## Contents

Preface	9
Introduction	10
The Way	12
"Germania Consisted of Eerie Forests and Desolate Moors" Wooden trackway from Northern Germany, ca. 180 BC	16
New Routes for New Markets Mariner´s astrolabe, ca. 1600, Iberian	20
A Shorter Way to Get There Faster Towing locomotive, 1898, Siemens & Halske, Berlin	24
Rails – The Way to Modernity Flanged rail, Curr, and pivoting cradle wagon, ca. 1800, Wales	28
"Get your motor runnin'" A section of the AVUS North Curve, 1937, Berlin	32
At the Right Place at the Right Time Pocket chronometer, 1828, Johann Heinrich Kessels, Altona	36
The Market	40
Earth Treasures for the Industrial Age Mining cart, 16 <sup>th</sup> century, Hungary	44
Mining as the Basis of National Power Blowpipe set, ca. 1860, Freiberg / Saxony	48
Brave New Plastic World Billiard balls, ca. 1900	52
A People Spins Some Self-reliance for Itself Portable spinning wheel, ca. 1920, India	56
"Geflammtes Hobeln" (flame motif cutting) A Machine as Hand-tool	60



Moby Dick in an Oil Can A bottle of sperm oil, ca. 1900, USA	64
From Luxury Good to Mass Produced Sugar bowl, ca. 1850, Germany	68
Industrial Espionage Guarantees Progress Beuth locomotive, 1912 replica of 1844 original, August Borsig AG, Berlin	72
Mankind	76
From Potato Water to Energy-saving Light Bulbs Gas discharge tubes: an experiment at the Science Center Spectrum, 2013, Ber	lin 80
Will it work? Trust in Technology  Bow ornament from the SMS MECKLENBURG, 1903, Germany	84
Aspiration Sprouts Wings "Aviette Balek" muscle-powered aircraft, ca. 1920, Lumière, France	88
Now it's Bugs in the Crosshairs  Dust applicator, ca. 1935, OLKÜ	92
The Can and Should Quandary Baby gas mask, 1942, Germany	96
From Scurvy to Brain Doping Bull Testicle Slicer, ca. 1950, Berlin	100
Technology for Killing Junkers Ju 87 R-2, 1939, Junkers Flugzeug- und Motorenwerke AG, Dessau	104
How the Starry Firmament Became a Dark Hole Giant Treptow telescope, 1896, Berlin	108
The Building	112
Berlin Was Built from a Barge "Kaffen" barge, ca. 1840, Germany	116
How Does a Horse Get to the Second Floor? Horse stairway, 1908, Berlin	120
Is it a Building? Is it a Machine? Is it a Museum Piece?  Deutsches Technikmuseum's new extension, 2002, Berlin	124
The Grounds of the Anhalter Train Station Become a Museum "Prince's" doorway from the Anhalter Bahnhof, 1880, Berlin	128

More than Train Stations and Rails Railway yard roundhouses, 1874, Berlin	132
Junction Point of Two Transport Systems Anhalter Freight Station loading road, 1874, Berlin	138
The Network	144
That Won't Go on a Cowhide Papermaking mould, 1910, Spechthausen near Eberswalde	148
He who Rejects Yodelling Will Have to Radio Lieben amplifier tubes, 1913, AEG, Berlin	152
Black Magic Illuminates the World Heidelberg Tiegel automatic platen printing press, 1931, Schnellpressen AG, Heidelberg	156
Necessity is the Mother of a First-Rate Technology VHF V 2 converter, 1955, VEB Elektronik Plauen	160
Prosthesis, Progress, Emancipation? Writing ball, 1869, Rasmus Malling-Hansen, Denmark	164
A Small Door to Heaven or Hell iPhone, 2007, Apple Inc., USA / China	168
Storage	172
Chocolate and Mountains of Coal Douglas C-47 B "Skytrain", 1945, Douglas Aircraft Company, USA	176
Gatherers and Hunters Magnetophon R 26 / HF tape recorder, 1943, AEG / RRG, Germany	180
Water Slakes Thirst and Wanderlust Railway yard water tower, 1908, Berlin	184
Baroque Operation Sequence Storage for Brocade Ribbons Punchcard set for the Jacquard controller of a mechanical ribbon loom, 1920, Suberg, Wuppertal	188
As Bright as Day and Fast as Lightning Slaby-Beringer, electric car, 1920, SB Automobil GmbH, Berlin	192
Museums – Not a Storage Place for the "Harmless Dead" at All Deutsches Technikmuseum, Berlin, 1983	196
Literature	200