

COMMERCIAL PEAT: ITS USES AND POSSIBILITIES

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Commercial peat: its uses and possibilities by Frederick T. Gissing

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FREDERICK T. GISSING

**COMMERCIAL
PEAT: ITS USES AND
POSSIBILITIES**



The first producer plant in the world making regularly sulphate of ammonia and producer gas from wet peat.

N.B.—Peat may be used containing up to 7.5 per cent. water.

(See page 156.)

COMMERCIAL PEAT:

ITS USES AND POSSIBILITIES.

BY

FREDERICK T. GISSING,

JOINT AUTHOR WITH P. R. BJÖRLING OF "PEAT: ITS USE AND MANUFACTURE."

With Fifty-nine Illustrations.



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PREFACE.

WHEN the late Sir Clement Le Neve Foster set before me the project of preparing a book on the subject of Peat, I did not realise how quickly the industry would develop. But the peat resources of the world are so vast, and the commercial possibilities so great, that engineers and scientists, both at home and abroad, are giving close attention to the subject, and a warm welcome was given to the publication of *Peat: Its Use and Manufacture*, under the joint authorship of the late Mr P. R. Björling and myself.

This present volume is designed as a companion to that above mentioned, and presents this important industrial question from a commercial point of view.

To appreciate the seriousness of the problem of utilising the bog-lands, it is only necessary to realise the great surface covered by peat bogs on the Continent of Europe alone. This amounts to 212,700 square miles. The survey of Ireland gives 2,858,150 acres of peat bogs. In Canada more than 30,000,000 acres of land are known to be peat bog, and in the United States 20,000,000 acres. In Newfoundland two-thirds of the surface of the country is said to consist of peat bogs.

The various processes described in this book, evolved by a long course of patient investigation and experience, and the numerous applications for patents, are evidences of

a new impetus to the subject. Gas engineers have lately been paying special attention, with most successful results, to the production of gas from peat and the recovery of the valuable by-products, in connection with central electric lighting stations, and their efforts will doubtless go a long way in assisting to solve the problem of the utilisation of peat as a fuel.

The task of sifting and collating the great mass of data placed at my disposal has been a heavy one, and I tender my sincere thanks to the following friends and firms for their encouragement and co-operation, viz.:—Martin Ekenberg, Ph.D.; Herman C. Wolterreck, Ph.D.; Dr Eugene Hannel (Canadian Department of Mines); Dr Arthur Heinemann; A. B. Lennox, C.E.; Capt. H. Riall Sankey, R.E. (Ret.), M.I.C.E.; Erik Nyström, M.E. (Canadian Department of Mines); Crossley Bros., Ltd.; Thos. Rigby, A.M.I.M.E.; Candy Filter Co., Ltd.; Sulphate of Ammonia Co., Ltd.; The Power-Gas Corporation, Ltd.; Uskside Engineering Works Co., Ltd.; J. Stevens, M.I.M.E.; Oberbayerische Kokswerk Fabrik, of Beuerberg; Controller of His Majesty's Stationery Office; Director of the Imperial Institute; Secretary of the Department of Agriculture and Technical Instruction for Ireland; Secretary of the Motor Union of Great Britain and Ireland; the Canadian Office, London; United States Geological Survey, Washington; American Consular-Agent W. B. Murphy, Sorau, Germany; A. Heinen; the Swedish Chamber of Commerce, London; and to the Editors of the various Journals quoted.

I desire also to express my appreciation of the care bestowed by the publishers in the production of the work, and for their ready assistance in all questions regarding the arrangement of text, etc.

FREDERICK T. GISSING.

October 1909.

CONTENTS.

CHAP.	PAGES
1. ALCOHOL FROM PEAT	1-6
2. AMMONIA FROM PEAT—WOLTERECK PROCESS	7-10
3. NITRATES FROM PEAT	11-17
4. EKENBERG WET-CARBONISING PROCESS	18-21
5. UTILISATION OF PEAT. PEAT GAS. PEAT-GAS PRODUCERS	22-39
6. PEAT FOR SEWAGE PURPOSES	40-43
7. RECLAMATION AND CULTIVATION OF PEAT LANDS	44-47
8. PEAT FROM FALKLAND ISLANDS	48-51
9. ZIEGLER'S PEAT COKING PROCESS AT BEUKERBERG	52-55
10. ZIEGLER'S PEAT COKING PROCESS AT DARTMOOR	56-57
11. PAPER FROM PEAT	58-61
12. PEAT DRYERS	62-71
13. PEAT EXCAVATORS	72-73
14. PEAT CUTTERS	74-75
15. PEAT MINCING OR DISINTEGRATING MACHINE	76-78
16. PEAT SQUEEZER	79-80
17. PEAT DRYING OVENS	81-83
18. HYDRO-EXTRACTOR FOR EXTRACTING MOISTURE FROM PEAT	84
19. PEAT PALLET CONVEYOR	85-86
20. MANUFACTURED PEAT FUEL	87-100
21. DESTRUCTIVE DISTILLATION OF PEAT	101

CHAP.	PAGES
22. PEAT MOSS LITTER BALING PRESSES	102-108
23. PEAT MOSS LITTER FACTORY	109-113
24. PEAT MOSS LITTER WILLOWS	114-115
25. PEAT MULL GRINDING MILLS	116-117
26. PEAT TEARING AND MIXING MACHINE	118-120
27. "LENNOX" PATENT PEAT PLANT	121-127
28. CANDY FILTERS FOR PEATY WATERS	128-129
29. PEAT DEPOSITS.—BRITISH ISLES: IRELAND, ISLE OF MAN, THAMES DEPOSIT; FRANCE: LA ROCHELLE; SWEDEN: WISBY, GOTHLAND; NORWAY; AUSTRIA; GERMANY: SCHLESWIG-HOLSTEIN, HANOVER; HOLLAND; UNITED STATES; MAINE; MEXICO; CANADA; NEWFOUND- LAND; INDIA	130-144
APPENDICES :—	
I. THE ASTOR VIBRATORY PEAT-GAS PRODUCER	145-147
II. DISTILLATION OF PEAT	148
III. PEAT CORE	148
IV. PEAT HALF-STUFF, PAPER, AND BOARDS	148-152
V. USE OF PEAT IN SCOTCH DISTILLERIES	152-153
VI. THE "LENNOX" PATENT HORIZONTAL REVOLVING PEAT DRYER	153-156
VII. { MOND PEAT-GAS PLANT	156-160
{ "MERSEY" MOND PEAT-GAS PRODUCER PLANT	160-162
BIBLIOGRAPHY	163-169
PATENTS	170-176
INDEX	177-191

LIST OF ILLUSTRATIONS.

Frontispiece : The first Producer Plant in the world making regularly sulphate of ammonia and producer gas from wet peat.

FIG.	PAGE
1. View of Peat Moor at Carnlough, Co. Antrim	facing page 9
2. General View of Works	9
3. Aerial Ropeway from Moor to Moor Terminal	9
4. View of Acid Towers	9
5. View of Evaporating Sheds	9
6. Experimental Plant at Stafajö Peat Bog, Sweden, for carbonising Peat by the Ekenberg Wet Process	20
7. Ekenberg Recuperative Wet-carbonising Oven under construction	20
8. Powerful Peat Pulp Pump forcing the raw Peat Pulp through the Ekenberg Recuperative Wet- carbonising Oven	20
9. Crossley Gas Producer for use with Peat, and intended for the Recovery of By-products	27
10. Crossley Gas Producer erected at Openshaw, Manchester	28
11. Ziegler Peat-gas Producer	37
12. Electrically-driven Elevator and Peat Press	facing page 52
13. Coke cooling in the Trucks, and Coke Sorting Shed	53
14. Peat Coking Plant at Beuerberg, Germany	53
15. General Plan of Works	54
16. Lennox Patent Continuous Drying Machine—Sectional Elevation	63
17. " " " " Plan	64
18. " " " " Elevation, showing Furnace	65
19. Lennox Patent Continuous Drying Machine—Transverse Sectional Elevation	66
20. Lennox Patent Reversible Current Dryer—Side Elevation	69
21. " " " " Plan	70