

Doc. 2933 Fluid

Folder 4

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INTERNATIONAL PROSECUTION SECTION

Doc. Nos. 2933 - 2940, incl

7 February 1947

ANALYSIS OF DOCUMENTARY EVIDENCE

DESCRIPTION OF ATTACHED DOCUMENT

Title and Nature: Mimeographed Reports on Narcotic Activities of Narcotic Drug Manufacturers in Japan Proper. Published by Public Health & Welfare Section, GHQ, SCAP

Date: 1 May - 8 Oct 1946 Original ( ) Copy (x) Language: English  
Period covered - (1930-1945)  
Has it been translated? Yes ( ) No (x)  
Has it been photostated? Yes ( ) No (x)

LOCATION OF ORIGINAL

GHQ, SCAP, Public Health and Welfare Section

SOURCE OF ORIGINAL: GHQ, SCAP, Public Health & Welfare Section, Joseph M. BRANSKY, Narcotics Investigator

PERSONS IMPLICATED: KIDO, Koichi; BAGA, Eiichi

CRIMES TO WHICH DOCUMENT APPLICABLE: Opium Traffic - Manchuria

SUMMARY OF RELEVANT POINTS

Doc. No. 2933 - "Survey of the Manufacture, Production and Sale of Narcotic Drugs by the Koto Pharmaceutical Company, Limited" (1 May 1946)

This report gives a brief business history of this company and its development of Cocaine Hydrochloride and Topacocaine production (1941). There is no evidence that the Cocaine Hydrochloride manufactured by the Koto organization was used for illicit purposes.

Doc. No. 2934 - "Survey of the Narcotic Activities of the Shionage Pharmaceutical Manufacturing Company, Limited" (29 May 1946)



This company manufactured cocaine hydrochloride. No evidence of diversion of these narcotic products was disclosed during this survey.

Doc. No. 2935 - "Survey of the Narcotic Activities of the Hoshi Pharmaceutical Mfg Co., Ltd" (8 ~~Nov~~ <sup>31 May</sup> 1946)

The survey traces the development of the company from its founding in 1911 through its wartime activities. From 1938 to 1945 it is stated by the superintendent of the Hoshi Plant that CODEINE HYDROPHOSPHATE was produced from CRUDE OPIUM. Tables are included in the survey giving information concerning the purchase of crude narcotic drugs and their manufacture and distribution.

Information as to the production and sale of Morphine Hydrochloride and Heroin Hydrochloride is outlined also in this survey. This survey discloses that in 1937 and 1938 the Ministry of Welfare and Social Affairs allotted the Hoshi Company a certain amount of raw morphine for the manufacture of HEROIN HYDROCHLORIDE and MORPHINE HYDROCHLORIDE with specific instructions to deliver the HEROIN and MORPHINE to the Manchurian govt. The manufacture of these drugs was not reported to the Opium Advisory Committee of the League of Nations by the Japanese Government. (Later to be made the subject of special report)

In conclusion a survey of the narcotics activities of the Hoshi Company does not reveal diversion of its manufactured drugs and from the period from 1930 through 1945, their entire production was sold in Japan and none of its narcotic drugs were exported other than the HEROIN exported to the Manchurian Govt.

Doc. No. 2936 - "Survey of Production, Manufacture, and Distribution of Narcotic Drugs and Preparations by the Sankyo Co., Ltd" (19 July 1946)

The narcotic drugs produced by the Sankyo Company were distributed through wholesalers and no narcotic drugs were exported by the Sankyo Company. It is revealed that in 1937 and 1938 the Japanese govt allotted the Sankyo Company certain quantities of RAW MORPHINE for the manufacture of HEROIN and MORPHINE HYDROCHLORIDES for delivery to Manchuria. This manufacture was not reported to the Opium Advisory Committee of the League of Nations by the Jap Ministry of Welfare and Social Affairs.



No evidence of diversion by the Sankyo Company of the narcotic drugs manufactured was disclosed.

Doc. No. 2937 - "Survey of the Narcotic Activities of the Takeda Pharmaceutical Industries, Ltd"

This company manufactured NARCOPON (an opium preparation), morphine hydrochloride and atropine - among other medicinal and narcotic drugs. No evidence disclosed in survey which might indicate that Takeda had diverted narcotic drugs into illicit channels.

Doc. No. 2938 - "Survey of the Production, Manufacture and Distribution of Narcotic Drugs and Preparation by the Dai Nippon Pharmaceutical Co., Ltd"

This company manufactured narcotic and medicinal drugs from opium, morphine and also produced Heroin Hydrochloride. In 1937 their production of HEROIN increased due to the fact that the Home Ministry allotted the Dai Nippon Co. a certain amount of RAW MORPHINE for its manufacture with instructions to deliver HEROIN and MORPHINE HYDROCHLORIDE to the Manchurian Govt.

Doc. No. 2939 - "Production of Narcotic Drugs by the Drug Manufacturers Located in Japan Proper for the Opium Monopoly Bureau of the Manchurian Govt"

It is revealed in this survey that in August 1937 the Opium Monopoly Bureau of the Manchurian Govt thru the Ministry of Home Affairs (BABA, Eiichi) requested the Sankyo Co, Ltd, to produce 400 kilograms of HEROIN Hydrochloride and 150 kilograms of Morphine Hydrochloride. Due to limited plant production facilities, the order was distributed among the Sankyo Co, Ltd., The Hoshi Pharmaceutical Co, Ltd., and the Dai Nippon Co. About 27 December 1937, the narcotic drugs were exported by these companies through the port of Kobe, Japan to the Opium Monopoly Bureau, Mukden Army Arsenal, Mukden, Manchuria. In a Jap govt directive, Marquis KIDO, Koichi, on 27 Jan 1938, at the request of the Manchurian govt, authorized the above drug companies to produce and export narcotic drugs to the Opium Monopoly Bureau of the Manchurian Govt. The production of these drugs was not reported to the Opium Committee of the League of Nations by Manchuria although the manufacture of the two drugs was done under the direction of the Jap Govt.



Doc. Nos. 2933 - 2940 - Page 4 - SUMMARY Cont'd

Doc. No. 2940 - "Final Report of the Survey Made of the  
Narcotic Drug Manufacturers Located in Japan  
Proper"

This survey covers a period from 1930 thru 1945 and the date for this survey was obtained from the records and information furnished by the Narcotic Drug Manufacturers personal conferences with their officials and the officials of the Ministry of Health and Social Affairs. The following companies were licensed by the Home Ministry and later by the Ministry of Health and Social Affairs to produce narcotic drugs in Japan Proper:

a. HEROIN HYDROCHLORIDE - Hoshi Pharmaceutical Co, Ltd, Sankyo Co, Ltd, Dai Nippon Pharmaceutical Co, Ltd.

b. MORPHINE HYDROCHLORIDE - Hoshi Co, Sankyo Co, Takeda Pharmaceutical Industries, Ltd and the Dai Nippon Pharmaceutical Co, Ltd.

c. COCAINE HYDROCHLORIDE - Hoshi Co, Sankyo Co, Koto Pharmaceutical Co, Takeda Ltd and the Shionogi Pharmaceutical Co, Ltd.

d. NARCOPON - Takeda Pharmaceutical Industries, Ltd. Prior to 1944, Narcopon was produced solely by the Radium Chemical Co, Ltd.

At the direction of the Japanese Home Ministry Morphine and Heroin Hydrochlorides were shipped to Manchuria. The Japanese failed to report this production for Manchuria to the League of Nations. It was disclosed through Dr. Yoshisuke YASUMI, formerly employed by the Jap Home Ministry and the Ministry of Health and Social Affairs, that false reports were prepared by these ministries for the League of Nations relative to the annual production of HEROIN HYDROCHLORIDE.

Doc. No. 2940A - (Same Doc.No. as above Survey)

Covering letter (check sheet) from Public Health and Welfare Section, GHQ, SCAP to IPS, dated 8 Nov 1946, enclosing copies of above reports prepared from surveys made of the narcotic activities of narcotic drug manufacturers in Japan from 1930 - 1945.

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# 2933

GENERAL HEADQUARTERS  
SUPREME COMMANDER FOR THE ALLIED POWERS  
Public Health & Welfare Section

1 May 1946

SUBJECT: Survey of the Manufacture, Production and Sale of Narcotic Drugs by the Koto Pharmaceutical Company, Limited (Koto Seiyaku Kaisha).

1. The Koto Pharmaceutical Company, Limited (Koto Seiyaku Kaisha), General Head Office, 1398, 2 chome, Setagaya, Tokyo, Japan, was organized in January 1919 and capitalized at ¥ 500,000. In 1929 they reduced their capital stock to ¥ 250,000 due to poor business conditions. In July 1934 they increased their capital stock to ¥ 800,000 and in May 1941 they purchased the Showa Pharmaceutical Manufacturing Company and increased their capital stock to ¥ 980,000.

2. Kanji Yoshikawa is the president and the following individuals are members of the board of directors of the Koto Pharmaceutical Company:

Hikoichi Ito, Special Managing Director  
Koji Azuma  
Bunichiro Terashima  
Schichishire Ishikawa

3. This company owns and operates the following drug manufacturing plants in Japan:

- a. SETAGAYA PLANT: Located 1398, 2 chome, Setagaya, Tokyo. Their main office and research laboratory are located here. Atropine is the only drug manufactured at this plant.
- b. AKABANE PLANT: Located 618, 1 chome, Fukure-Machi, Ojiku, Tokyo. Here they refine Sulfanilamide and produce Ampoules of Non Narcotic Drugs.
- c. NAKANO PLANT: Located in front of the Nakano Railroad Station, Nakano Ward, Tokyo. Ampoules of Non Narcotic Drugs are produced here.
- d. FUJI PLANT: Located in Yeshiwara Machi, Shizuoka Prefecture, Bunichiro Terashima is the Managing Director and Keikichi Nagasawa the Chief Chemist. Here they manufactured Cocaine Hydrochloride and Tropicocaine chemically known as Benzol-Tropaine for the entire organization.
- e. NIIGATA PLANT: Located at Kuzutsuka-Machi, Niigata Prefecture. Glass Ampoules are manufactured here for the entire Koto organization.

4. Cocaine Hydrochloride for the entire Koto Organization was manufactured at the Fuji Plant, located in Yeshiwara-Machi, Shizuoka Prefecture. This plant was not damaged by the air raids and remained in operation all during the war.

5. The following information as to purchases of Coca Leaves and the production of Cocaine Hydrochloride from 1931 thru 1945 by the Koto Organization was submitted to this section by Bunichiro Terashima, Managing Director of the Fuji Plant. See Table (1) Attached:



TABLE ONE					
<u>YEAR</u>	<u>COCA LEAVES ON HAND FIRST OF THE YEAR</u>	<u>COCA LEAVES PURCHASED</u>	<u>COCA LEAVES PROCESSED</u>	<u>COCAINE HYDROCHLORIDE MANUFACTURED</u>	<u>COCAINE HYDROCHLORIDE SOLD</u>
1931**	0.000	5,498.312 kg**	57,554.428 kg	440.300 kg	440.300 kg
		53,885.116			
1932	1,829.000 kg	51,981.000	51,422.000	398.300	361.200
1933	2,388.000	51,120.000	52,470.000	396.200	433.300
1934	1,038.000	54,375.000	49,205.000	408.800	408.800
1935	6,208.000	47,275.000	51,796.000	399.700	399.700
1936	1,687.000	52,217.000	52,936.320	399.000	399.000
1937	967.680	52,559.000	52,663.680	396.200	370.300
1938	863.000	53,383.000	53,294.000	396.200	372.505
1939	952.200	52,550.000	52,867.000	396.200	360.322
1940	635.000	52,850.000	52,222.000	396.200	457.736
1941	1,263.000	52,263.000	52,882.000	396.200	296.397
1942	644.000	52,875.000	53,289.000	396.200	403.440
1943	230.000	39,025.000	38,977.000	303.100	344.000
1944	278.000	26,062.480	22,887.480	147.700	193.900
1945**	3,453.000	0.000	3,453.000	17.225	46.625
15 YRS	22,435.680 kg	697,918.908 kg	697,918.908 kg	5,287.525 kg	5,287.525 kg

\*\* Brought over from 1930.

6. Analysis of the production figures submitted by the Koto Company discloses the average yield of Cocain Hydrochloride from Coca Leaves purchased between the dates of 1931 and 1945 as 0.756 %. Bunichiro Terashima the Managing Director of the Fuji Plant and a pharmaceutical chemist, stated during the course of several interviews with Investigator Bransky that the yield of Cocaine Hydrochloride from Coca Leaves would average 0.6 to 0.7 %.

7. The production of Cocaine Hydrochloride was greatly curtailed in 1944 and 1945 due to the capture of Iwo Jima by the American armed forces. The Japanese had developed large coca leaves plantations on Iwo Jima and Okinawa.

8. Cocaine Hydrochloride was marketed in 5, 25 and 700 gram packages. The 5 and 25 gram packages were sold in glass containers and the 700 gram in tin cans. The price for 1 kilo of Cocaine Hydrochloride was set at ¥ 991.99 by the Ministry of Welfare and Social Affairs Section. The gross business of the Koto Company for the past 15 years totaled amount ¥ 15,000,000 and about one third or ¥ 5,000,000 was received from the sale of Cocaine Hydrochloride.

9. The residue of coca leaves after being processed for Cocaine Hydrochloride and Tropicocaine was sold by the manufacturer to the Japanese farmers for use as fertilizer. The value of this residue as a fertilizer was based upon its nitrogen content. The price paid by the farmers for a kilo would average about ¥ 2.

10. The following information as to purchases of Coca Leaves for the production of Tropicocaine and Atropine Sulphate from September 1941 through 1945 was submitted by the Koto Organization to this section through Bunichiro Terashima, Managing Director of the Fuji Plant. The production of Tropicocaine and Atropine Sulphate began in September 1941. See Table (2) Attached.



11. Bunichiro Terashima stated Tropacocaine Hydrochloride and Atropine Sulphate were both processed from the same lot of coca leaves and for that reason he could not furnish this section definite figures as to the exact amount of coca leaves used for each alkaloid. That the yield of Tropacocaine was from 0.30 to 0.35 % or an average of 0.325 % and that of Atropine Sulphate from 0.06 to 0.07 % or an average of 0.065 %. Based upon these figures the following amounts of Coca Leaves were used in the processing of the two alkaloids:

For Tropacocaine Hydrochloride 51,587.000 kg

For Atropine Sulphate 64,359.000 kg

Amount Coca Leaves being  
Processed for manufacture of  
Tropacocaine Hydrochloride  
at the time of the SCAP  
Directive dated 12 Oct 1945. 14,253.000 kg

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130,199.000 kg

TABLE TWO

YEAR	COCA LEAVES PURCHASED	COCA LEAVES PROCESSED	TROPACOCAINE MANUFACTURED	TROPACOCAINE SOLD	ATROPINE	ATROPINE
					SULPHATE MANUFACTURED	SULPHATE SOLD
1941**	15,037.000 kg	9,662.000	0.000	0.000	0.021	0.000
1942	8,700.000	5,375.000	32.957	28.121	2.006	1.993
1943	0.000	8,700.000	25.000	29.150	1.025	1.075
1944	63,245.000	63,245.000	64.000	64.000	27.480	27.480
1945	43,217.000	43,217.000	84.000	84.686	3.000	3.044
5 YRS	130,199.000	130,199.000	205.957	205.957	33.532	33.532

\*\* The manufacture of Topacocaine and Atropine Sulphate started in September 1941.

12. The coca leaves for the manufacture of Cocaine Hydrochloride, Tropacocaine Hydrochloride and Atropine Sulphate were purchased through the following organizations:

- a. Iwoto Industrial Company, Limited, No. 1, 1 chome, Irifunecho, Kyobashi-ku, Tokyo.
- b. Sumatra Industrial Company, Limited, No. 2, 2 chome, Marunouchi, Kojimachi-ku, Tokyo.
- c. Koeki Eidan (Trading Corporation of Japan), No. 2, 3 chome, Honcho, Nihonbashi-ku, Tokyo.
- d. The Medicine Controlling Company, Limited, Sankyo Building, 2 chome, Muromachi, Nihonbashi-ku, Tokyo.

13. Tropacocaine Hydrochloride was marketed in forms of Ampoules and Crystals. Each ampoule contained 0.06 grams (0.925 grains) of Tropacocaine Hydrochloride and were packed 5 ampoules to a carton. The crystals of Tropacocaine Hydrochloride were sold in 5 and 25 gram bottles and in 1 kilogram tin cans.



14. The Koto Drug Company was the first drug manufacturer in Japan to produce Tropacocaine Hydrochloride and for that reason the Ministry of Welfare and Social Affairs did not permit any other drug manufacturer in Japan to import coca leaves for the manufacture of this alkaloid. Tropacocaine Hydrochloride as "Tropacocainum Hydrochloridicum" is an official drug of the 5th Edition of the Japan Pharmacopoeia which sets the maximum dose as 9.10 gram (1.543 grains) and the maximum daily dosage as 0.30 gram (4.629 grains).

15. Bunichiro Terashima stated Tropacocaine Hydrochloride like Cocaine is produced from coca leaves or crude cocaine. It is a benzoic acid ester of pseudotropine and fundamentally differs from the latter which is a derivative of ecgonine. It is also alleged by Terashima that Tropacocaine does not possess the habit forming properties of Cocaine and was not classified as a Habit Forming Drug by the Advisory Committee on Traffic in Opium and Other Dangerous Drugs of the League of Nations or by the Narcotic Drug Laws of Japan. This fact has been verified by Investigator Bransky.

16. Terashima further stated Tropacocaine differs distinctly from Cocaine in that it does not cause the contraction of the terminal blood vessels. Its chief use in Japan is as a "Lumbar Anesthetic" in abdominal and gynaecological operations.

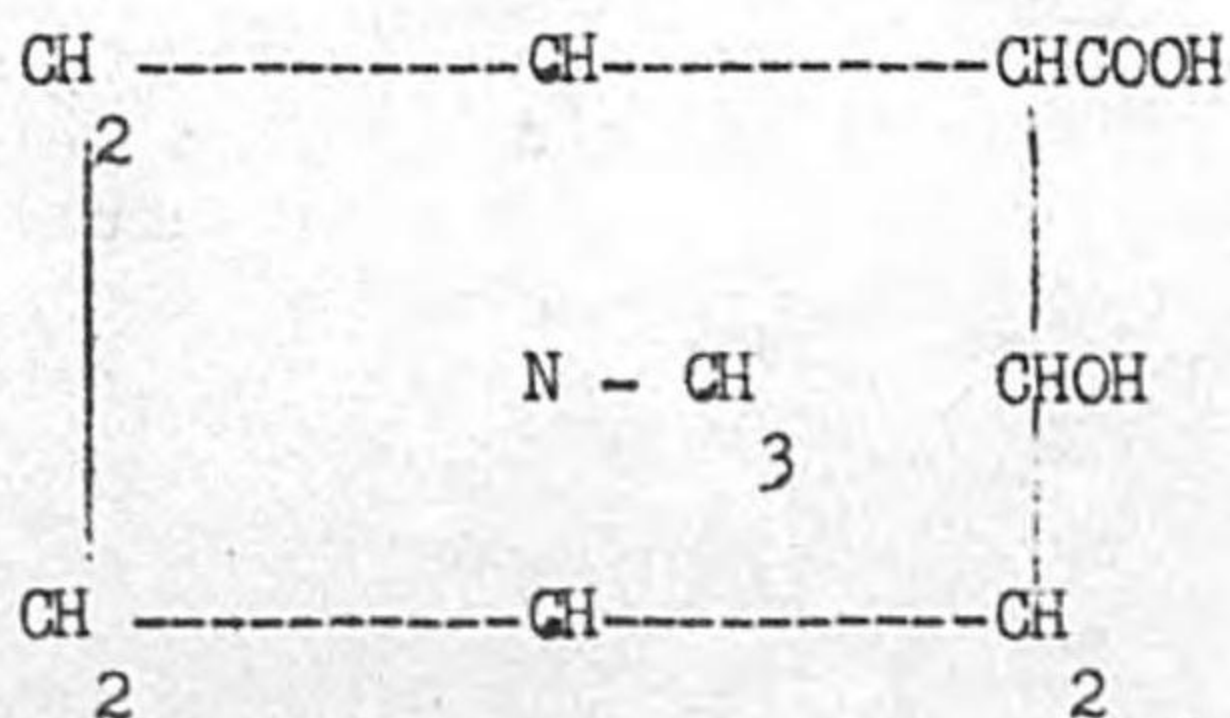
17. Terashima also furnished the following information as to the method used by the Koto Company in producing Tropacocaine Hydrochloride and its chemical structure: (See Chart on page 5).

"Ecgonine which has been isolated from coca leaves or has been prepared by the hydrolysis of crude cocaine, is oxidized with chromic acid. Thereby secondary alcohol group of the ecgonine molecule is oxidized to keton with the simultaneous decarboxylation at the adjacent carbon atom, thus producing tropinone which is strongly basic amine without optical activity. See attached diagram. Although Tropinone is made from Ecgonine in this way, it is, so far, impossible chemically to reverse this process to obtain Ecgonine from the Tropinone.

"Tropinone is then dissolved in alcohol and reduced with metallic sodium to pseudotropine, which on benzylation gives tropacocaine hydrochloride, which is used for lumbar anesthesia."



CHART

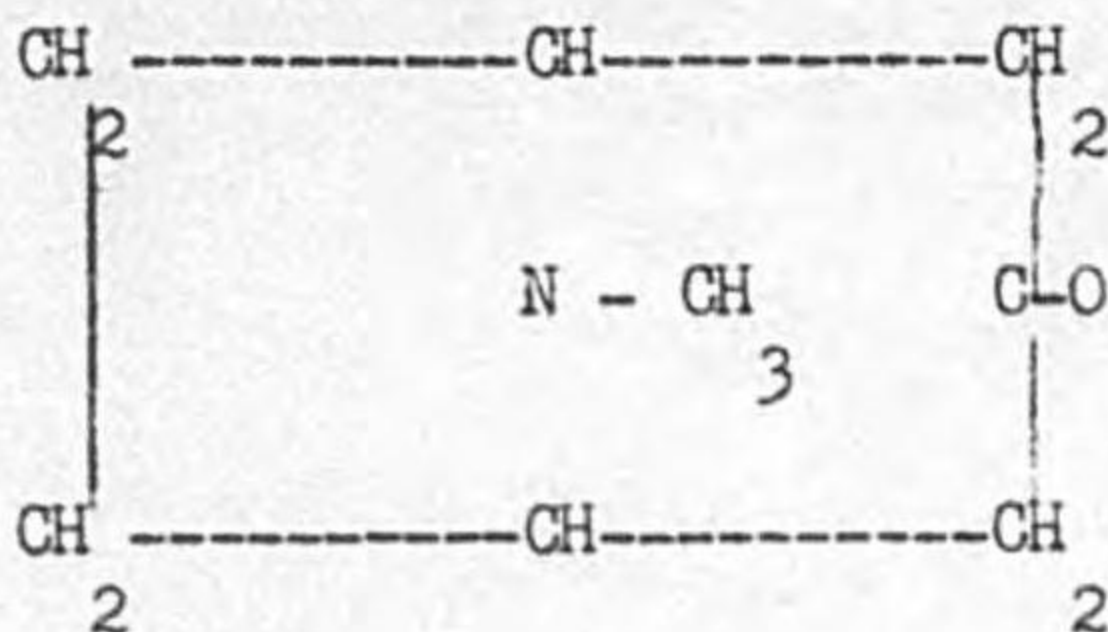


Oxidation and  
decarboxylation

by chromic acid

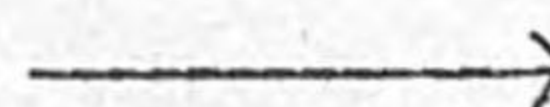


Ecgonine

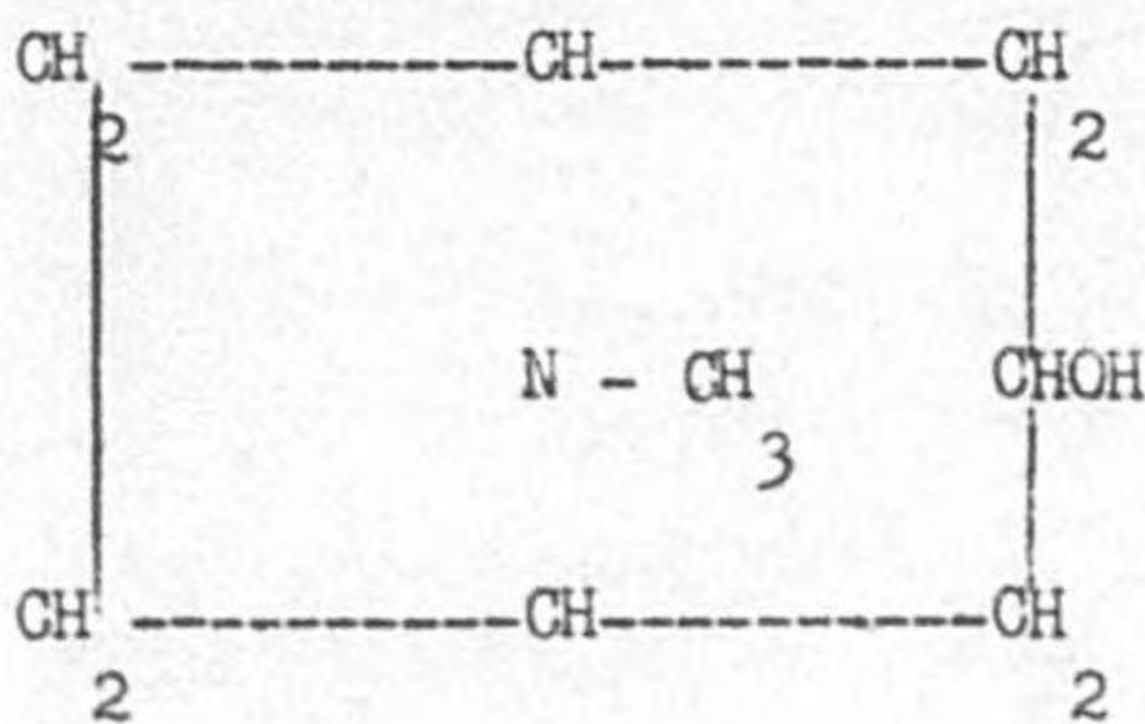


Reduction

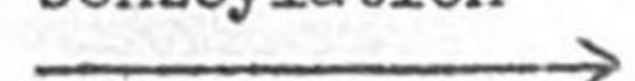
with sodium and  
alcohol



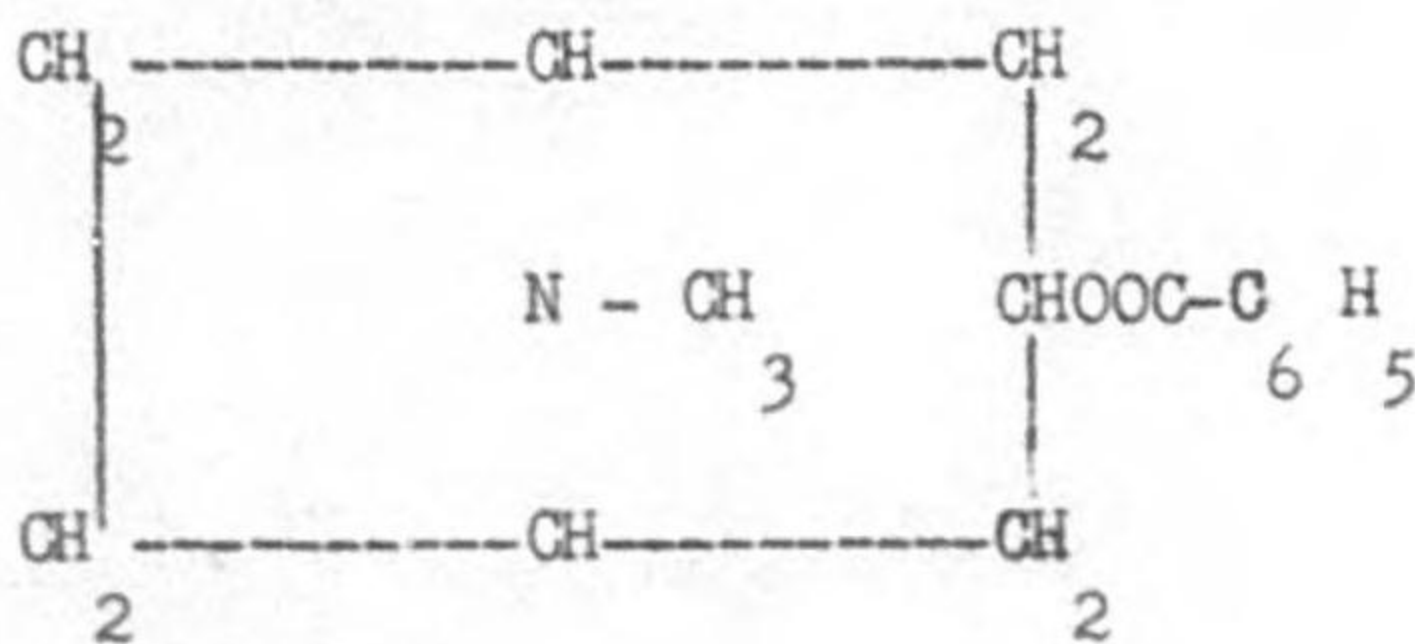
Tropinone



benzoylation



Pseudotropine



Tropacocaine

18. From 1931 through October 1941 the Cocaine Hydrochloride manufactured by the Koto Company was sold direct to the drug and medical trade. From November 1941 through April 1945 it was distributed through the Medicine Control Company. No evidence at this time has been disclosed that the Cocaine Hydrochloride manufactured by the Koto Organization was diverted into illicit channels.

/s/ JOSEPH M. BRANSKY,  
Narcotic Investigator.