## PREFACE.

THE work before the reader has been prepared with a desire to aid the manufacturer of distilled oils in his avocation, and to record the most important facts regarding the various raw materials used by him. To assist the engineer and machinist, drawings, taken from the original plans used by the author in the erection of petroleum and coal-oil apparatus, have been inserted. Original drawings of petroleum wells and boring tools have also been added, to convey a correct idea of the mode of procuring one of the chief articles used by the oil manufacturer. A great deal of valuable information relating to the production of hydrocarbon oils is scattered throughout the French, German, and English scientific journals, and is contained in numerous patents to which the public have not The information collected from these convenient access. sources that seemed applicable to the present treatise, has been carefully recorded. The author of the first edition of the work left, at the time of his decease, many memoranda connected with it, intending to insert them in a second edition. The author of the present edition has endeavored to carry out his father's intentions regarding it, and has made such revisions and enlargements as seemed called for.

Care has been taken to present such facts regarding petroleum wells and petroleum as may be useful to those interested in them.

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