

COMMISSION ON NARCOTIC DRUGS

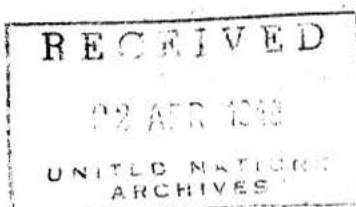
THIRD SESSION

Former Japanese Narcotic Factory in Mukden, Manchuria

(Item 20 on the Provisional Agenda)

- I. Letter of Dr. A. H. Homeyer, expert on the manufacture of opium alkaloids, giving opinion on the potential morphine and heroin manufacture of the former Japanese factory in Mukden, Manchuria.
- II. Photographs showing former Japanese narcotic factory in Mukden, Manchuria.

The Assistant Secretary-General in charge of the Department of Social Affairs has the honour to communicate to the members of the Commission the above-mentioned letter and photographs transmitted by the representative of the Government of the United States of America.



- I. Letter of Dr. A. H. Homeyer, expert on the manufacture of opium alkaloids, giving opinion on the potential morphine and heroin manufacture of the former Japanese factory in Mukden, Manchuria.

MALLINCKRODT CHEMICAL WORKS
Research Laboratories
St. Louis, 7 Mo.

February 25, 1943

Honorable H. J. Anslinger, Commissioner
Bureau of Narcotics
Treasury Department
1300 E. Street, N. W.
Washington 25, D. C.

Dear Mr. Anslinger:

I have studied the 34 photographs of the former narcotic factory in Mukden. This was indeed a very large factory of this type. While it is difficult to judge the capacity because of lack of knowledge of operating practices it would seem to me that this plant could process about 400,000 kilos of opium annually. This would produce about 50,000 kilos of morphine alkaloid. If this were all converted to heroin there might be potentially available 50,000 kilos annually.

It is my impression that the plant included administration (picture No. 2), garage (3), transformer (4), and power plant (10) buildings and that there were at least six and probably more other buildings shown partly in pictures No. 1, 4, 7, 11, 14, 15. Some of this space was for storage of raw materials, empty containers and finished products, and for packaging, mechanical shop, laboratory services, etc. The main manufacturing buildings are shown in pictures No. 11, 14, and 15.

The best indication of opium extraction capacity is from the equipment shown in building No. 11 including two stills about 4' X 9' (16, 17, 18, 21), three large plate and frame type filter presses about 30" X 30" X 10' (16, 17, 21) and 11 jacketed kettles of about 100 gallon capacity (17, 18). A large centrifugal or drum type filter, two pressure tanks and two kettles show in picture 22. There are five more jacketed kettles and several reciprocating steam driven pumps in picture 23. Other equipment such as storage tanks for liquors which may be upstairs would be necessary as accessories but the capacity would be set by that mentioned before. These facilities would provide for filtration of opium extracts, concentration of the solution and crystallization of the morphine salts for purification. The capacity would depend on time cycles, efficiency of recovery and purity of product desired. Building 11 seems to have enough artificial illumination for night operation. It seems to me that working 24 hours per day its capacity might be 400,000 kilos of opium per year. This might yield around 50,000 kilos of morphine alkaloid.

The interior of the new building 14 is shown in picture 20. There are autoclave tops and cylinders of compressed gas which might be methyl chloride. These lead to the conjecture that synthetic codeine was made there.

There appears to be a steam heated drier and a mixing tank in picture 28, while No. 29 shows a battery of stirred tanks possibly for mixing or extraction. Picture 30 shows two medium size filter presses, three jacketed kettles, two large hods and about seven or eight tanks of about 500 gallon capacity. Some of this equipment could be used in the production of heroin but its capacity would be difficult to estimate. Picture 31 appears to be a modern interior containing some large horizontal tanks or drum filters. From the size of the rooms and equipment one would judge that they would have a considerable potential output.

The steam plant shown in pictures 32, 33 and 34 consists of at least 4 boilers about 8 ft. in diameter and may have a steam capacity of 20,000 lbs. per hour. This would be adequate for general heating of the plant as well as all processing needs.

There is no doubt that the capacity of this plant is much larger than the one with which I am familiar. The floor space of the manufacturing and auxiliary buildings, the visible equipment, steam and power capacity, etc., are several times our requirements.

Very truly yours,

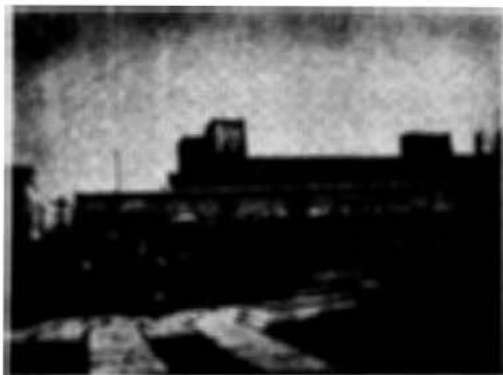
(Sgd) A. H. Homeyer
A. H. HOMEYER

AHH:sh

Photographs Enclosed

ANNEX II

PHOTOGRAPHS SHOWING FORMER JAPANESE NARCOTIC FACTORY IN MUKDEN



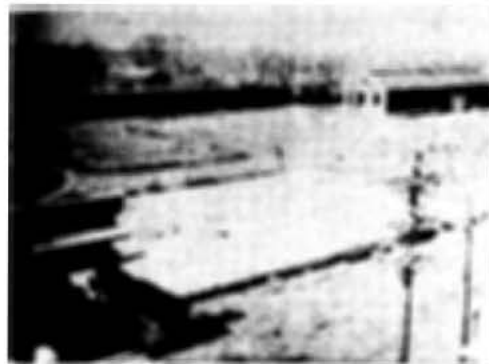
No. 1. The compound close to the front gate.



No. 2. The administrative building in the compound.



No. 3. The extension of the administrative building used as a garage.



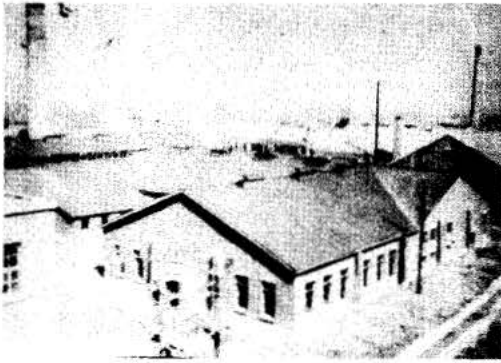
No. 4. A bird's eye view of the left hand yard, the building in the far corner is the house for transformers. The empty space is the remains of a new building demolished by bombing.



No. 5. Another half of the building that the bombs missed.



No. 6. This is the house for the power units.



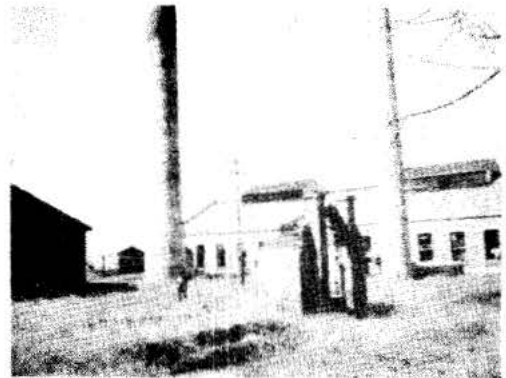
No. 7. Bird's eye view of the most concentrated part of the compound, where the old installation was placed.



No. 8. A switch board in the transformer unit which was badly looted and important parts were taken away.



No. 9. The picture shows that the room was barely stripped.



No. 10. The remains of a house bombed in the central yard.

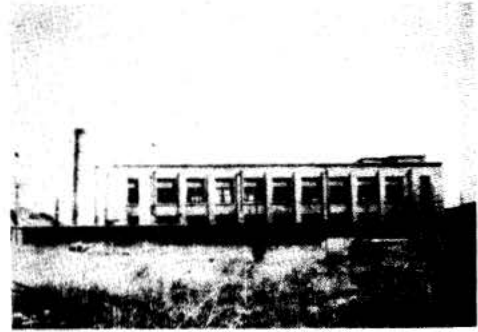


No. 11. The lateral and front view of the main production building where most of the new equipment were installed.





No. 13. This is a little hill of different sizes of tanks and boilers, including supports. Most of them is lined with lead or enamel. They are new and some of them are in crates. This heap lies in the left of the building described above.



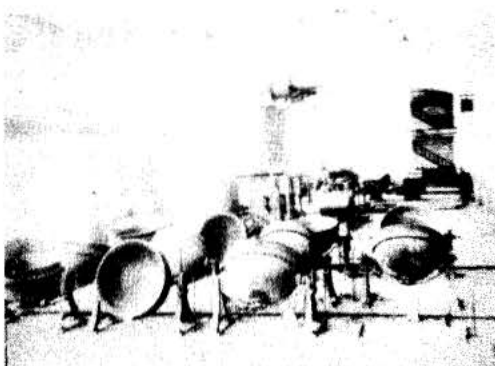
No. 14. This is another new two-storey building, situated right of the building in picture 11. Most of the installed machinery have been removed. The building is still good.



No. 15. One of the buildings in the compound, inside which heavy machinery was to be installed.



No. 16. A general view of the ground floor of the building mentioned in picture 11.



No. 17. The heavy filter presses are seen in the far end. The gigantic distilling unit in the middle and the eleven sets of acid-proof phosphorous bronze evapora-





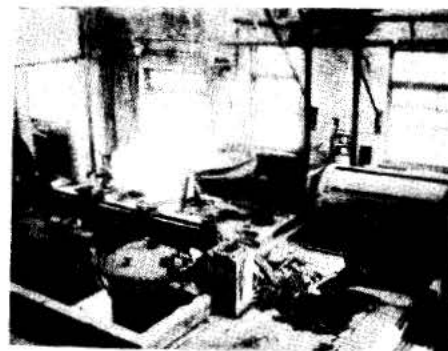
No. 19. One of the interior views of a manufacturing unit. Installations are seen only half erected. Many of these heavy equipments are lying outside of this building with some of them still in crates.



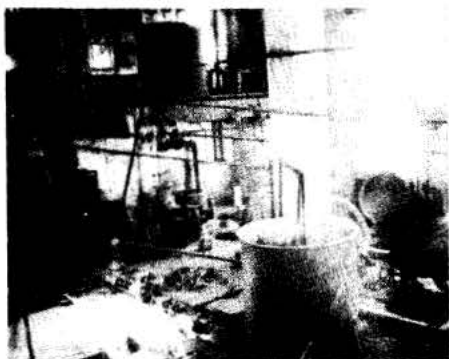
No. 20. The interior of a badly stripped building. This building is a two storey one mentioned in picture 14. Note the tops of autoclaves and a pile of cylinders in the far end.



Nos. 21, 22 and 23 are interior views of the building mentioned in picture 11. 21, shows big press filters, lying in one of the distillating units. 22 is a view from the top of the still, where big imbedded tanks and cylindrical centrifuge are seen near another two bigger evaporating pans.



22



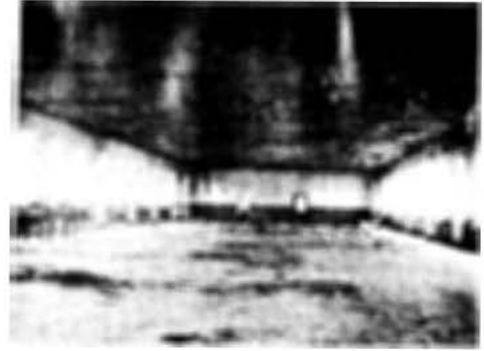
23



No. 24. Is a view from the top, showing the tanks and other cylinders.



Nos. 25 and 26. Shows the interior of two well-built buildings, which was probably intended for packing or other light manufacturing work. It has been very badly stripped. The window frames were all torn; holes were made in the ceiling.



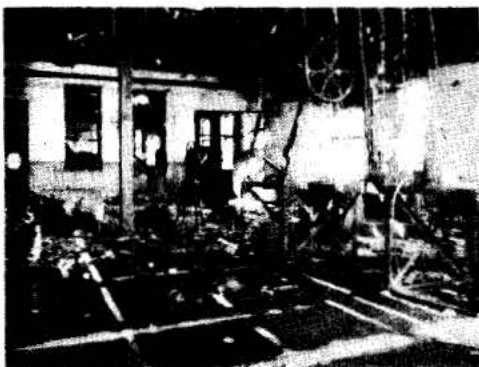
26



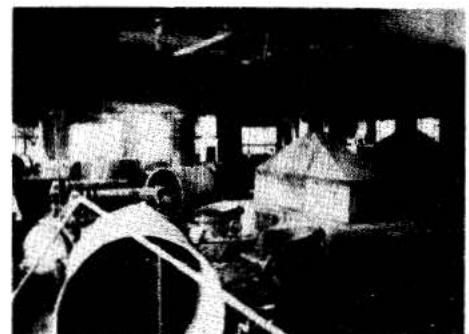
No. 27. Shows the interior of a just completed factory, where installations have not been assembled. The roof of this building is in good condition.



Nos. 28 and 29. Shows two badly looted factory units, where work was apparently going on the day it was forced to stop the manufacture. Machinery in these rooms were demolished. Parts of the roofs are torn and the sun is seen through the broken places.



29



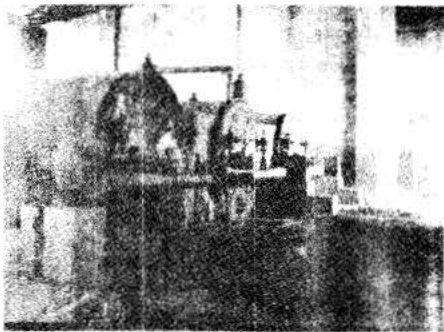
No. 30. The interior of an old manufacturing unit. It consists mostly of old equipments, among them new equipments are added. It was also badly looted.



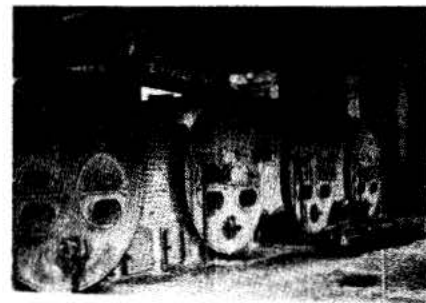
No. 31. The roof of a wellplanned factory.



Nos. 32, 33 and 34 are the new boilers installed in the boiler unit. These boilers are new and some of them are equipped with automatic stokers.



33



34