

Karl von Linde Biography

Karl von Linde

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

| | |
|---|-------------------|
| Karl von Linde Biography..... | 1 |
| Contents..... | 2 |
| Biography..... | 3 |

Biography

Karl von Linde was born in Berndorf, Bavaria. He studied engineering at Zurich Polytechnic and began teaching at the Technische Hochschule in Munich in 1868. Gabriel Sedlmayr, a friend from the Spatenbrau brewery, who was also president of the German Brewer's Union, asked Linde to develop a refrigeration system that would make possible year-round beer brewing. By 1874 Linde had developed a methyl ether refrigerator, followed by an ammonia-compressor model in 1876. While Linde was not the first to use condensed ammonia as a refrigerant--the Scottish-American inventor David Boyle had patented such a system in 1872--his design was the first practical refrigerator.

By 1879 Linde had left teaching to concentrate on research, and by 1891 he had sold 12,000 domestic refrigerators in Germany and the United States. The success of the refrigeration business allowed Linde to concentrate on his next project, the removal of heat from gases and liquids at low temperatures. In 1895 he produced a machine that used the Joule-Thomson effect in a continuous process to produce large amounts of liquefied gases, which up until then could be made in only very small quantities. By 1902 Linde had developed a method for separating pure liquid oxygen and nitrogen from liquid air, again in large, commercially valuable amounts. Variations of Linde's methods are still used today.

Linde's discoveries accelerated the development of the liquid air industry, had important commercial applications in steel manufacture, and also provided an important basis for modern low-temperature, high-vacuum physics research. Linde died in Munich in 1934.