which has emphasized the necessity of centralizing control of the production of iron and steel in Manchukuo to ensure the attainment of maximum wartime production of these materials. The Anshan (formerly the Showa Steel Works) of the Manchuria Iron Manufacturing Corporation has far surpassed the increased pig iron production quota allotted to it. The former Tungpientao Development Company has likewise attained a production record far beyond its expectations. The former Penhsiu Iron and Colliery Company has also succeeded in fully achieving its allotment goal. The South Manchuria Synthetic Products Works and another chemical manufacturing concern was established in the same period to exploit fully the potential by-products of the iron and steel industries... In the field of coal production, the Manchuria Heavy Industry Development Corporation and affiliated coal mining concerns have all achieved remarkable production figures. Through rationalization of their management and ... revision of coal prices, these coal mining concerns have been able to make vast improvement in their financial position. In the field of non-ferrous metals, the production of aluminum, copper, lead molydenum and vanadium is well maintained as planned. The business turnover of the Manchuria Light Metals Corporation and the Manchuria Mining Company is further improved over the previous period. Measures to effect ... a step-up in the production of aluminum were taken by the Manchuria Heavy Industrial Corporation; the manufacture of aircraft has been at last placed on a mass production basis by the Manchuria Aircraft Works. The production of planes at the factory of this corporation has steadily been mounting which in no small ... role played by the large number of clerical workers of the Manchuria Heavy Industry Development Corporation and other affiliated concerns who have volunteered to work on front line production. Reports of enterprises of Manchuria Machine ... Works likewise showed that their respective production programs have been smoothly carried out as planned. (6/28/44 Tok. Eng.)

See Manchukuo Light Metals Company, LIGHT METALS, 5/6/44.

Imperial Iron Manufacturing Company

See RESEARCH, 6/23/44.

Manchukuo Iron Manufacturing Company

Hsinking: The industrial structure of wartime Manchukuo will be greatly strengthened through unified management of the iron and electric industries, as the Manchuria Iron Manufacturing Corporation and the Manchuria Electric Corporation which will be formally established

IRON AND STEEL INDUSTRY MANCHUKUO CORPORATIONS AND COMPANIES

Manchukuo Iron Manufacturing Company (Cont'd)

with capitals of 740,000,000 and 600,000,000 yuan respectively. The newly created Manchuria Iron Manufacturing Corporation amalgamated three iron manufacturing companies in the country including Showa Steel, ... Iron and Colliery Company, and the Tungpetao Development Company; the Manchuria Electric Corporation was organized by the amalgamation of the Hydro-electric Power Construction Bureau and the Manchuria Electric Company. (3/31/44 Tok. Eng.)

In (Anshan) the Manchurian Iron Manufacturing Corporation has perfected a new process with (leading) iron ore (concentrations) after six years of painstaking experiment. The new epoch-making process is based on the (flotation) principle with the secret to the medium providing (sic) to be none other than the fatty acid of Manchukuo's famous staple product, soy beans. The new (flotation) process is ascertained to be capable of stepping up the 36% iron content ore of the abundant hematite deposits in eastern (Anshan) to as high as 85%. (5/9/44 Hsinking Eng.)

Audshan: Reflecting their enthusiasm to contribute their share toward bolstering Manchukuo's industrial power, local Manchukuo girls and young married women have voluntarily organized a service corps. This patriotic body is composed of 1,200 members ranging from 14 to 40 years of age. The interesting fact is that half of the members are young married women between the ages of 25 and 30. They will work in 16 factories of this city including the Manchuria Iron Manufacturing Corporation's plant from June 15 to the end of October of this year.

(6/14/44 Tok. Eng.)

See Manchukuo Heavy Industrial Company, 6/28/44.

See Commerce and Industry Ministry, GOVERNMENT ADMINIS-TRATION, 7/14/44.

Manchukuo Iron Mining Company (Manshu Saitetsu)

See Manchukuo Industrial Company, MISCELLANEOUS, COR-PORATIONS AND COMPANIES, 3/15/44.

Manchukuo Steel Works

Hsinking: The inauguration of the Manchukuo Steel Company was announced for April 1, and the officials were appointed at a meeting held on March 25. They are: president, Ryotaro Shimaoka, former chairman of the Honkeiko Railway Company; directors, Shinyo Morikawa, managing director of the Showa Steel Company, and 23 others plus four secretaries. Their appointment was given official approval by the Manchukuo Government. Furthermore, Takasaki, chairman of the Manchukuo Industrial Corporation, has been made adviser of the new company. (3/31/44 Tok. Jap.)

See JAPAN, PRODUCTION PROGRAMS, 4/18/44.

See GEA Ministry, CHINA, GOVERNMENT, 7/19/44.

IRON AND STEEL INDUSTRY MANCHUKUO CORPORATIONS AND COMPANIES

Ryuen Iron Mine Company (Ryuen Tekko)

See Manchukuo Industrial Company, MISCELLANEOUS, COR-PORATIONS AND COMPANIES, 3/15/44.

Showa Steel Company

See Manchukuo Iron Manufacturing Company, 3/31/44.

South Manchuria Synthetic Products Works

See Manchukuo Heavy Industrial Company, 6/28/44.

Tookendo Development Company

See JAPAN, PRODUCTION PROGRAMS, 4/15/44.

Tungpetao (Tunpientao Steel) Development Company

See Manchukuo Iron Manufacturing Company, 3/31/44.

See Manchukuo Heavy Industrial Company, 6/28/44.

"CONTROL" ASSOCIATIONS

Japan Iron and Steel Control Association

See JAPAN, PRODUCTION PROGRAMS, 8/21/44.

Mining and Manufacturing Council

Meanwhile, the Mining and Manufacturing Council will be dissolved with formal establishment of the new council. Rokuzo Takabe, director of the General Affairs Board, will concurrently assume the post of president of the council and Takayuki Furumi, vice-director of the same office, will be appointed its vice-president. In addition, ... high military officers, the director of the Kwantung Bureau and the presidents of the South Manchuria Railway Company and the Manchuria Heavy Industry Development Corporation will become its counsellors. They will be aided by 30 committee members comprised of government officials concerned and private technical experts. (7/13/44 Tok. Eng.)

Manchukuoan ... Company

The government, reflecting upon the developments of the war situation and regarding highly the (mission) of the Manchukuoan ... Company, which is a unified (controlling) organ for iron and other mineral materials, had been planning to increase its capital from the present 50,000,000 yen to 60,000,000 yen, and during the (latter portion) of today's (councillor's) conference a formal approval was reached. (8/31/44 Hsinking Jap.)

PROMOTING ASSOCIATIONS

Iron Deliberative Association Council

Hsinking: In order to perfect increased production activities of the iron works which are absolutely neces-

IRON AND STEEL INDUSTRY MANCHUKUO PROMOTING ASSOCIATIONS

Iron Deliberative Association Council (Cont'd)

sary to strengthen the war effort, an increased production campaign will be carried out for three months from July 1 to September 30 by 17 companies in Manchukuo including the Manchukuo Iron Works. This movement will be under the sponsorship of the government council of iron works and the Labor Service Association. The increased production program covers iron ore, (shooketukoo), (dankoo Kooseki), large, medium, small size thick iron plates, thin iron plates, steel billets, iron rods, iron cables, etc. This campaign will also apply to the industries which are chiefly engaged in the production of such products as wrought iron products, cast steel products, cast iron products, wheels and other special items.

(6/10/44 Tok. Jap.)

RESEARCH, INVENTION, DISCOVERY

Anshang Iron Plant

Another report says that a remarkable process for iron ore concentration has just been perfected by research workers of the famous Anshang plant. The process is based on the ... magnetic process perfected by Dr. (Ravinay) for the treatment of a peculiar type of iron ore found abundantly in the Anshang area. The outstanding features of the new process are for (huge) savings in material, equipment, (skill) and time. (5/11/44 Singapore Eng.)

Imperial Iron Manufacturing Company Laboratories

A revolutionary floatation method of producing (ling) iron ore has been perfected by the Imperial Iron Manufacturing Company's laboratories. After 6 years of painstaking experiments, it will shortly be utilized on a large scale in Manchukuo. The liquid medium used in this method is the ... (6/23/44 Hsinking Eng.)

PRODUCTION PROGRAMS

Shipments of Manchukuo's 1943 pig-iron supply to Japan have been completed. In 1941 and 1942 Manchukuo shipped the full amounts of pig iron to be supplied to Japan under the materials mobilization plan.

(3/29/44 Tok. Jap.)

Manchukuo: The 1943 supply goal set for pig iron to Japan was attained on Tuesday. This means a 30% increase as compared with that of last year. Still further production increases are expected this year.

(3/30/44 Tok. Eng.)

Hsinking, June 1: On March 28, Manchukuo sent her last pig iron shipment under the 1943-44 fiscal pig iron quota to Japan. The 1943-44 shipments in comparison with the 1942-43 supply represented an increase of 30%.

Manchukuo is rich in iron ores. The development and handling of low-grade ores are noteworthy. Ore having only 30% to 40% iron content is steadily being used in the production of better-grade pig iron.

(5/31/44 Tok. Jap.)

IRON AND STEEL INDUSTRY MONGOLIA CORPORATIONS AND COMPANIES

Lungyen Iron Mines

Kalgan: In order to carry out an important increase in the production program for iron ore during the 1944-45 the production program for iron ore during the 1944-45 fiscal year, the Lungyen Iron Mines which are now capitalized at 60,000,000 yen of which 49,000,000 are paid talized at 60,000,000 yen of which 49,000,000 to up decided to increase its capital by 120,000,000 to up decided to increase its capital by 120,000,000 to 180,000,000. The decision to increase capital was 180,000,000. The decision to increase capital was made at the extraordinary general shareholders meeting which was held April 28. (5/1/44 Tok. Eng.)

See GEA Ministry, CHINA, GOVERNMENT, 7/19/44.

In Inner-Mongolian (sic) the government has decided to start a campaign to increase the output of (subterranean) resources from the first of next month. The campaign will be started with the expansion of the now famous Lungyen Iron Mine. Preparations to supply new equipment, labor, and technique to the Lungyen Mine have ment, labor, and technique to the Lungyen Mine will already been completed. The (Tahtin) Coal Mine will also be improved with more mining facilities. That also be improved with more mining facilities. That step alone is expected to boost this year's coal prostep alone is expected to boost this year's coal production by more than 50%. (7/29/44 Hsinking Eng.)

Many natural resources are still undeveloped because of geographical difficulties. Among these, the iron ore of Lungyen and the coal of Taitung are potential sources Lungyen and the coal of Taitung are potential sources of war material. The officials and the people are putting and transportation. Since the increased production and transportation. Since the increased production and transportation. Since the increased production and transportation are the Lungyen Mine, each day campaign started in August at the Lungyen Mine, each day in August shows an approximate 80% increase over the in August shows an approximate 80% increase over the corresponding date in July. By the end of next month, corresponding date in July. By the end of next month, corresponding that this year will have been filled. It all labor needs for this year will have been filled. It is certain that this year's production goal will be reached through improvements in technique.

(8/18/44 Tok. Jap.)

Rooen Iron Mine

See GOVERNMENT, 7/27/44.

GOVERNMENT ADMINISTRATION

Kalgen: The Mongolian Government has been exerting its utmost toward exploitation and increased production of resources pertaining to national defense. (Rooen) Mine will effect an increased production movement on a large scale beginning the early part of next month. In the meantime, the aged (Kaen) Coal Mine will be closed and the apparatus, equipment and work cars of the mine will be transferred to Tatung Coal Mine. This transfer of equipment is expected to be completed by the end of August. The preparation for furnishing labor, equipment, and skill to be used in the above mentioned increased production at (Rooen) Iron Mine was practically completed recently by the Mongolian Government and affiliated (Rooen) Iron Mine Company. Particularly in regard to labor, the Government will thoroughly effectuate distribution of labor in order of importance and, in the meantime, it is now training workers acquired by (mobilizing) Patriotic Labor Corps from every locality. Also the production rate of coal is expected to show an increase

IRON AND STEEL INDUSTRY MONGOLIA GOVERNMENT ADMINISTRATION

of about 50% this year due to the transfer of equipment to Tatung Coal Mine from (Kaen) Coal Mine. Incidentally the Government has decided to continue its resolute steps in the future to regulate ... enterprises whenever necessary in order to bring about increased production of important resources. (7/27/44 Tok. Jap.)

PRODUCTION PROGRAMS

Although this year's production quota for iron ore and other minerals is much greater than was set for last year and inspite of some difficulties, the production of these resources since April has been satisfactory, generally speaking.

(5/26/44 Tok. Jap.)

LEGISLATION

Iron Ore Resource Control Company's Yamamoto Plan

In order to eliminate the financial fears of the iron mine operators in Chosen, the Munitions Ministry on May 1 decided to enforce the Iron Ore Resource Control Company's Yamamoto Plan by which payment on approximate cost will be made possible on stored iron ores in Chosen and copper ores in Japan proper. Since ore which was in storage at the beginning of the 1944 fiscal year will be applicable on this year's quota, it would be possible to make immediate shipment of this ore; therefore, this plan will be retroactive to April and from then on it will be on a quarterly basis. It has been decided that assessment of iron ore in Japan proper under the above plan will be made both by the Mine Control Association and the Iron Ore Control Association under the guidance of the Mine Bureau. On this matter of assessment, the Mine Control Association and the Iron Ore Control Association will confer with each other to bring about speedy increase in iron ore production which is urgently needed at this moment. And on the basis of the emergency assessment plan, the conditions of stored ores owned by iron ore operators in Chosen will be investigated. Through their district branches, the assessors will make surveys on the amount of stored ore, average ore quality, location of ore storages, and storage conditions to expedite the plan. In regard to the amount of stored ore on which assessment is based, the Government authorities decided to set aside sufficient for several days production and about a month's supply in harbors of Chosen will be reserved. The remainder of the stored ore will still be a huge amount, and the mine operators who own these remaining ores and are having difficulties in the upkeep will get (6/8/44 Tok. Jap.) approximate cost payment.

RESEARCH, INVENTION, DISCOVERY

Tahgyo Mine

In Keijo, the capital of Korea, it is disclosed that great veins containing iron ore (of) lithium, or a metallic element which is requisite for aircraft production have been discovered in the (Tangyo) Mine of (Chusai)

IRON AND STEEL INDUSTRY KOREA RESEARCH, INVENTION, DISCOVERY

Tahgyo Mine (Cont'd)

Hoku Province, and in the (Indichi) of (Kogan) Province. As a result of these discoveries the demand for the metal for Japan's light metal industries will be amply satisfied. In this connection the Governor General of (Korao) ... immediately started large scale production of these metals with the aim to boost Japan's airplane construction enterprises. (4/15/44 Hsinking Eng.)

Governor General Koiso of Chosen said: "Also, important materials which are indispensable to the manufacture of weapons during the war are found in abundance everywhere in Chosen. The production of such minerals as graphite amounts to one-half of Japan's total output. Most gratifying is the fact that lithium which is required in the light metal industries and minerals such as zircon, tantalum, beryllium, and (magnesite), used in the manufacture of electronic weapons, are being discovered and swiftly developed. I am able to state that Chosen alone can meet the demand for lithium and zircon regardless of how long the war may last." (5/19/44 Tok. Jap.)

PRODUCTION PROGRAMS

Since 27% of the iron ore which will be consumed by Japan, China, and Manchukuo next year will be produced in Chosen, the project calls for an increased production of iron ore at two and a half times more than that of previous years. In order to attain this increased production development, as well as the subsidy of non-ferrous and special metals, such as coal, lead, zinc, copper, tungsten, molybdenum, nickel, cobalt, graphite, mica,(flur), iron, sulphur, apatie, and also rare elements such as zilicon and tantalum 170,250,000 yen has been appropriated for the 1944-45 budget. (3/21/44 Tok. Eng.)

Keijo: It is understood a production responsibility system will be adopted at principal mines throughout Chosen during the 1944 fiscal year starting April 1. Under the new system, production increase instructions will be sent to more than 300 leading lead, graphite, mica, tungsten, molybdenum, fluorspar, asbestos, manganese and coal mines and to others in Chosen within a few days. A marked increase in mineral production in the peninsula is expected to result. (3/25/44 Tok Eng.)

Compared with the increased output of the mines, the refining facilities are deficient, and this is developing into a problem with regard to the increased production in the various mines and refineries in Chosen. In this connection, the Munitions Ministry has been inspecting the important refineries in Chosen, and in collaboration with the Mines Control Association, it has been devoting its efforts to devise countermeasures. However, in the solution of this problem the revamping of the refineries is an absolute necessity. The existing refining equipment is not operating at maximum efficiency. It is necessary to relieve existing conditions relative to funds and construction, and to place greater emphasis on existing refineries, so that they may be able to produce at maximum efficiency. The refining technique, comparatively inferior and behind that of copper refining, must

IRON AND STEEL INDUSTRY KOREA PRODUCTION PROGRAMS

be improved speedily, since this backwardness is the greatest enemy of lead and zinc production. The elimination of imperfections in the mines requires thorough study.

(6/7/44 Tok.Jap.)

The Chosen Government General has decided upon next year's basic iron ore production goal. It has been set at 50% above the level of this year's production. The ore produced will be distributed as follows: 40% to Japan, 40% to Chosen and 20% to Manchukuo. A further study will be made to secure the necessary working materials and equipment so that this goal can be met. A 50% increase in the ore output for next year is not much, if we compare next year's goal with this year's schedule, which is 2.4 times as great as the previous year.

(7/31/44 Tok.Jap.)

In view of the urgent need for an unprecedented increase in the production of iron ore in Chosen, the Government-General of Chosen is strongly pushing production in important mines, starting with the already developed Mozan mine by enforcing the production responsibility system from this fiscal year. Judging from the supply and demand of iron ore in Japan proper, an increase in production for the coming fiscal year of from (a certain) per cent to several times that of the past year is desperately needed. Consequently, the Government-General is at present studying various counter-measures which will enable the next year's increased iron ore production goal to be reached, based on this year's required production quota. The already developed mines mentioned above are for various reasons believed incapable of fulfilling alone the allotted quota for Chosen; therefore, the operation, technique, and other means for an increased production setup for new important mines, such as the Hokusei, Hoozan, and the Bunkei mines, are to be mapped out. (8/25/44 Tok. Jap.)

THAILAND PRODUCTION PROGRAMS

Burma: The Burmese Government has established charcoal-burning blast furnaces to melt scrap iron. Some of these furnaces were imported and the government has started the production with the idea of putting out hundreds of thousands of tons of pig iron. Installation of pressing machines, electrically-operated blast furnaces and machinery for manufacturing sheet iron plates also is under way. (4/30/44 Tok. Jap.)

FRENCH INDO CHINA PRODUCTION PROGRAMS

Saigon: The Japanese in French Indo-China have stepped up productive activity in various fields of industry. Local interests are steadily developing the iron manufacturing industry without placing reliance on outside support. A certain business establishment has converted an automobile garage into a small plant to manufacture nuts and bolts for building purposes. More than 10 brick furnaces of simple construction were installed in the plant for this purpose. Scores of workers are being em-

IRON AND STEEL INDUSTRY FRENCH INDO CHINA PRODUCTION PROGRAMS

ployed and several thousand pieces are being turned out daily. Nails also are being produced. The only raw material which this plant secures is scrap iron. The plant hopes to step up its production and it is believed that it will have sufficient working material. This plant does not use any machinery, depending on human labor alone. This establishment owns and controls two other iron production plants. One produces parts for wooden ships while the other manufactures iron pipes. This company also maintains connections with certain factories in Annam Province and has authorized the native plants into one large company in order to integrate production. (7/27/44 Tok. Jap.)

PRODUCTION PROGRAMS

Beginning from the first part of February, the experimental stage of steel manufacture was started, and during the middle of February, the industry had begun to function. Because of the high quality of iron ore, 68% iron, and the rich output of (Mankolop)(coke) here, the great progress, and expansion of the Malay Steel Mfg. Co. will henceforth be worth noticing.

(3/15/44 Tok.Cant.)

The establishment of the iron manufacturing industry throughout the Malay Peninsula is progressing steadily. Great progress is expected in the development of a certain "A" type of blast furnace, and the production of reclaimed pig iron ..., steel, cement, fire-proof brick, and other correlated industries are being markedly expanded. (4/11/44 Tok. Jap.)

The production of pig iron and charcoal recently has reached an active stage. At this time, a giant, modern iron manufacturing establishment, which will use the superior coal found in a certain region, is being built through the spirited work of the Japanese and natives.

(6/28/44 Tok. Jap.)

EAST INDIES PRODUCTION PROGRAMS

Djakarta, Java: It is learned that, paving the way for speedy establishment of a heavy manufacturing industry in Djawa, work already is under way to construct many open hearth (furnaces). Machinery and other materials for the hearths' accessories had been brought from ...

(4/20/44 Tok. Eng.)

LIGHT METALS INDUSTRY JAPAN . CORPORATIONS AND COMPANIES

Asahi Electro-Chemicals Company See Light Metals Control Association, "CONTROL" ASSOCIATIONS, 7/6/44

Asano Cement Company See PRODUCTION PROGRAMS, 6/24/44 - 9/8/44

Higashikonaka Manganese Mine

Maebashi (Gumma Prefectures): The majority of the workers at the manganese mine at Higashikonaka, Azuma-mura, Setagun, Gumma Prefecture - the first manganese mine in the prefecture - are young girls from the nearby mountain villages.

(5/14/44 Tok.Jap.)

Inekura-ishi Manganese Carbonate Mine "CONTROL" ASSOCIATIONS, 6/22/44

Japan Aluminum Company (Nihon Arumi) See PRODUCTION PROGRAMS, 3/23/44
- 6/22/44

Tokyo: The Japan Aluminum Company held its annual meeting on May 31 at the Kaijo Building in Marunouchi. The matter of disposal of profits for the term - 8% of the dividends deferred - was brought up for discussion and approved. As a result of the election of officers to fill the expired terms of managing director and all auditors, Sentaro Komura was chosen Managing Director and President to succeed President Ichiro Yoshida, who retired. (5/31/44 Tok.Jap.)

Japan Electro-Smelting Company See PRODUCTION PROGRAMS, 6/26/44

Japan Iridium Manufacturing Corporation

... Tokyo: Turning the geisha call-office into a workshop subcontracting the manufacture of munitions, Toki Murata, 36, and more than 100 girls of the Mukoojima Geisha Hall are working, smeared with grease, with machinery day after day from 7:30 A.M. to 4:00 P.M. They have very recently turned this workshop into a systematic factory and have pleaded that they be allowed to work as regular women factory hands. Tokyo: In Higashi-Nakasu Street, known for its Hakata atmosphere, is a sign which reads: "The Nakasu Workshop of (an undisclosed) steel works." It is a workshop for geisha girls engaged in munitions productions. Since the emergency measures were enforced on March 5, a majority of them returned home, while for the remaining 140 or so, a factory exclusively for them was established through the efforts of a Mr. Furuta, chief of a certain steel works. These girls received three months' training at a certain steel plant and are now full-fledged factory workers. They are assembling parts from 7:30 A.M. to 5:00 P.M. without any rest, and sending out the finished products rapidly. Fukuoka: Having made a sudden, sharp change in their mode of life on March 5, geisha girls are contributing their efforts as full-fledged production soldiers at the Miura and Yoshida plants of the Japan Iridium Manufacturing Corporation. At first there were misgivings as to their attendance efficiency, but these proved to be merely groundless apprehensions, for at the Miura plant, for instance, the attendance hit the excellent record of 90%. At this Japan Iridium factory, work for which at least six months' training had been deemed necessary from the standpoint of the technique involved, was mastered to perfection in only two months by these geishas, and they (7/7/44 Tok. Jap.) are now capably handling this work...

Japan Light Metal Company See PRODUCTION PROGRAMS, 6/22/44 - 9/8/44

Japan Mining Industry Exchange

The Japan Mining Industry Exchange (Nihon Kookan Koogyoo) held its inaugural meeting at the main office of the Japan Exchange Company (Nihon Kookan Honsha) in Tokyo on March 25, and named its officers. In

LIGHT METALS INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Japan Mining Industry Exchange (Cont'd.)

connection with the formation of this organization, four companies -Mining Industry Exchange (Kookan Koogyoo), Musashino Lime, Nikko Manganese, and Japan Exchange -- will soon be dissolved. The officers of
the new company are: Ryozo Asano, Chairman of the Board of Directors;
Jinnojo Hayashi, President; and Kiichiro Matsushima, Managing Director.
(3/27/44 Tok.Jap.)

Japan Soda Company See PRODUCTION PROGRAMS, 9/8/44

In order to meet the demands of the present situation, the Japan Soda Company completed its special research to produce aluminum from alumina by means of direct electrolysis. The experiments having been successful, production on a commercial scale will be started in Toyama Prefecture... (7/28/44 Tok.Jap.)

As the second Light Metals Production Drive nears a close, the production of aluminum from domestic resources registers steady progress according to plan. A noteworthy development is the direct electrolysis method of the Nippon Soda Company, which soon will be employed to manufacture aluminum. This method calls for the use of high-grade ores containing alumina compound from North China. The manufacture of machinery and equipment highly valued by the authorities concerned for this electrolysis process has been pushed, and much is expected of its progress. This production method is expected to play an important role in the manufacture of aluminum, which would double or triple current aircraft construction. The only problem affecting the use of North China is the elimination of the iron content, but as the ores are suited for light metal castings, a means is expected to be found to eliminate the source of trouble.

(8/24/44 Tok.Jap.)

Kamikita Copper Mine

In January, 1944, prior to the end of the last fiscal year (on March 31 -- trans.), Kamikita Mine of Aomori Prefecture had already exceeded in production goal, and by May had become the number-one mine in Japan, setting an all-time record for national copper production.

(6/5/44 Tok.Jap.)

The Kamikita Mine in a way is an unknown mine. It started out as a copper mine a little over two years ago. It was believed that it would take at least 10 years before it could be developed to a point where copper could be produced on a large scale. But, it broke all precedents when, a year after its development, in one jump it attained 7th place in national ranking, and in May, 1944, it finally commanded 1st place in national production. This mine, as the name implies, (kami - above; kita - North -- trans.) is located in the mountains seven ri (17 miles-trans.) removed from a railroad where snow piles up to eight meters in winter. In spite of these natural handicaps, it attained its record through the all-out, desperate, emergency development by men under the leadership of Superintendent Sakata of Osaka. The quality of the iron aluminum-silicate veins discovered by Engineer Mitsuya is from 60% to 70%; with from 15% to 97% silicon content, a pre-existing latent phenomena. Through gradual increase in volume, it is contributing much toward the emergency increased production of light metals. (6/11/44 Tok. Jap.)

Kamikuni Manganese Carbonate Mine See Mine Control Association, "CONTROL" ASSOCIATIONS, 6/22/44

Kantoo Electro-Chemicals Company See Light Metals Control Company, "CONTROL" ASSOCIATIONS, 7/6/44

LIGHT METALS INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Kawaguchi Copper Mine

Akita: In order to reopen the Kawaguchi Mine, which had been abandoned on account of inconveniences in transportation, despite the inexhaustible supply of superior copper ore the mine holds, a truck road project at public expense, involving 500,000 yen, has been under way. One thousand students from the various schools located nearby have taken turns to give their untiring help so that the mine could be made useful even a day sooner.

(8/30/44 Tok.Jap.)

Kokusan Light Metal Company

Morioka: The Kokusan Light Metal Company, which is aiming at production of light metals from strictly native ores in order to get away from dependence on foreign resources, recently decided that it was impossible to meet the heavy demand for light metals caused by the present aerial battles -- so very essential in aircraft production -- by the hitherto utilized methods of production, and therefore changed over to a new method of production discovered by Dr. Hiroshi Tanaka at the Nippon Electro-Chemical Research Laboratory. The light metal factory has secured Dr. Tanaka as its chief in the production department, and after making adjustments it has completed the necessary installations and has started operating anew. By following this new process, not only will production increase four-fold as compared with results obtained with the former process, but a savings will be effected in the use of materials of both primary and secondary importance, thus paving the way for a new epoch in the production of light metals. The ores, which are found in unlimited quantities in the underground deposits in the prefecture of Iwate, will be made (into light metals) in large quantities by integrated operations using electrical power. There had been some doubt expressed regarding the utilization of these new production methods, but the enthusiasm of President Saito, who is responsible for production, and of production manager Tanaka and other factory heads, and the firm conviction expressed by Governor Suzuki in his statement: "We'll perfect this process and show the world!", resolved into a determination which amazingly overcame every bottleneck. It has been two years since work on this new method was begun, and it has reached a state of perfection just at a time when demands for the light metal output are increas-(6/25/44 Tok. Jap.) ing...

Mitsubishi Magnesium Company See Light Metals Control Association, "CONTROL" ASSOCIATIONS, 7/6/44

Nippon Iron Sulphide Manufacturing Company

Through recent research two new mines, which were hitherto operated by the Nippon Iron Sulphide Manufacturing Company as sulphur mines, have proved promising for limonite mining, with about 50% pure limonite ores estimated deposited in substantial amount. (6/2/44 Tok.Eng.)

Nippon Magnesium Company See Light Metals Control Association, "CONTROL"ASSOCIATIONS, 7/6/44

Nisso Mining Company See RESEARCH, INVENTION, DISCOVERY, 9/21/44

Ohye Manganese Carbonate Mine See Mine Control Association, "CONTROL" ASSOCIATIONS, 6/22/44

Onoda Cement Company See PRODUCTION PROGRAMS, 6/26/44 - 9/8/44

Oriental Light Metals Company (Toyo Keikinzoku) See PRODUCTION PROGRAMS, 3/23/44

Oriental Soda Company See PRODUCTION PROGRAMS, 3/23/44

LIGHT METALS INDUSTRY JAPAN CORPORATIONS AND COMPANIES

Shuuyetsu Chemical Company See Light Metals Control Association, "CONTROL" ASSOCIATIONS, 7/6/44

Sulphate Metals Company See Light Metals Control Association, "CONTROL" ASSOCIATIONS, 7/6/44

Sumitomo Company See PRODUCTION PROGRAMS, 4/6/44 - 9/21/44

Teikoku Magnesium Company See Light Metals Control Association, "CONTROL" ASSOCIATIONS, 7/6/44

Tojo Metals Company See Light Metals Control Association, "CONTROL" ASSOCIATIONS, 7/6/44

Toohoku Aluminum Development Corporation

The Toohoku Aluminum Development Corporation held an emergency election on the 28th and the following were chosen: President, Seiichi Sano; Production Manager, Harunoshin Miyanohara; General Manager, Mikin Kuwahara (former Vice-President of the Toohoku Industrial Development Company). The special election meeting was held because of the resignation of Yoshitomi Hori as General Manager. (3/2/44 Tok.Jap.)

Toyo Soda Company See PRODUCTION PROGRAMS, 9/8/44

Yakumo Manganese Carbonate Mine See Mine Control Association, "CONTROL" ASSOCIATIONS, 6/22/44

"CONTROL" ASSOCIATIONS

Japan Black Lead Control Association

Tokyo: The Munitions Ministry, in view of the importance of black lead to war industries, has determined the outlines for controlling the distribution of black lead. The control system is expected to be enforced June 1. Black lead is an important material used in munitions production. It is used for manufacturing signalling apparatus and shells. The control measures will be carried out by the Japan Black Lead Control Association, which is expected to work for improving the quality as well as accelerate the quantity output of this material.

(5/16/44 Tok.Jap.)

Light Metals Control Association See PRODUCTION PROGRAMS, 3/24/44

The Light Metals Control Association has been encouraging the free exchange of information on production technique among the various factories interested in the effort to improve production technique in the magnesium industry. However, during the coming light metals production drive, the Light Metals Eureau of the Munitions Ministry will assume charge of the work, which is expected to result in considerable increased activity during the second quarter. The work of exchanging information on techniques, carried on under the leadership of the Technical Cooperation Committee of the Light Metals Control Association, produced excellent results in the improvement of the (magnesium) dehydration method and in the utilization of bittern method and the combination of bittern and... The Shuuyetsu Chemical Company, the Asahi Electro-Chemicals Company, the Sulphate Metals Company, and the Kantoo Electro-Chemicals Company have been commended for the leadership they have taken in this matter. Other companies, such as the Tojo Metals, Mitsui Chemicals, Teikoku Magnesium, Nippon Magnesium and Mitsubishi Magnesium, already are utilizing the methods developed by first-named companies.

LIGHT METALS INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Light Metal Manufactured Goods Control Association

... As the power of light metals distribution belongs to the Aviation Industrial Association, the Light Metal Manufactured Goods Control Association naturally handles only the distribution of subsidiary materials. Because the distribution route is divided into two - one for light metals, which are the principal raw materials for aircraft use, and the other, the subsidiary materials - it is causing difficulty, and consequently since the fear is that it might cause a bottleneck in aircraft production, closer cooperation between the Aviation Industrial Association and the Light Metal Manufactured Goods Control Association has been demanded. Recently, when a change of press operation of aircraft parts in the factories belonging to the Light Metals Manufactured Goods Control Association took place, the two organizations came to full agreement. As a result of a conference between the two organizations, it was decided at this time that, under the support of the Munitions Ministry, the Light Metal Manufactured Goods Control Association will henceforth undertake the task of unified distribution of silicon and manganese which are important subsidiary materials. To avoid duplication, the filing of priorities for raw materials needed by the Control Association will be made only through the Association and no other machinery will handle the matter. For instance, it was decided that when priority requests are filed with the Control Association and a similar application is made to other control organizations or military authorities, these applications will all be filed with the Munitions Ministry. Here the assessment will be made from the application with the lowest figures. Consequently, because there is the possibility of assessment difficulties when applications are filed at several sources, the quarterly amount of raw materials to be (filed) will be based on the production capacity. The application must define (9/27/44 Tok. Jap.) properly the quantity required.

Mine Control Association See Munitions Ministry, GOVERNMENT ADMINISTRA-TION, 8/2/44

It is contemplated to merge the Japan Organic Ore Control Association into the Mine Control Association as its member in the near future. The organic ore does not exist independently but is always contained in the various mineral ore veins. Therefore, the past treatment of the organic ores separately from the general minerals has been illogical. The absorption of the Organic Ore Control Association by the Mine Control Association will make possible the nationwide production increase of organic ores, and materialization of the merger proceeding is greatly anticipated.

(5/5/44 Tok.Jap.)

Tokyo: Along with the production of steel, the demand for various minerals needed in steel production has recently greatly increased. Among these, manganese for the manufacture of ordinary and special steels... The production goal for this year has been set at so many percent over that of last year. The Mine Control Association of the Munitions Ministry is assiduously promoting various plans to attain this goal. This year, as last year, the mines on which emphasis is laid for manganese production are the Hokkaido manganese carbonate mines -- the Inekura-ishi, Yakumo, Chye, Hatta, and Kamikuni. However, the greater part of our manganese mining is on a small scale, and processing is done by small companies or individuals. There are very few mines with as large a deposit of manganese as the above-mentioned mines. Medium and small mines play a rather important part in the mountains throughout the country. There are some mines in Honshuu, whose manganese dioxide surpasses the manganese carbonate of Hokkaido in quality. The emphasis in this year's production must be placed on the general development of these medium-and small-scale mines. The establishment of strong new measures for the guidance of production and the breaking of bottlenecks has become urgent. The Imperial Nangan-Chrome Company has been taking the lead in

LIGHT METALS INDUSTRY JAPAN "CONTROL" ASSOCIATIONS

Mine Control Association (Cont'd.)

production guidance, but with its dissolution last year the Mine Control Association has taken over the work. The financing will be done by the Imperial Mineral Development Company, and shipping and distribution will be taken care of by the Mineral Distribution Company. Furthermore, the various authorities concerned have organized a Manganese Production Committee to speed up production. The Munitions Ministry has decided to add the quality requirement at this time to the quantity requirement for the payment of the manganese production subsidy which was established earlier in the year, thus requiring quality improvement as well as quantity output. The bottlenecks of the medium— and small—sized mines are the transportation difficulties due to unfavorable geographical location, difficulties in securing labor and the materials necessary for production, and the low operating profit due to heavy transportation expenses.

Increased production of the essential minerals of our nation has been progressing along the single path with extremely good results. All minerals are showing excellent results as they are surpassing the quantitative goals for the decisive wartime emergency. That is to say, according to the over-all view concerning this matter as reported to the Mine Control Association (Koozan Toosei Kai), and designating the (ordinary) productive rate as 100, the following increased productive rates are indicated: 100% for copper, 129% for manganese, 105% for chrome, 131% for molybdenum, 109% for quicksilver, and 170% for asbestos. In connection with other minerals, the rate of increased production is indicated as being greater than expected... (9/9/44 Tok.Jap.)

Nippon Carbon Industry Association See PRODUCTION PROGRAMS, 3/24/44

Tokyo Metal Reclamation Control Company

The government previously had been carrying on a dual reclamation project on metals under the wartime reclamation enforcement policy, but at this time has established a single reclamation policy. To assure success for this new policy, the government has unified the nation's 18 metal reclamation control companies into a single, mighty control body. At the meeting of representatives from the control companies of Tokyo, Osaka, Kyushu, Nagoya, the Hokkaido and various corporations in China, it was decided to merge the 18 companies with the Tokyo Metal Reclamation Control Company as the head organization. The merged firms will function as branches or agencies of the Tokyo Metal Reclamation Control Company. (4/12/44 Tok.Jap.)

FINANCING COMPANIES

Imperial Mineral Development Company See Mine Control Association, "CONTROL" ASSOCIATIONS, 6/22/44, and Munitions Ministry, GOVERNMENT ADMINISTRATION, 8/2/44

PROMOTING ASSOCIATIONS

Light Metals Affiliations Improvement and Increased Production Promotion Corps

In order to attain a drastic increase in production of light metal production in parallel with the rapid advancement of the air force fighting strength, the government approved a matter concerning the establishment of a period for the drive of Light Metal Increased Production during the meeting of Vice-Ministers of the Cabinet, which was held on March 11.

LIGHT METALS INDUSTRY JAPAN PROMOTING ASSOCIATIONS

Light Metals Affiliations Improvement and Increased Production Promotion Corps (Cont'd.)

... The Light Metals Affiliations Improvement and Increased Production Promotion Corps, which will be established in the Munitions Ministry, will play a part as the nucleus power in this drive.

(3/24/44 Tok.Jap.)

GOVERNMENT ADMINISTRATION

Munitions Ministry

Responding to the demands for rapid production increase in light metals, which are important raw materials necessary for rapid production of aircraft, the Munitions Ministry has decided to put into effect a self-sufficiency and control of placement of orders... Today the outline for self-sufficiency in black lead and...was decided upon. Announcements from the Light Metals Bureau were sent to the various persons concerned and the contents of the outline were made known...

(4/8/44 Tok.Jap.)

The Bureau of Mine Supervision which is the foremost government office concerned with the development of mineral deposits has recently been undergoing some changes from a hitherto supervisory administration to an administration taking active and leading part in the production of minerals. In order to facilitate this change and to further smooth the administrative works of this Bureau, the government during its cabinet meeting on the 2nd decided to revise some of the Bureau's setup. The Munitions Ministry on the 5th announced the revisions which are to go into effect on June 1. These revisions are: (1) The name, Bureau of Mine Supervision, will be renamed to "Regional Bureau of Mines." To this will be attached regional names. The present Bureau offices in Tokyo. Sendai, Osaka, Fukuoka, and Sapporo will be revised and termed Eastern Region, Northeastern Region, Western Region, Kyuushuu Region, and Hokkai Region. (2) The present local offices of the Mine Supervision Bureau will be changed to branch, agency, and branch agency. (3) The branch offices are to be located at Nagoya, Nigata, Hiroshima, and Matsuyama cities, seats of the Regional Bureau of Mines (are located). It is expected that the branch chiefs will be given some of the Regional Bureau chief's powers. (4) The present local offices which will not be recognized as branch offices under the new setup will either become agencies or branch agencies. (5) From the standpoint of setting up the Regional Bureau of Mines under the same jurisdictional areas as the Regional Administrative Council, the four prefectures, Miye, Fukui, Ishikawa, and Toyama, which under the present setup come under the Osaka Mine Supervising Bureau, will be incorporated into the Eastern Regional Bureau of Mines. However, Yamaguchi Prefecture will specially come under the (5/5/44 Tok. Jap.) Kyuushuu Regional Bureau of Mines.

Tokyo: The Bureau of Non-Ferrous Metals of the Munitions Ministry, following up last year's readjustment of the gold mining industry, planned to shift labor and materials from the tin and sulphur mining industries to more urgent fields. This diversion program has been in effect since May 27, when plans for the readjustment of the tin and suphur mining industries were drawn up. The tin and sulphur mining companies were given directives through various regional bureaus of mines and ordered to suspend operations and release their workers and materials to other mines where production was regarded more essential. The main points of the directives were as follows: 1. In view of the present supply and demand situation regarding urgent metals, sulphur and tin mines, which do not produce any critical materials on the side as copper, lead or zinc, should suspend operations and transfer their works and distribute their equipment to other mines. 2. Those sulphur mines whose operations are

LIGHT METALS INDUSTRY JAPAN GOVERNMENT ADMINISTRATION

Munitions Ministry (Cont'd.)

considered essential will be allowed to continue mining. Their operation will be determined by their ability to produce and their location. 3. Tin mines having a high productive capacity will be allowed to continue operation. For the period up to June 30, voluntary compliance (of) these directives was expected. Since then with the aid of the Mines Control Association and the Tin and Sulphur Mines Readjustment Promotion Committee of the Imperial Mining Development Company, the various mines are steadily progressing with arrangements for the transfer. A greater part of the mines already have suspended work and diverted their facilities. The Bureau of Non-Ferrous Metals, the Mines Control Association, and the Imperial Mining Development Company are speeding the conversion of mines and the distribution of labor and materials of the suspended mines. The tin and sulphur industry diversion program is different from the gold mining program in that the former emphasizes localized changes, centering on various regional mines control bureaus. The policy is to ease the transportation problem by restricting conversions and diversions to localities. Already a certain number of miners have been re-distributed to critical mines and are now at work in the critical minerals production increase drive, which was launched August 1. As in the case of gold mining adjustments, the Imperial Mining Development Company will compensate suspended tin and sulphur mines. The Superintendence Department of the Mines Control Association and the Readjustment Committee of the Imperial Mining Development Company are at present making appraisals of the mines. The selection of the mines which are to continue operation and those which are to be suspended under the government's policy is nearing completion. Although the suspension program in the sulphur and tin industry is on a smaller scale than that of the gold mining readjustment program, the changes are being carried out swiftly and efficiently. The authorities and the Mine Control Associations are highly praising the cooperative efforts of the sulphur and tin mine operators and their (8/2/44 Tok. Jap.) understanding of the war situation.

Tokyo: The government has decided to establish in the Munitions Ministry a Light Metals Provisional Headquarters, comprising representatives of various Ministries connected with light metals production. The organization was formed to boost the production of light metals, so essential to the growth of Japan's air strength. On September 4, at a meeting of Vice-Ministers, Munitions Vice-Minister Takeuchi explained the setup and its organization was upheld by the Vice-Ministers present. The Munitions Ministry will provide the nucleus for the organization and the bureau and department heads of the Home, GEA, Welfare, Agriculture and Commerce, and Transportation and Communications (Ministries) will be committee members. The section heads of these Ministries will be secretaries. Munitions Vice-Minister Takeuchi will be the first President and Shiina, Director of the Mobilization Bureau of the Munitions Ministry, will be Vice-President. In step with the present war situation, the headquarters will secure production capital, provide measures to install and manufacture equipment and machinery, and will attempt to break production and transportation bottlenecks. It will also attempt to secure sufficient electric power and coal for light metals production factories. Heretofore, administrative authority was relegated among the various Ministries, but this recent setup will centralize administrative power which will make it possible for the government to overcome the difficulties standing in the way of greater light metals production. (9/5/44 Tok. Jap.)

LIGHT METALS INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Aircraft Research Institute

The key to the solution of the problem of increased aircraft production lies in the speedy increase of necessary minerals. (Bad keying at this point makes copy poor -- Engineer) ...by Aircraft Research Institute which made a record-breaking long distance flight. The proportion of duralumin was 68.2%; that of alloys of magnesium, 2.8%; that of steel, 14.5%; and that of other materials combined, 14.5%. Though our warcraft differs from this type of plane, nevertheless the fact remains that duralumin is the most predominate among the materials needed in the manufacture of planes. Duralumin production in Japan compares favorably with that of the United States and Britain. (4/6/44 Tok.Eng.)

Banzoo Copper Mines

Sendai: At the Banzoo Copper Mines, a rich copper vein has been discovered, and mining operations have been launched. The availability of manpower is very good, as the various equipment which had been considered has been installed, and an opening ceremony was held on August 1. The workers have pledged themselves to make good the increased production in August and September. (8/5/44 Tok.Jap.)

Miscellaneous

Honors given for the first time to four persons for discovery of mineral deposits: ... Copper Pyrite - Kiyoji Watanabe, a charcoal producer of Higashi-oguni-mura, Mogami-gun, Yamagata Prefecture. ...discovered an outcrop of this ore and reported this to the mineralogical supervising office of the area. ... Mining operations were begun at once. Hyacinth ore - ... Tetsunosuke Marunouchi... prospected for this rare element in the area around Ishikawa-machi, Ishikawa-gun, in Fukushima Prefecture, under the guidance of Professor Ryooichi Chashi of the Akita Mineralogical College, convinced that hyacinth ore would some day be in great demand. As a result of his endeavors, he succeeded in discovering this ore containing high-grade elements. Manganese ore - Eizoo Suzuki...discovered a specimen of manganese ore in the basin area of the Abukuma River, which flows through Oyama-mura, Iwase-gun, in Fukushima Prefecture... Beryl ore - While Genshiroo Uchimura, a mine worker of Kozekimura, Saga-fun, Saga Prefecture, was engaged in digging silica in the Saka Mine...he came across a green ore and reported this to the mine owner. Analyses made by the bureau branch office in Kumamoto Prefecture revealed that this was a specimen of a rare metal called beryl. (4/27/44 Tok. Jap.)

The fact that magnesium is an important war material which can be obtained from brine during the process of manufacturing salt has been brought to the fore by the Japanese salt industry at the present stage of the GEA war. Salt refineries along the coast of the Inland Sea which is Japan's salt center are now busy not only producing vital salt but valuable magnesium.

(5/20/44 Hsinking Eng.)

Sakaide: lauxite, from which aluminum is made, was discovered in the vicinity of Kanayama in Sakaide, and this city which is known as the "city of salt" is about to become the "city of bauxite." ... Ikutaroo Komatsu, who owns these mountains, thought perhaps there might be something worthwhile and started to investigate. As a result he discovered bauxite ore in great quantities. He had it assayed and found that it contained 60% aluminum and that it was comparable to those produced in Bintan Island of the Riouw Archipelago. The ore deposit is also very large... (6/7/44 Tok.Jap.)

A deposit of rare ore which is said to be almost as rich as the one found in the Osaka area was discovered recently in Shikoku, and steps are being taken to make this ore immediately available for war industries. The ore

LIGHT METALS INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Miscellaneous (Cont'd.)

discovered commonly is called "Sanuki-ishi" (Sanuki rock). Samples of this ore, analyzed by experts of the Munitions Ministry, were said to have contained from 54% to 70% aluminum. An unrevealed number of tons of this ore has arrived at the Ehime Prefecture plant of the Sumitomo Aluminum Company for trial production. Active development work on this deposit will be started as soon as a full survey is completed. The survey is expected to show that a considerable amount of ore can be taken from the area. (6/16/44 Tok.Jap.)

group to Inner Mongolia to make a survey of the possibility for developing precious metal resources in that area which are said to be found in abundance. The group will also scout possibilities of developing other special mineral deposits. The leader of the Research Group will be Lieutenant General Reikichi Tada, Chairman of the Board of Directors of the Scientific Mobilization Association. Members of the group will comprise Scientific experts who are assistant professors of various colleges. Dr. Hisateru Okuno, councillor of the Board of Technology, is one of the members. With the selection of the party completed, the first meeting preparatory to the dispatch of the mission was held on August 14, at the Association office. (8/14/44 Tok.Jap.)

Toyohara: An investigation of undeveloped mineral resources throughout Karafuto (Sakhalin) was carried on over a 17-day period beginning June 20. As a result of the geological survey made by Tohoku Imperial University Professor Hanzawa and his party of the Esutoru area, which is the coal center of Karafuto, it was determined that the coal deposit in this area reached the huge figure of (so many) tons. This great coal bed is of a size hitherto unknown, with the main deposit contained in the underlayer.

(8/16/44 Tok.Jap.)

After two years of painstaking research, the light metal factory in Iwate Prefecture has succeeded in obtaining alumina from alum stone. Conducting investigation for the deposits of the alum stone throughout Japan, the Munitions Ministry has discovered a large amount of this deposit in the prefectures of Tochigi, Nagano, Tottori, Miyazaki, and Kagoshima, as well as in Hokkaido. The industrialization of the mineral is already underway.

(8/19/44 Tok. Eng.)

The Investigation Committee of the Association for Emergency Development of Mineral Resources has been, under instructions of the Munitions Ministry, exploring possibilities of further development of various mines as well as locating new fields in the Tohoku area. Special attention has been concentrated in locating possible iron and molybdenum deposits. Ansai, Professor of the Yamagata Higher School, who has been on a special investigation of the Asahidake area in Nishi-okitama-gun, Yamagataken, over a 20-day period beginning August 31, has reported the discovery of a great outcrop of high quality molybdenum. (9/21/44 Tok.Jap.)

method using alumina. The company is striving principally to produce aluminum for...use. A remarkable technical improvement was made in aluminum process by removing the iron content from the raw material with acid. Lately, high quality aluminum of 85% pure, and containing 8% to 10% silicon, less than 0.5% iron, and a small amount of (chitan), is being produced. The specially equipped alumina electrolysis technique is said to be almost perfected now. As for the processing of aluminum with alumina, the Nisso Mining Company and the Sumitomo Company have recently discovered a unique technique. It is expected that the new technique will be perfected soon and made known to the public at the end of this month. With this processing technique, high-grade aluminum as good as when bauxite is used can be refined. The characteristic of this technique is

LIGHT METALS INDUSTRY JAPAN RESEARCH, INVENTION, DISCOVERY

Miscellaneous (Cont'd.)

that the present facilities can be used with very little change and that unnecessary time will not be lost in the event shifts in raw materials are made. Like the direct electrolysis method, much is expected out of this technique using domestic raw materials. (9/21/44 Tok.Jap.)

Udo Industrial Laboratory

A huge deposit containing sulphide ore, produced only in some sections of Taiwan, was recently discovered in the Kitcho Mines in Kyoto City Prefecture. Kinsaku Udo of the Udo Industrial Laboratory has been experimenting with the find. He recently discovered that it could be used as material for the manufacture of dyes, paints, and electric wire insulations. He has also found that it could be used to make carbon black. Udo's experiments have also been confirmed by further experiments made by (Budrock) Reece, Swedish technical expert and owner of an industrial laboratory in Osaka. It is hoped that it will become one of the vital war materials. (10/5/44 Tok.Jap.)

PRODUCTION PROGRAMS

In the 1944 aluminum expansion program, emphasis is placed, as was done last year, on the manufacture of domestic alumina, and distribution of materials is being focused on alumina manufacturing enterprises using the soda lime process with aluminite as raw material... The manufacturing method whereby aluminite is changed into alumina clinkers and put through the soda lime process is being particularly stressed for the following reasons: 1. Technically, it is sure; 2. Diverted equipment can be utilized; 3. Whenever bauxite is procurable in large quantities, it can readily be switched over to (Bayer) alumina manufacturing equipment. There are several companies that will employ this process, such as Showa Electric Light (SHOW DENKO), Oriental Light Metals (TOYO KEIKINZOKU), Japan Aluminum (NIHON ARUMI), Oriental Soda (TOYO SODA), etc. Among them, Oriental Soda will promptly take shape by the end of this month or early next month. Manufacture of domestic alumina by the others is at present being energetically prepared for by the respective (3/23/44 Tok. Jap.) companies...

March 25: A vigorous six months' drive to increase the production of light metals for the manufacture of aircraft will take place throughout Japan starting May 1 according to a plan approved by the Cabinet yesterday. Affecting all branches of the light metal industry, including aluminum, magnesium, pitch, coke, and electrodes, the drive will make special efforts to effect close liaison between munition plants and government officials, with an aim to operating existing production facilities at a maximum pitch peak of efficiency... (3/24/44 Tok.Eng.)

...the government decided...to designate a light metals productionincrease period. ...The main points affect the factories manufacturing
six items, namely, aluminum, alumina, magnesium, fluoride, (pitch-coke),
and electrodes and places emphasis on a demonstration of the maximum efficiency of existing facilities and a speedy completion of plans for
expansion with the first quarter of 1944 considered as the first working
period and the second quarter as the second working period. For this
purpose, the corps for the promotion of increased production in factories
connected with light metals, which was established in the Munitions Ministry by including all officials concerned, will be the main body taking
charge of the drive for the central authorities. Locally, close relations will be maintained among the prefectural governors, the munitions
supervision departments, the Light Metals Control Association, and the
Nippon Carbon Industry Association, and the cooperation of the light