APPENDIX A.

ORGANIZATION OF THE LURGI COMPANIES. (As of May 2, 1945)

The activities of the Lurgi Companies are carried on by four different Lurgi concerns:-

> Lurgi-Gesellschaft für Chemie und Hüttenwesen 1)

Lurgi-Apparatebau Gesellschaft

Lurgi-Gesellschaft für Wärmetechnik 3)

Lurgi-Werkstätten G.m.b.H.

The capital of the Lurgi Companies is held 100% by the Metallgesellschaft, A.G., a company with a capital of 70,000,000 RM. The name Lurgi is derived from the original field of activity "Metallurgie". The Companies are directed by the following indivi-

Director of all Lurgi Companies: Dr.Oetken who at the same time is a member of the Board of Directors of the Metallgesellschaft:-

Dr.Gehre Dir.Klencke Dr.Siecke Dir.Behlert Dr. Oetken.

Lurgi-Apparatebau Gesellschaft:

Dir.Rader Dir.Gies Dr.Oetken

Lurgi-Gesellschaft für Wärmetechnik m.b.H:

Directors:-Dr.Oetken Dr.G.Maller Dir.Klan.

Principal Technologists:-Low-temperature Distillation of Fuels: Dr. Hubmann Production of City &

Synthesis Gas: Dr. Danulat Synthesis of Motor Fuels: Dr. Herbe: Power Plants: Dipl.Ing.Miller Dr.Rueping.

Lurgi Werkstätlen G.m.b.H.

Dr.Recer Dir. Mattcher Dr.Oetken.

The activities of the Lurgi Companies are as follows:-

Lurgi-Gesellschaft für Chemie und Hüttenwesen: Construction of Sintering Plants (Dwight-Iloyd)

* Rossters

Sulphuric Acid Plants.
Apparatus for the Cellulose Industry.
Various Process for Lead and Zinc Smelters.

Lurgi-Apparatebau G.m.b.H.
Cottrell Electrical Precipitators for Gas Purification
Mechanical De-dusters.

Lurgi-Gesellschaft für Wärmetechnik m.b.H:-

a) Fuel Technology

Construction of low-temperature Carbonization Plants. Gas Plants for Municipal Gas and Producer Gas. Motor-Fuel Plants (Fischer Process)
Garbage-Disposal Plants.

b) Steam Engineering.

Evaporating Plants.
Drying Plants.
Crystallization Plants.
Plants for Treatment of Vegetable Oils and Fats.
Distillation Plants.
Extraction Plants.

c) Recovery of Solvents (Active Carbon).

APPENDIX B.

LABORATORIES OF METALLGESELLSCHAFT A.G.

MAIN RESEARCH (Z.F.)

Metal Laboratories. (Z.F.M.) in Niedernhausen/Taunus.

Director: - Prof. Dr.phil. E.Schmid.

- a. Metals Department
 Director: Dr.E.Schmid (whereabouts unknown)
- b. Alloys Department
 Director:- Doz.Dr.phil.habil.G.Wassermann
 (whereabouts unknown)
- c. Technology.
 Director:- Dr.phil.habil.k.Löhberg
 (whereabouts unknown)

Fields of Activity:- Aluminium Alloys.

- a. Castings (especially Silumin)
- rorging Material (amongst others development of a copper-free forging alloy having the properties of Dur-Aluminium)

Zinc Alloys.

- a. Castings
- b. Forging Material.

Bearing Metals Lead Alloys.

Chemical-Metallurgical Laborator ies (Z.F.C.)

Principal Office: Erbstadt.

Director: Doz.Dr.Ing.G.Roesner.

a. Department of Process Development in Erbstadt.

Director:- Dr.Ing.H.Ley
Sulphur & Sulphur Compounds.
Phosphorus & Phosphates
Clay Products.
Metallurgi:- Preparation and Smelting; for
example, processing lean iron Ores.

b. Department of Surface Phenomena.

Director:- Dr.Ing.L.Schuster.

Chemical treatment of metal surfaces for purposes of corrosion prevention and facilitating shaping.

c. Department of Research and Service in Frankfurt am Main, Bockenbeimer Analage 45

Director: - Dr.Ing.habil.J.Fischer.

d. Amalytical Department
Frankfurt am Main, Bockenheimer Anlage 45.

Director: - Dr.phil. Th. Becker.

e. Department for Colloid Chemistry (Z.F.K.)

Director: - Dr.phil.Miedel
Research in Rubber, especially Revertex
Present Activity: - Plasticizer for Buna
(Naftolen)

APPENDIX C.

RECENT METALLGESELLSCHAFT-LURGI PATENT APPLICATIONS OF POSSIBLE INTEREST TO PETROLEUM INDUSTRY.

Metallgesellschaft-Lurgi Serial Nos.

4262	Insecticides
4261	Carbonization and social
4257	Carbonization and gasification of fuel and oil shale. Sulphur from Coking Ovens.
4243	Powder coking
4230	Cracking oils, tars, etc.
4228	etc.
4227	Oxidation of aliphatic hydrocarbons.
4223	Thermal treatment of 7
4222	Thermal treatment of liquid and gaseous hydrocarbons.
4201	Process for ovideties as a second
4190	Process for exidation of aliphatic hydrocarbons. Applying synthetic rubber to a solid base
4186	a solid base
4184	Combustion of H2S and O2
4182	Tar Cracking
4181	Shaft gasifier
4124	• • • • • • • • • • • • • • • • • • •
4111	Isotope diffusion
4107	,
4103	Preparation of alumina.
4100	Carbonization process
4090	Frocedure and appearation for the
4087	Procedure and apparatus for mixing gases and liquids. Synthesis of hydrocarbons with iron catalyst at atmospheric pressure.
	pressure. pressure.
4085	Reduction (2 stage) of immediate
4075	Reduction (2 stage) of iron catalysts for CO hydrogenation. Removal of acids from synthetic fats.
4057	White I alba
4032	Production of hydrogenation catalyst.
4011	
4010	
3997	Process of making synthesis gas of low methane content.
3991	Process for reduction of in the methane content.
3961	
3960	Oven for carbonization of fuels.

Preparation of hard coal in generator gas manufacture **39**55 Carbonization apparatus for oil shale **39**53 3948 Lubricating medium Production of sulfur by reduction of (ore) reasting gases. 3945 Improving the corresion resistance of protective coatings. 3937 **39**33 Sulfur recovery. Coolant and lubricant for metal working. 3927 3914 Preparation of fuel oil from carbonization tar. Preparation of Diesel oil and fuel oil from coal 3913 carbonization tar, shale tar, etc. Production of higher paraffins and olefinic hydrocarbons, 3896 addition of dilute synthesis gas. Apparatus for thermal conversion of gases under pressure. 3893 3837 Synthesis of hydrocarbons with iron catalysts. 3879 Ship deck paint 3874 Gasification of fuels in shaft ovens. Separation of organic sulfur from gases under pressure. 3859 3840 Preparation of de-poisoned city gas by hydrogenation 3810 Recovery of phenois. 3781 Recovery of hydrocarbon mixtures. Gasification of fuels in shaft ovens. 3767 Carbonization of high ash fuels. 3761 Carbonization of oil shale and similar high ash fuels 3757 Production of hydrocarbons by CO hydrogenation. 3738 3734 Preservation of wood. 3707 Se paration of organic sulfur from gas under pressure.

APPENDIX D.

Documents and Papers.

1. File:-

Carbonization of Bituminous Coal, Krupp-Lurgi Reports 1937 to Sept.1941.

2. File:-

Ringwaltzen Press. Tech. Reports to 1942.

3. File:-

E.T.4. Projected Plant at Heesch using air circulation 1939-1944.

4. File:-

Fischer-Tropsch Miscellaneous Projects at different Works including Japan.

- 5. Prints:
 - a) Recovery systems of Fischer-Tropsch plants, different arrangements.
 - b) Flow Diagrams of Fischer-Tropsch yields by three recirculation systems.
 - c) Miscellaneous D. awings of Experimental Plant.
- 6. Stenographer's Notebook
- 7. *Ergebnisse der Steinkohlenschwelung*
- 8. "Krupp-Lurgi-Kammer-Schwellanlagen"
- 9. Drawing of "Krupp-Lurgi-Steinkohlenschwelofen".
- 13. Directors of Lurgi Personnel 1945.

- 11. Description of Lurgi Process for manufacture of Synthetic Lubricating Oils.
- 12. Flowsheet of Lurgi Synthesis-Gaz Plant.
- 13. Comparison of 8 processes of synthesis gas manufacture.
- 14. Flow diagram of gas-recirculation system of Lurgi hydrocarbon synthesis process.
- 15. Flow diagram and material balance of Lurgi H.P. gasrecirculation process of hydrocarbon synthesis, using catalyst.
- 16. Flow diagram and material balance of Lurgi H.P.gasrecirculation process of hydrocarbon synthesis using Fe catalyst.
- 17. Flow diagram and material balance of Lurgi H.P. gas recirculation process of hydrocarbon synthesis, with special catalyst for high benzin yield.
- 18. Flow diagram of experimental hydrocarbon synthesis plant with iron catalyst.
- 19. Drawing of 500 mm. H.P. contact vessel.
- 20. " catalyst reduction furnace.
- 21. " 3 mm. H.P. contact vessel.
- 22. * lamellar-type contact vessel.
- 23. Diagram of experimental H.P. synthesis plant for Ruhr-Benzin.
- 24. Drawing of experimental H.P. tubular oven.
- 25. Flowsheet for semi-technical experimental plant.
- 26. Experim ntal converter (70 atm. water pressure)
- 27. Lurgi-Hoesch negotiations on Kreislauf process.
- 28. Recovery of alcohols from A K water (Hoesch)
- 29. The Lurgi Recirculation Process.

- 30. A plant for the removal of organic sulphur from synthesis gas.
- 31. High-temperature recirculation with cobalt catalyst.
- 32. Lurgi Process for Synthesis Gas production.
- 33. Project for converting the Wanne-Eichel Works to the Lurgi recirculation process.
- 34. Preparation of Paraffin Wax from Water Gas.
- 35. Medium Pressure Synthesis Scheme for Japan (Rumoi)
- 36. Two-stage process with cobalt and iron catalysts using water gas.
- 37. Iron catalyst synthesis.
- 38. Medium-Pressure Synthesis Scheme.
- 39. Large-scale work on the Lurgi recirculation process at Hoesch-Benzin.
- 40. Engineering Drawings for the Lurgi Pressure Generator and Plant at Böhlen.
- 41. Angaben über Sauerstoff Anlagen.

The above documents Nos.13 to 41 and others of related subject matters have been placed in CIOS Bags Nos.2708, 3499, 3500 and 4182 for safe-keeping and future reference, and have been reproduced in Series A, B and E microfilms of the Liquid Fuels and Lubricants CIOS Team and been deposited with the Secretary of the Interior, Washin ton, D.C., and with British Ministry of Fuel and Power, London.