

# **THE TREASURES OF COAL TAR**

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The Treasures of Coal Tar by Alexander Findlay

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**ALEXANDER FINDLAY**

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OF COAL TAR**



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## **COAL TAR TREE CHART**

Illustrating the various chemical products derived from Coal and Coal Tar, designed in the form of a Genealogical Tree. 34" x 36".  
Revised Edition.

By WALLACE C. NICKELS, F.C.S.

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# THE TREASURES OF COAL TAR

BY

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ETC.

WITH THREE FIGURES IN THE TEXT



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A. I. L.

TO  
MY MOTHER

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## PREFACE

IN order that the effort now being made to promote the more widespread application of science, and more especially to render this country independent of others for the supply of the dyes necessary for the maintenance of our textile industry, shall not be relaxed, it is essential that the people as a whole should interest themselves in the work, and should gain some knowledge of what has been achieved in the past, and some understanding of the nature and complexity of the problems to be solved. As the matter is urgent, and of vital importance for the welfare of this country, the writer felt that, even in a time of much preoccupation, he could not refuse the invitation of the publishers to discuss in a readily intelligible manner the production and utilisation of coal tar, and to indicate, sufficiently fully for the general reader, the almost infinite variety of materials—dyes, drugs, perfumes, explosives—for the manufacture of which coal tar is the raw material.

Based on this invaluable by-product of the manufacture of coke and of illuminating gas, an industry, or rather a series of industries, has been developed ;

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but although Great Britain played a predominant part in the early stages of this industrial development, she failed to retain the great advantages she had gained, and the manufacture of synthetic dyes and drugs became increasingly a German monopoly. To such an extent was this the case that, before the outbreak of war, Germany was producing more than three times the quantity of coal-tar products produced by all the rest of the world combined. It is true that dyes were manufactured in considerable amount in this country, but our manufacturers rested content, in too great a measure, with their dependence on German "intermediates," which, instead of making, they imported and worked up into dyes. In spite of the warnings uttered by our foremost chemists during the past thirty years, in spite of the object-lessons furnished by the destruction of the European madder and the decay of the Indian indigo plantations, this country failed to develop its coal-tar chemical industries on a national scale; and as a result of this failure she found herself, on the outbreak of war, placed in a position of great gravity. Perilously handicapped in our production of the munitions of war, threatened with the destruction of our textile industry through the cutting off of the supply of the German-made intermediates and dyes, and with the health of our people and army endangered through shortage of those